



The Consumer Generative AI Dossier

A selection of high-impact use cases

By Deloitte AI Institute



www.deloitte.com/us/generative-ai-dossier

About the Deloitte AI Institute

The Deloitte AI Institute™ helps organizations connect all the different dimensions of the robust, highly dynamic, and rapidly evolving Artificial Intelligence ecosystem. The AI Institute leads conversations on applied AI innovation across industries, with cutting-edge insights, to promote human-machine collaboration in the “Age of With™.”

The Deloitte AI Institute aims to promote the dialogue and development of AI, stimulate innovation, and examine challenges to AI implementation and ways to address them. The AI Institute collaborates with an ecosystem composed of academic research groups, start-ups, entrepreneurs, innovators, mature AI product leaders, and AI visionaries to explore key areas of artificial intelligence including risks, policies, ethics, the future of work and talent, and applied AI use cases. Combined with Deloitte’s deep knowledge and experience in artificial intelligence applications, the Institute helps make sense of this complex ecosystem, and as a result, delivers impactful perspectives to help organizations succeed by making informed AI decisions.

No matter what stage of the AI journey you are in: whether you are a board member or a C-Suite leader driving strategy for your organization—or a hands-on data scientist bringing an AI strategy to life—the Deloitte AI Institute can help you learn more about how enterprises across the world are leveraging AI for a competitive advantage. Visit us at the Deloitte AI Institute for a full body of our work, subscribe to our podcasts and newsletter, and join us at our meet-ups and live events. Let’s explore the future of AI together.

www.deloitte.com/us/AIInstitute

The image shows a large, dark blue Deloitte logo on a light-colored wall. The logo is in a bold, sans-serif font. The letter 'l' at the end of the word 'Deloitte' is replaced by a green circle, which is the Deloitte brand mark.

Introduction

The advent of Generative AI has delighted and surprised the world, throwing open the door to AI capabilities once thought to be still far off in our future. With a remarkable capacity to consume and generate novel outputs, Generative AI is prompting excitement and stimulating ideas around how this type of AI can be used for organizational benefit. Far more than a sophisticated chatbot, Generative AI has the potential to unleash innovation, permit new ways of working, amplify other AI systems and technologies, and transform enterprises across every industry.

This compendium highlights 60 of the most compelling use cases for Generative AI across six major industries:

- **Consumer** (which includes Consumer Products, Retail, Automotive, Lodging, Restaurants, Travel, and Transportation)
- **Energy, Resources, and Industrial** (ER&I)
- **Financial Services** (FSI)
- **Government & Public Services** (GPS)
- **Life Sciences & Health Care** (LSHC)
- **Technology, Media, and Telecommunications** (TMT)

For each of these industries, we explore Generative AI use cases that can address enterprise challenges in new ways, permit more and greater capabilities across business functions, and deliver advantages in efficiency, speed, scale, and capacity.

As with any type of AI, there are potential risks. We use Deloitte's Trustworthy AI™ framework to elucidate factors that contribute to trust and ethics in Generative AI deployments, as well as some of the steps that can promote governance and risk mitigation. Trustworthy AI in this respect is: fair and impartial, robust and reliable, transparent and explainable, safe and secure, accountable and responsible, and respectful of privacy.

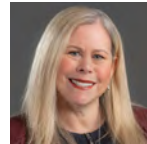
To be sure, this collection of use cases is just a sample among myriad other applications, some of them yet to be conceived. As Generative AI matures as a technology and organizations move forward with using it for business benefit, we will likely see even more impressive and compelling use cases. The applications highlighted here can help spark ideas, reveal value-driving deployments, and set organizations on a road to making the most valuable use of this powerful new technology.



Nitin Mittal
**Global Generative
AI Leader**
Deloitte Consulting LLP



Beena Ammanath
**Global Deloitte AI
Institute Leader**
Deloitte Consulting LLP



Lynne Sterrett
**US Generative AI Market
Activation Leader**
Deloitte Consulting LLP



Jim Rowan
US Head of AI
Deloitte Consulting LLP

Six key modalities

One of the primary differences between more traditional AI and Generative AI is that the latter can create novel output that appears to be generated by humans. The coherent writing and hyper-realistic images that have captured public and business interest are examples of Generative AI models outputting data in ways once only possible with human thought, creativity, and effort. Today, Generative AI models can create outputs in six key modalities.



Text

Written language outputs presented in an accessible tone and quality, with details and complexity aligned with the user's needs.

Examples include summarizing documents, writing customer-facing materials, and explaining complex topics in natural language.



Code

Computer code in a variety of programming languages with the capacity to autonomously summarize, document, and annotate the code for human developers.

Examples include generating code from natural language descriptions and autonomously maintaining code across different platforms.



Audio

Much like textual outputs, audio outputted in natural, conversational, and even colloquial styles with the capacity to rapidly shift among languages, tone, and degrees of complexity.

Examples include Generative AI-powered call centers and troubleshooting support for technicians in the field.



Image

Textual or visual prompts lead the model to create images with varying degrees of realism, variability, and "creativity."

Examples include simulating how a product might look in a customer's home and reconstructing an accident scene to assess insurance claims and liability.



Video

Similar to imagery, Generative AI models can take user prompts and output videos, with scenes, people, and objects that are entirely fictitious and created by the model.

Examples include autonomously generating marketing videos to showcase a new product and simulating dangerous scenarios for safety training.



3D/Specialized

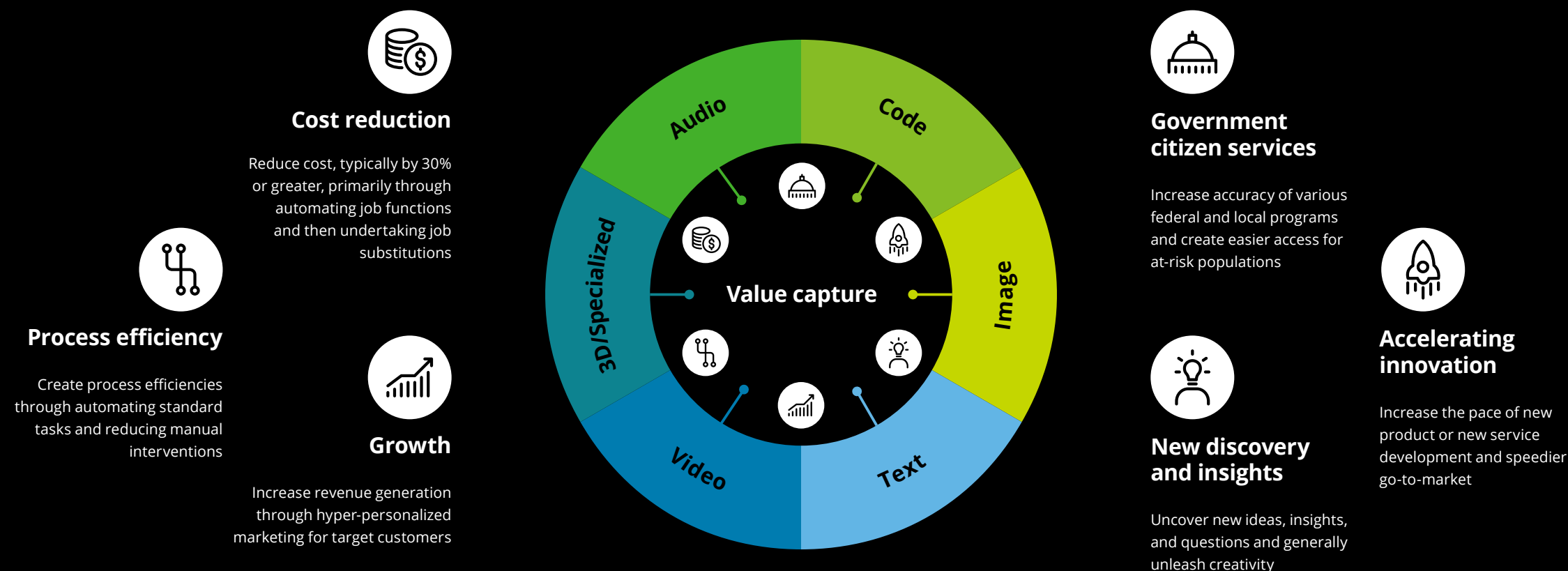
From text or two-dimensional inputs (e.g., images), models can extrapolate and generate data representing 3D objects.

Examples include creating virtual renderings in an omniverse environment and AI-assisted prototyping and design in a purely virtual space.

By understanding these modalities, organizations are empowered to think through and better understand the kinds of benefits Generative AI could permit. For each use case described in this dossier, there may be more than one value-driving modality. A chatbot text output could be presented as simulated audio; a generated image could be extended into a video. Ultimately, the Generative AI use case and the value the organization seeks will determine which output modalities can contribute the greatest advantages and outcomes.

Broad categories of value capture from Generative AI

The value that Generative AI use cases can enable can be conceived across six dimensions: cost reduction, process efficiency, growth, innovation, discovery and insights, and government citizen services. To be sure, a single use case can drive more than one value capture, but to help paint the vision for how Generative AI can be used to move the needle on competitive differentiators and operational excellence, the use cases described in this dossier are each associated with a primary value capture.





Generative AI has already seized the imagination of the consumer. The public release of models that can convert text to images or respond coherently to user prompts captivated and even startled many. As the Generative AI marketplace grows, consumers are increasingly exposed to Generative AI-enabled search, educational tools, and a range of free and paid services. For businesses in the consumer industry, Generative AI holds vast potential for improving and enhancing interactions, from helping consumers understand and find the products they need to accessing better, more real-time support to promoting brand loyalty.

Among Generative AI's exciting capabilities for the consumer industry is the ability to automatically create compelling content on demand and at scale. With Generative AI-created text, images, marketing campaigns, product offerings, and more, businesses can hyper-personalize customer engagement across a multitude of markets and channels. There are also emerging opportunities for improving business operations and meeting enterprise goals. The rapid tempo of decision making in the consumer industry demands faster analysis of enterprise data, including structured information (e.g., sales) and unstructured information (e.g., customer feedback and design trends). Given the scale of the data, as well as the reality that data is sometimes siloed or geographically dispersed, Generative AI can help business users more rapidly and easily query datasets,

find the right answers when they are needed, and understand their market at a level of granularity and speed that was previously unachievable. All of this moves toward improved decision-making that drives greater cost avoidance, labor efficiency, positive customer interactions, and measureable ROI.

Today, Generative AI is beginning to be built into the technology solutions that run consumer businesses. As it becomes more accessible, companies will continue exploring the potential use cases and deployments that can drive top-line and bottom-line benefits. Looking ahead, when Generative AI is combined with human oversight and governance, as well as other complementary technologies (e.g., traditional machine learning), it will likely sit at the core of consumer businesses.

Today, Generative AI is beginning to be built into the technology solutions that run consumer businesses.



Marketing content assistant

(Content Generation)

Generative AI can be used to enable the creation of efficient, consistent, and personalized content across a range of modalities.



Issue/opportunity

Companies face a significant challenge in managing and optimizing marketing content. With hundreds of websites for brand portfolios, each in dozens of languages, companies struggle to allocate enough time and resources to create customer group-specific product descriptions, images, video, and even audio. Enterprises also wrestle with consistency across descriptions, imagery, ads, and other media, and the materials may not always be optimized for the necessary purposes (e.g., product descriptions for search versus e-mail). Companies need a method to provide a seamless and personalized brand experience across different ecosystems and touchpoints.

How Generative AI can help

Next-gen content generation

With Generative AI, the enterprise can create product descriptions, imagery, video, and more much faster and more consistently than with existing tools and processes.

Personalization at scale

Generative AI models can draw from multimodal data (e.g., text, image, geospatial data) to create personalized and contextually relevant content. The model can be used to catalog content and adapt content and user flow based on language, region, and customer behavior trends.

Assisting compliance

Due to the consistency Generative AI enables across modes, languages, and contextual factors, the enterprise can enhance regulatory compliance for materials across different geographies, cultures, and topics.

Marketing content assistant

Managing risk and promoting trust



Reliable

While tasked with producing superior marketing materials, Generative AI systems may invent inaccuracies, which will lead to poorer customer engagement and outcomes.



Fair and impartial

Biases in the data (e.g., due to incomplete datasets) could lead to unequal quality of content in the face of different geographical or cultural factors.

Potential benefits

Catering to the customer

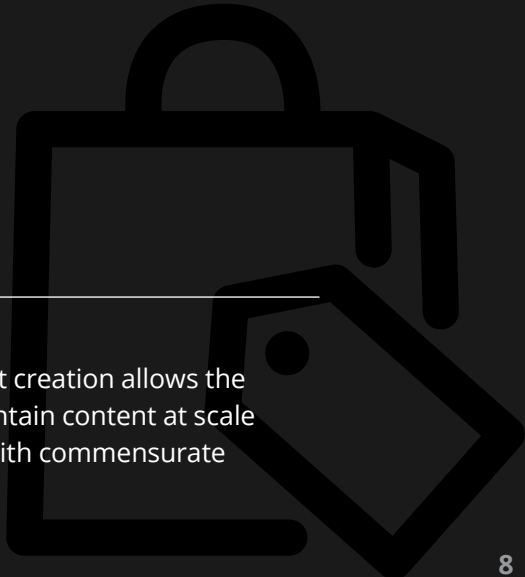
By tailoring content and the user experience based on language, region, and customer preferences, the enterprise can drive customer satisfaction and loyalty.

Revenue growth

Personalized content can promote higher engagement, traffic, and conversions through tailored and relevant marketing experiences.

Cost efficiency

Using Generative AI for content creation allows the enterprise to develop and maintain content at scale without the costs associated with commensurate human labor.





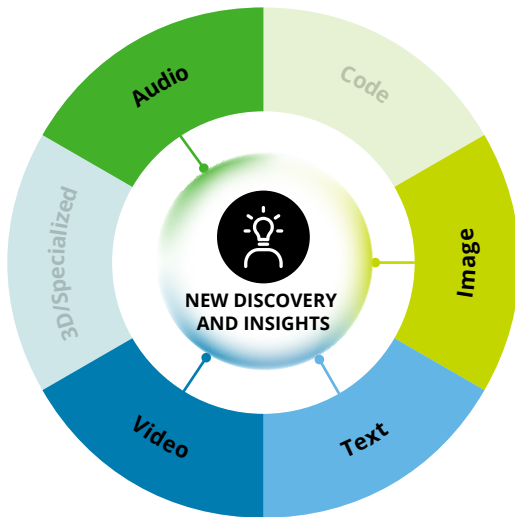
Planning for promotions

(Reimagined Trade Promotions)

Generative AI can be used to prepare promotion plans, negotiation materials, pre-works, and pitch-decks.

Issue/opportunity

When it comes to planning and negotiating trade promotions, Consumer Packaged Goods (CPG) organizations draw from a multitude of data sources and there is often not enough time to filter through all relevant information. What is needed is a way to more rapidly consult data sources to enhance trade pricing negotiations by predicting outcomes, customizing strategies, and tailoring selling stories. At the same time, there is also a challenge in understanding complex transactional data from retailers, which holds valuable insights for the design of successful promotion plans (i.e., what, where and how to promote).



How Generative AI can help

Supporting employees

Generative AI can be used to prepare negotiation materials by combing through older campaigns or deals, sorting the relevant information, and generating suggestions. This helps equip the human employee with materials like pre-works (e.g., consolidated material from prior years) and pitch-decks, supporting their negotiations.

Predicting outcomes

Generative AI can help optimize trade shelf spacing and investment allocation by predicting outcomes and conducting scenario building and storytelling. It can also be used to build scenarios with cultural customizations for negotiation processes with retailers.

Optimization support

With Generative AI, users can rapidly analyze EPOS data and transactional information to provide insights that help optimize the design of promotional programs, setting the right price points, promotion mechanics, and anticipating sales uplift to inform production processes of the expected demand.

Planning for promotions

Managing risk and promoting trust



Security

Because price, margin information, and negotiation strategies are consumed by the model, it must be secured to prevent the leakage of sensitive commercial data.



Fair and impartial

The data used to train and fuel the model may be dated, leaving new target groups and small-but-growing customer segments potentially underrepresented. As a result of this latent bias, the model may be challenged to provide commensurate accuracy for all groups and segments.

Potential benefits

Driving efficiency

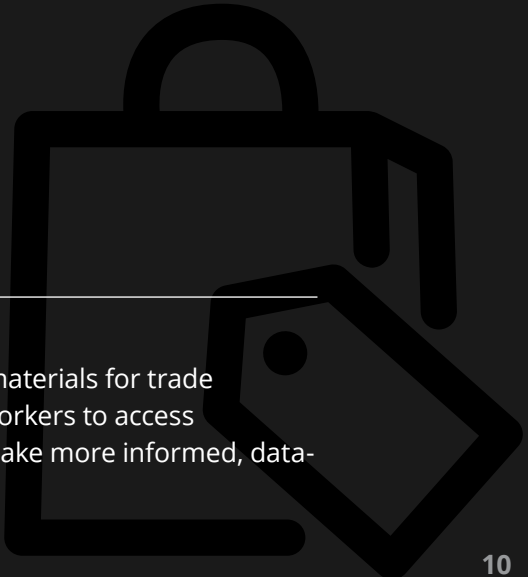
By using Generative AI to augment preparing and sorting materials, the organization promotes efficiency in trade promotion processes.

Trade promotion effectiveness

Leveraging Generative AI can help improve allocation of resources across price, promotion, and negotiation strategies.

Data-driven decision making

Using Generative AI to create materials for trade negotiations enables human workers to access much more information and make more informed, data-driven decisions.





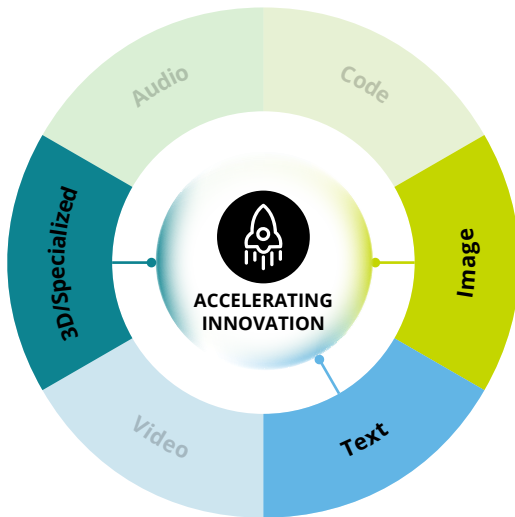
Product design assistant

(Rapid Prototyping)

Accelerate the product prototyping lifecycle by creating new concepts and high-fidelity virtual prototypes with the help of Generative AI.

Issue/opportunity

Traditionally, product development is a time-intensive process, and from hundreds of options, just one idea is commercialized. The challenge is in part overcoming human limitations in generating diverse and innovative ideas, facilitating cross-industry inspiration, and streamlining concept testing processes.



How Generative AI can help

A creative aid

Generative AI can be integrated with CAD and other software to assist the design process of new prototypes and products. This can help creative thinking, brainstorming, and out-of-the-box thinking.

Trends for innovation

Generative AI can be a collaborative assistant by drawing from consumer trend analysis to help inform creative concepts and products.

Product design assistant

Managing risk and promoting trust



Reliable

While virtual prototyping can accelerate the iteration process, a Generative AI assistant may propose prototype designs that are sound in a virtual space but infeasible from the standpoint of real-world fabrication and regulatory compliance.



Responsible

There remain legal questions around the intellectual property rights for outputs created with Generative AI. Ownership rights, attribution, and the protection of designs can become complex when Generative AI is involved in the creative process.

Potential benefits

Cost reduction

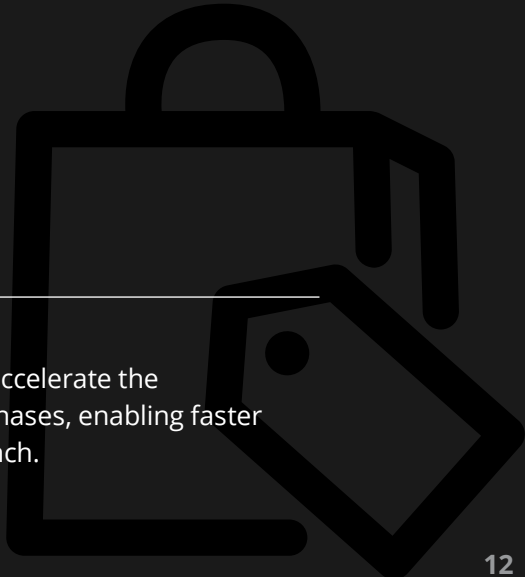
By reducing the need for extensive market research and concept testing, the enterprise can save resources, time, and money across the prototyping process.

Increased innovation

More rapidly generating diverse and unconventional ideas in greater volume expands the creative possibilities for new product development.

Speed to market

Leveraging Generative AI can accelerate the ideation and concept testing phases, enabling faster product development and launch.





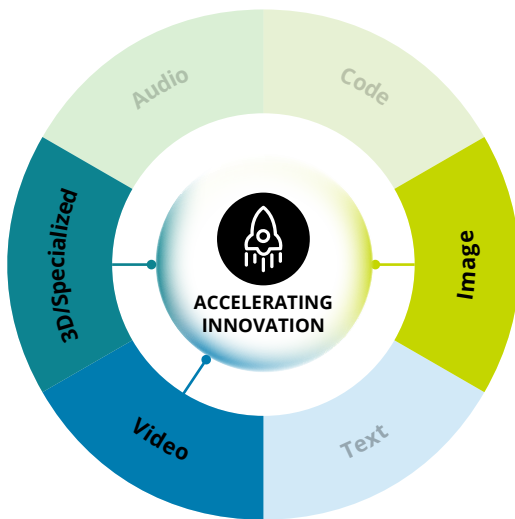
Strike an AI pose

(Artificial Model Agency)

Generative AI can create video and still images to more efficiently showcase products to a more diverse set of people.

Issue/opportunity

The model industry requires significant coordination among agencies, actors, photographers, and other professionals. Agencies may sometimes struggle to find models with a specific look or voice, and it may also be challenging for agencies to communicate their ideas to models and even to the audience. The overall process can suffer from inefficiency, limited capacity for customization or variation, limited diversity, high costs, and issues around intellectual property and licensing.



How Generative AI can help

Customization and realism

Generative AI can be used to create a range of artificial models, with customizable features that can promote diversity and uniqueness. These artificial models can exhibit a high degree of realism, giving consumers more immersive experiences with a greater ability to envision the products that interest them.

Time and cost efficiency

Generative AI can automate the generation of models by using pictures of one model and transferring it to many other models, reducing the need for manual creation from scratch.

Adaptability in style and aesthetics

Whether agencies require models with a specific art style, period, or cultural reference, Generative AI can be used to adapt artificial models to specific design requirements. Agencies can also provide feedback on generated models to help the Generative AI application refine and improve its outputs.

Driving diversity

By using Generative AI to create virtual models, the business has greater flexibility to create diverse and inclusive representations.

Strike an AI pose

Managing risk and promoting trust



Transparency

The enterprise should consider the ethics of portraying a digital output as authentically human. Suggest weighing the degree to which customers should understand they are not observing a real person, as that could have implications for customer trust in how the product looks in person, and ultimately, trust in the company itself.



Responsible

The Generative AI system is trained on the data and likeness of human models, which raises important ethical and intellectual property considerations regarding consent, privacy, and representation.

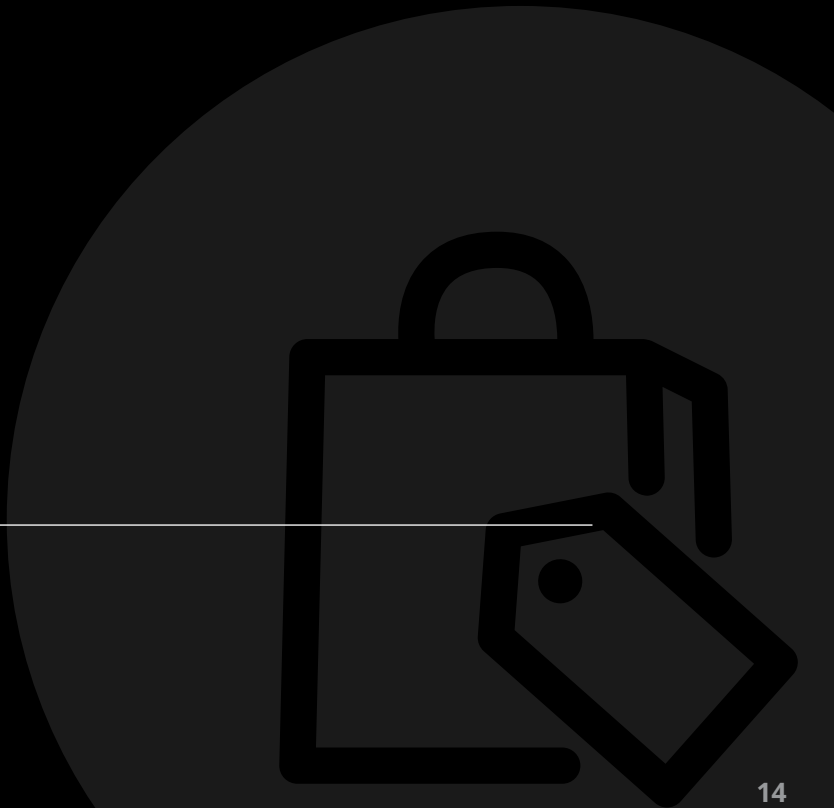
Potential benefits

Model customization

A more tailored and diverse use of AI-generated models to showcase products may better attract customer interest and sales.

Scale on demand

Leveraging Generative AI to create artificial models allows the enterprise to quickly adapt showcasing to changing market conditions and customer needs. It can achieve this at scale, across markets and geographies, while also ensuring consistent quality and speed.





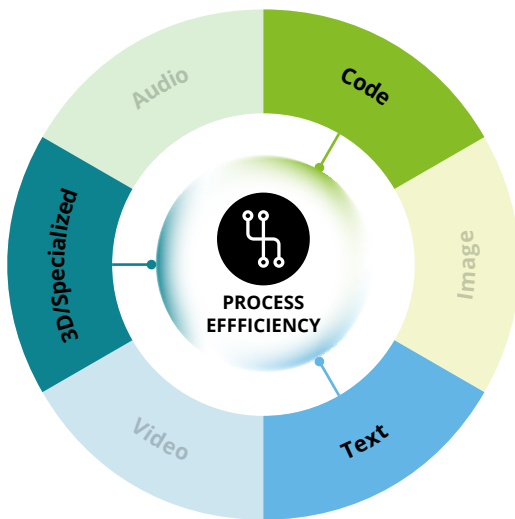
Data access for all

(Data-Empowered Business Users)

Generative AI can help guide business users to key insights in consumer behaviors by enabling them to combine data from various sources through natural language queries and summarizing issues to action without needing the help of dedicated analysts.

Issue/opportunity

Everyone in the business should be consumer-focused, but while the marketing function may have access to customer data, business stakeholders in product design, trading, retail operations, supply chain, and other functions may only encounter slices of customer information. Currently, enterprises need dedicated analysts to pull SQL queries to curate data for decision making, which creates an expertise barrier to use AI the advantages of AI. Data is held across different silos, and existing interfaces are only built to answer pre-populated questions. The result is that most business users cannot fully leverage the enterprise's models and data, and cross-functional insights are challenging to identify.



How Generative AI can help

Greater access to insights

A Generative AI system can help stakeholders across all business functions better understand the consumer by simplifying data mining and analysis with user-friendly interfaces and natural language queries. This allows users to ask questions relevant to their work and extract actionable insights without compromising functionality.

Bringing down data barriers

The system can aggregate data from various sources and domains (e.g., purchasing patterns, customer service, website and browsing data, marketing campaign response) to provide comprehensive insights into consumer behaviors. Reaching across data silos, the system can automatically identify outliers and summarize issues to guide decision-makers to areas requiring attention.

Data access for all

Managing risk and promoting trust



Security

The Generative AI model is exposed to sensitive and proprietary enterprise data, which creates a risk of potential data leakage. To mitigate this risk, the enterprise may look to restricting data access to the Generative AI provider, as well as carefully determining which consumer data should be exposed to the model.



Reliable

For business users to make confident decisions informed by Generative AI, they need to be able to trust the outputs. To this end, data inputs need to be accurate and up-to-date, and outputs should be validated and monitored.



Explainable

Business users require sufficient context to interpret consumer data, and whereas analysis conducted by a data expert inherently contains a level of “human in the loop”, when using a Generative AI model, business users need the capacity to understand context and outputs.

Potential benefits

Agile decision-making

Business users are empowered to make more informed decisions about product launches, sales, and other customer-related initiatives both quickly and efficiency.

Time and resource efficiency

Simplifying data access and analysis for business users can accelerate time-to-insight without additional burdens on data analysts and the technical workforce.





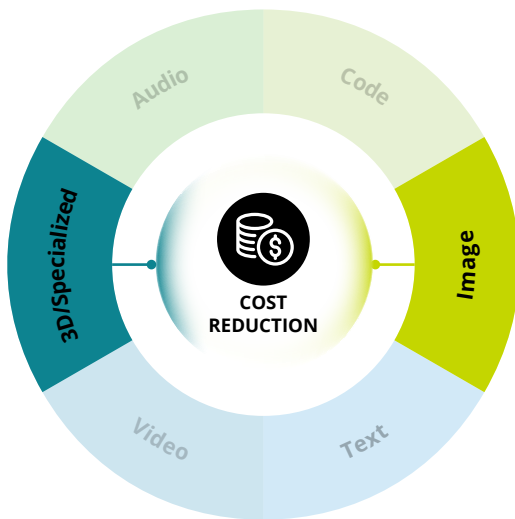
Seeing is believing

(Virtual Try-On)

Generative AI can be used for style transferring, which allows consumers to see a digital rendering of clothes and other products on their own bodies, in their homes, and elsewhere.

Issue/opportunity

In the clothing and make-up industry, consumers typically try on products to determine whether they want to purchase and keep it. Yet, this traditional method of selecting products is challenged by online shopping, where the consumer relies on pictures and product descriptions to inform their decision. This can lead to high return rates and affiliated costs to the company, as well as customer dissatisfaction.



How Generative AI can help

Accurate style transferring

By analyzing images or videos of the customer and the desired style, Generative AI can create realistic representations of how the clothing or product would look in the real world.

Virtual mix-and-match

Generative AI allows customers to more easily explore a wider range of style options, clothing combinations, and accessories.

Greater personalization

By considering factors such as body shape, skin tone, and personal style, Generative AI can suggest suitable products that align with the customer's preferences.

Seeing is believing

Managing risk and promoting trust



Privacy

By working with and augmenting consumer photos and videos, the model is exposed to sensitive or personally identifiable information, which is subject to privacy regulations and standards. Leveraging Generative AI for style transferring requires the enterprise to ensure user data is safely stored, transferred, and used.



Transparency

When consumers input an image of themselves or their surroundings, they need to understand how that media is used by the enterprise, how consumer-machine interactions are tracked and recorded, and whether there are any privacy risks to the consumer when using the style transferring application.



Fair and impartial

If the training set is unbalanced and therefore biased, renderings for virtual try-ons may be more accurate or realistic for one demographic group over another, potentially impacting customer satisfaction and regulatory compliance.

Potential benefits

Customization for the customer

Catering to the customer buying experience with a simpler way to explore product offerings promotes customer satisfaction.

Reduced return rates

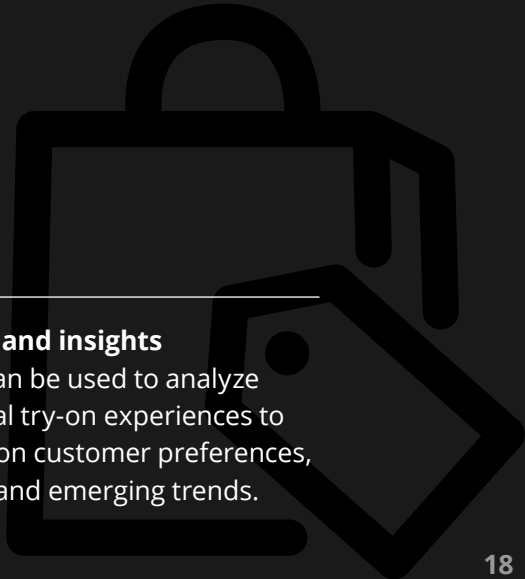
When customers can better see and imagine how a product looks before making a purchase, it helps reduce the likelihood of mismatched expectations, product dissatisfaction, and returns.

Simpler sales

Making it easier to choose which product to buy by virtue of a simpler method for exploring options can support sales growth.

Trend analysis and insights

Generative AI can be used to analyze data from virtual try-on experiences to gather insights on customer preferences, popular styles, and emerging trends.





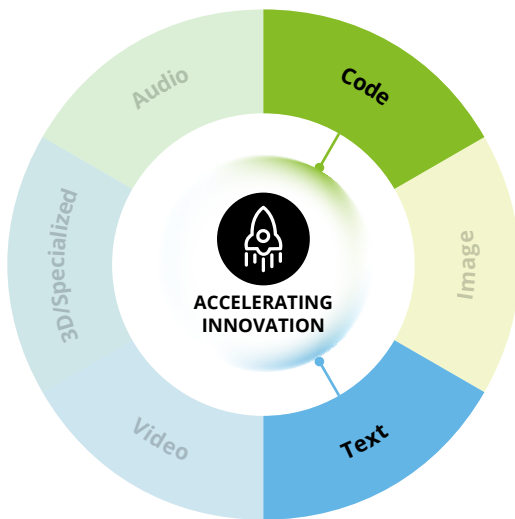
Code assist for developers

(Augmented Developer)

Generative AI can be used to supplement the work of software developers by helping create and maintain multiple applications and platforms.

Issue/opportunity

To give customers a seamless digital experience, enterprises are challenged to develop and maintain applications across different platforms. Yet, developers and other high-skilled professionals are in high demand and short supply. To overcome the talent gap, Generative AI can be used to supplement a developer's effort by automating aspects of code creation and maintenance so the developer can focus on more complex code writing and validating Generative AI outputs.



How Generative AI can help

Offloading lower-level work

Generative AI can augment the completion of repetitive tasks, such as the deployment and maintenance of code across different platforms (e.g., iOS, Android, webapps).

A developer assistant

Generative AI can be used in the development of the code itself, serving as a assistant supporting software developers in writing and maintaining code. It can also promote consistency across platforms and applications, such as by converting functional code to different environments.

Code assist for developers

Managing risk and promoting trust



Security

Code created with Generative AI may include vulnerabilities that may be difficult to identify during development and even after deployment. Given the importance of cybersecurity, enterprises need to ensure generated code does not introduce security risks.



Reliable

Generative AI is susceptible to errors, and when using it for development tasks, human validation is necessary to mitigate the risk of bugs or vulnerabilities in code as it is created and maintained for multiple applications.

Potential benefits

Efficient deployments

Using Generative AI can help developers efficiently deploy and maintain code across platforms.

Digital consistency

Using Generative AI helps developers maintain a consistent experience across multiple platforms by ensuring each environment functions at the same level of quality, thanks to automation (e.g., code conversion) that augments developer capacity and capabilities.





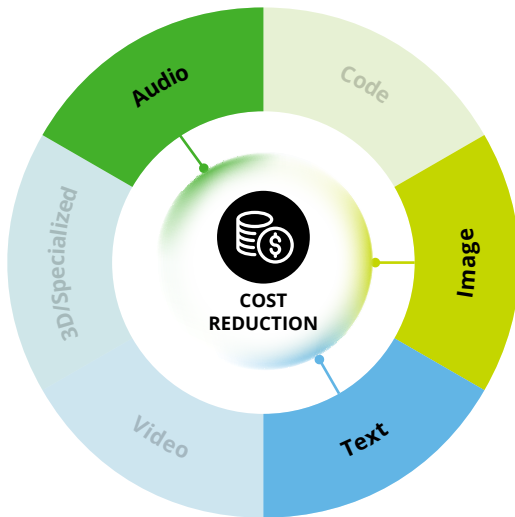
Customer support on demand

(Customer Assistant)

Generative AI-enabled virtual agents can improve the customer experience by providing real-time, personalized support and creating new ways of interacting with customers.

Issue/opportunity

After purchase, customers may seek information or support around a product or service. While traditional call centers have implemented some AI capabilities to automate responses to customer inquiries, the automation is often limited in its capacity to interpret customer questions and respond in a conversational and helpful way. The need is to accurately and proactively respond to customer inquiries and online trends in an efficient and effective manner.



How Generative AI can help

A conversational agent

Generative AI can enable new ways of engaging with customers, using speech-to-text and natural language inputs to generate empathetic and personalized conversations for aftersales support and handling customer complaints.

Better use of human capital

Because Generative AI can provide instant, personalized responses to customer queries, offer relevant solutions, and engage in conversations, customers can gain faster response and resolution, and organizations can free up human agents to focus on more complex customer issues.

Customer support on demand

Managing risk and promoting trust



Reliable

The quality and accuracy of customer interactions impacts the customer experience and brand impression. If a Generative AI-enabled customer assistant fails to provide accurate and personalized advice or product instructions, it could degrade (rather than enhance) the quality of the customer interaction.



Transparency

Customers should have the opportunity to gain a clear understanding of what the model can and cannot do, and to promote transparency and positive engagements, enterprises should set customer expectations for the virtual assistant.

Potential benefits

Enhanced customer experience

Providing personalized and accurate support, guidance, and troubleshooting supports a positive brand reputation and improved customer relationships and loyalty.

Increased efficiency

By integrating Generative AI to automate aspects of customer engagement, a larger volume of customer interactions can be accomplished simultaneously, improving response times, driving customer satisfaction, and with the capacity to scale with customer demand.





A virtual shopping assistant

(Product Recommendations)

Generative AI can be used to create personalized product recommendations based on customer preferences and behavior.

Issue/opportunity

Suggesting the right products to customers can dramatically increase sales, and hyper-personalized product recommendations are often the most effective at driving a sale. Data-based product recommendations are already possible today, but they often lack a conversational, natural language tone. What is more, recommendations may lack a hyper-personalized quality as they are based on broader customer segments and purchase history, as opposed to individual customer search criteria and feedback.



How Generative AI can help

Hyper-personalized recommendations

Based on customer input and preferences, Generative AI can generate tailored recommendations, making the buying process more personalized and convenient. In addition, the interactive and iterative approach to product recommendations that Generative AI enables can yield more targeted suggestions than current search engine capabilities.

Image as input/output

Consumers can enter an image of preferred styles (e.g., a celebrity in a designer outfit), and the Generative AI model can output product identification and recommendation based on the image.

A virtual shopping assistant

Managing risk and promoting trust



Fair and impartial

Latent bias in training and testing data may lead the model to express a preference toward some products or product combinations when making recommendations. Ongoing monitoring, data updates, and human validation can contribute to continuous improvement and bias mitigation.



Privacy

The model may be exposed to customer data throughout the course of an interaction, and that personal information may be subject to regulatory protections. Important considerations include how the customer data is stored, transferred, and used, as well as how the data is consumed and used by the model itself.

Potential benefits

Enhanced customer experience

Providing personalized and accurate support, guidance, and troubleshooting supports a positive brand reputation and improved customer relationships and loyalty.

Increased efficiency

By integrating Generative AI to automate aspects of customer engagement, a larger volume of customer interactions can be accomplished simultaneously, improving response times, driving customer satisfaction, and with the capacity to scale with customer demand.





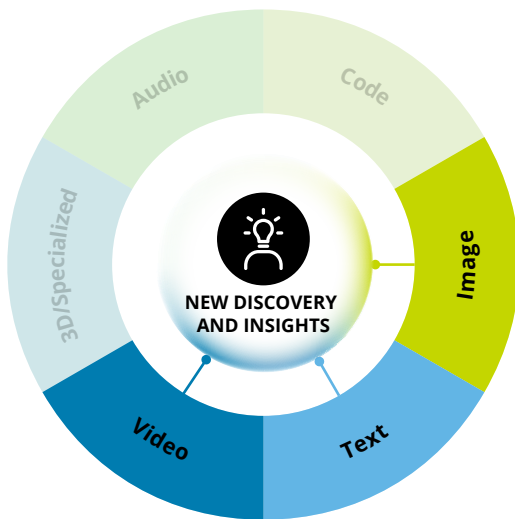
Next-level market intelligence

(Market Research)

By harnessing Generative AI's capacity to read and summarize vast amounts of relevant material, companies can expedite market research and gain concise insights for effective decision-making in new markets.

Issue/opportunity

When researching entry possibilities in new markets or customer groups and identifying new target segments, enterprises face a variety of challenges. Things like a lack of market data, unfamiliar customer preferences, cultural and economic differences, competitive analysis difficulties, regulatory complexities, high market entry costs, potential brand perception challenges, and uncertainties about demand and market acceptance all impact the speed and quality of market research.



How Generative AI can help

Market intelligence

Generative AI can help simulate market scenarios, generate synthetic data to fill data gaps, predict customer preferences based on existing patterns, offer cross-cultural insights, aid in competitor analysis, suggest compliance strategies, optimize market entry costs, simulate brand perception scenarios, and provide demand forecasting to reduce uncertainties.

Information synthesis

Generative AI enables rapid market research by efficiently reading and summarizing extensive volumes of pertinent material, presenting the information in a readily understandable format for market research teams.

Novel market segmentation

AI-generated data may reveal new and previously unidentified market segments within the target market. This can open up additional opportunities for niche marketing and product customization.

Richer personas

Rather than relying on basic surveys and focus groups for understanding consumer likes and dislikes, Generative AI can identify specific customer preferences and create detailed profiles. Using Generative AI, market research teams can even create fictional-yet-plausible customer personas based on the market's unique characteristics, helping the company better understand their potential customers' behavior and preferences.

Next-level market intelligence

Managing risk and promoting trust



Fair and impartial
Generative AI models may learn from biased datasets, leading to biased outputs that do not accurately represent the actual market.



Reliable
Given Generative AI's potential to hallucinate inaccurate outputs, AI-generated insights should be verified with real-world data and traditional research methods to ensure accuracy and reliability.



Responsible
While Generative AI can complement market research, it should not replace traditional research entirely, as it may miss qualitative nuances and human expertise.

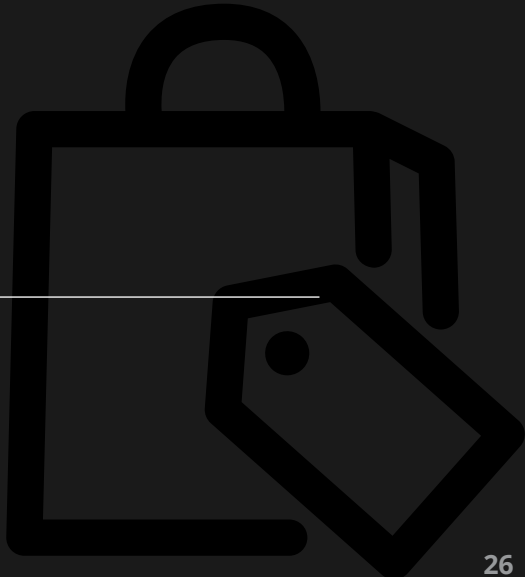


Transparency
To trust the Generative AI outputs, users require the ability to understand which samples and research methods were used to generate recommendations and insights.

Potential benefits

Cost-effective research
Generative AI can reduce the costs associated with traditional market research methods by generating large datasets and simulating scenarios.

Risk mitigation
By simulating market responses, CPG companies can identify potential risks and challenges in the new market before making substantial investments. This helps reduce the chances of product failure and financial losses.





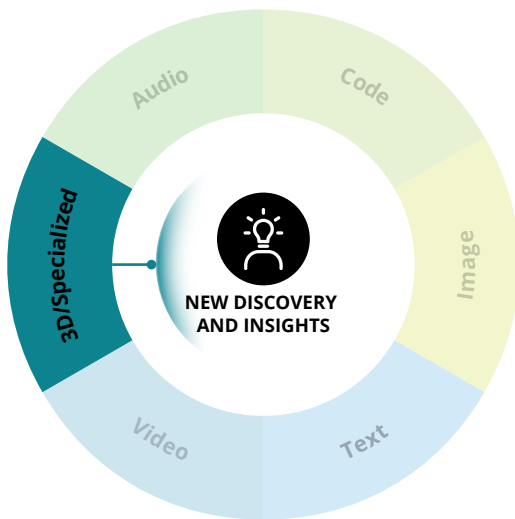
Integrated business planning

(AI consolidation of forecasting and planning across the enterprise)

AI can help an organization consolidate real-time sales, demand, and supply data across all functions, creating a single source of truth to drive faster, more strategic decisions in finance, supply chain, marketing, and sales.

Issue/opportunity

Today's companies have a wide variety of systems for planning and forecasting. However, the individual outputs from those disparate systems often conflict with each other and don't provide a unified view of what's really going on. Different teams—finance, supply chain, marketing, and sales—create their own forecasts using siloed data and inconsistent approaches. The potential results? Mismatched projections, inefficiencies, delayed decision-making, and significant operational waste.



How Generative AI can help

Real-time consolidation

Generative AI can consolidate real-time inputs from sales, inventory, marketing trends, and supply chain metrics to produce dynamic forecasts.

Sophisticated analysis

AI enables trend recognition, historical pattern analysis, and early alerting on supply-demand gaps, while also facilitating scenario planning and pricing strategy refinement—all through a unified dashboard.

Actionable insights

The system can continuously update itself as new data flows in, signaling demand shifts or regional product affinities and providing decision makers with actionable insights.

Integrated business planning

Managing risk and promoting trust



Robust and reliable

Given the system’s critical business impact, resilience is key. AI models should be capable of updating in real time and integrating multiple data streams reliably and accurately. Extensive pilot testing can help fine-tune model accuracy before scaling.



Transparent and explainable

A user-facing dashboard that clearly shows inputs, trends, and recommendations can help business leaders understand how forecasts are generated, what assumptions are at play, and what real-world data is influencing outputs—reducing blind reliance on the system and promoting human-AI collaboration.



Safe and secure

To help mitigate security breaches and operational disruptions, robust security protocols should be embedded in both the technology infrastructure and data flows, with IT overseeing access controls, data encryption, and integration with existing ERP systems.

Potential benefits

Unified forecasting with less redundancy

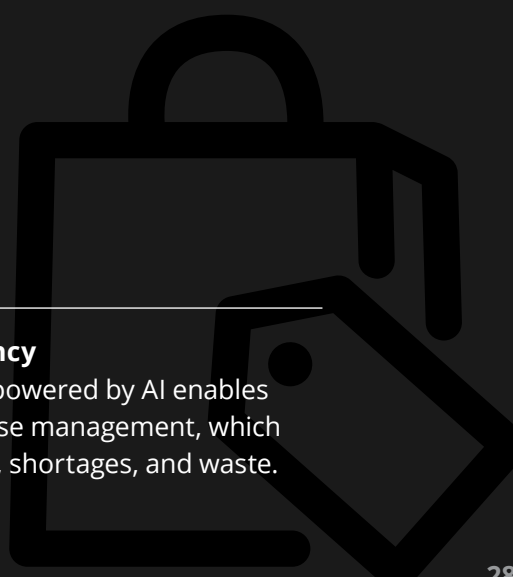
AI can help minimize conflicting forecasts across departments, creating a single source of truth for the entire enterprise.

Improved collaboration and decision-making

Cross-functional teams are able to operate from the same real-time data set, improving alignment. Also, leaders spend less time on data consolidation and cross-checking, enabling them to make better-informed decisions more quickly.

Greater supply chain efficiency

Integrated business planning powered by AI enables better inventory and warehouse management, which can reduce supply disruptions, shortages, and waste.





Social media content generation

(Automated, multimodal content creation that is trend-aware and always on)

Generative AI is now being used to autonomously produce social media content—text, images, hashtags, and videos—that aligns with brand identity and capitalizes on viral trends in real time.



Issue/opportunity

Social media is a key channel for communicating with customers and shaping brand perceptions, and an important driver for awareness, engagement, and sales conversion. But creating personalized, high-quality content at speed and scale—while maintaining brand consistency and legal compliance—is a difficult balance.

Large enterprises often rely on global agencies to support social media content across dozens of brands and channels. This approach can be very costly, time-consuming, and limited by human working hours. Also, in a media environment where trends can shift in an instant, traditional methods likely cannot scale or respond quickly enough to keep pace with opportunities in real time.

How Generative AI can help

Detecting and analyzing trends and events

AI can help detect and analyze influencer trends and brand affinity across a wide range of social media platforms 24/7, identifying opportunities to shape consumer expectations in real time. Retrieval-augmented generation (RAG) capabilities provide real-time access to social data, such as trending hashtags, viral video clips, and current events.

Generating multimodal creative content

GenAI offers the ability to autonomously generate creative content across modalities, while remaining contextually and culturally aware. Key capabilities include: (1) LLMs for generating social media copy, product descriptions, captions, and hashtags; (2) multimodal image models for visual asset generation, including pack shots, brand imagery, and marketing visuals; and (3) short-form video generation.

Model-agnostic orchestration

Content creation tasks can be dynamically routed to the most cost-effective or best-performing GenAI models, optimizing output while reducing compute costs.

Social media content generation

Managing risk and promoting trust



Robust and reliable

Retrieval-augmented generation can reduce hallucinations and improves model performance over time. Fallback models and safety nets can mitigate failures or inappropriate content generation under unpredictable conditions.



Fair and impartial

The content generation pipeline should be evaluated regularly for potential cultural, social, or representational biases. Human oversight can ensure that outputs reflect brand values.



Respectful of privacy

No personal user data should be used in the generation process; models should be trained and tuned on anonymized or public datasets. Data residency and usage should comply with regional regulations, including the EU AI Act.

Potential benefits

Always-on, real-time responsiveness

Traditional content workflows often require long lead times for ideation, approval, and execution. With GenAI, brands can respond almost instantly to real-time events, seasonal trends, or cultural moments by generating relevant content in minutes, enabling more agile and timely brand engagement.

Scalable content production at low marginal cost

Generative AI enables brands to produce high volumes of personalized, platform-specific content—text, images, and video—without requiring a linear increase in resources. The system can support hundreds of product lines and campaigns with minimal incremental effort, greatly improving operational leverage.

Cost reduction through automation and budget reallocation

Augmenting external creative agencies and internal content teams with AI-generated outputs can reduce operational costs. It can also free up budget that can be reallocated toward more strategic initiatives, such as paid media, analytics, or customer experience improvement.

Data-driven personalization and targeting

AI systems can tailor content for audience segments based on behavior, geography, platform norms, or product affinity. This micro-personalization allows brands to deliver relevant content to niche audiences, increasing engagement and conversion potential.

Improved productivity

By automating repetitive or time-intensive content generation tasks, marketing and creative professionals can focus more on high-value work such as strategy, brand storytelling, or campaign optimization. This reallocation of effort can lead to improved job satisfaction and better use of talent.

Consistent brand voice and visual identity

With proper tuning and governance, AI-generated content can more reliably align with predefined brand guidelines, helping to ensure a unified voice across markets, languages, and touchpoints. The system can learn and reinforce tone, terminology, and aesthetic standards consistently.

Conclusion

Getting the most value from Generative AI

These are the early days of Generative AI, but the technology is rapidly maturing. As it does, organizations in every industry will probe how this type of AI can contribute to their business and open doors to transformative opportunities. As such, an important part of understanding and working with Generative AI is shaping the vision for the future, acknowledging both the potential benefits and the risks.

In this Generative AI-enabled era, governance and risk mitigation are business imperatives. The challenges organizations face with traditional AI are amplified in this new arena. A commitment to the trustworthy development and use of Generative AI will only become more important as the capabilities grow and governing bodies shape rules for their application.

Still, there is also a risk in waiting to embrace Generative AI. The use cases described in this dossier are a starting point for exploring how this powerful technology can be used to improve the enterprise today and prepare it to lead in the future.



A handwritten signature in blue ink, reading 'Beena'.

Beena Ammanath
Global Deloitte AI Institute
Leader, Deloitte AI Institute
United States, Lead
Deloitte Consulting LLP



A handwritten signature in black ink, reading 'Francisco'.

Francisco Barroso
Global Generative AI Market
Activation Leader
Deloitte Consulting LLP



A handwritten signature in black ink, reading 'Sulabh'.

Sulabh Soral
Deloitte AI Institute
United Kingdom, Lead
Deloitte United Kingdom

Contact us



Kate Schmidt
US Deloitte AI Institute Leader
Deloitte Consulting LLP
kateschmidt@deloitte.com



Ivana Savic Vucenovic
Global Office of Generative AI Program Leader
Deloitte Touche Tohmatsu
ivucenovic@deloitte.com

Deloitte AI Institute



Beena Ammanath
Global Deloitte AI Institute Leader, Deloitte AI Institute United States, Lead
Deloitte Consulting LLP
bammanath@deloitte.com



Audrey Ancion
Deloitte AI Institute Canada, Lead
Deloitte Canada
knuttall@deloitte.com



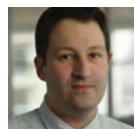
Naser Bakhshi
Deloitte AI Institute Netherlands, Lead
Deloitte Netherlands
nbakhshi@deloitte.nl



Yousef Barkawie
Deloitte AI Institute Middle East, Lead
Deloitte United Arab Emirates
ybarkawie@deloitte.com



Dr. Bjoern Bringmann
Deloitte AI Institute Germany, Lead
Deloitte Germany
bbringmann@deloitte.com



Jefferson Denti
Deloitte AI Institute Brazil, Lead
Deloitte Brazil
jdenti@deloitte.com



Tiago Durao
Deloitte AI Institute Portugal, Lead
Deloitte Portugal
tdurao@deloitte.com



Roman Fan
Deloitte AI Institute China, Lead
Deloitte China
rfan@deloitte.com



Nicolas Griedlich
Deloitte AI Institute Luxembourg, Lead
Deloitte Luxembourg
ngriedlich@deloitte.lu



Jan Hejtmanek
Deloitte AI Institute Central Europe, Lead
Deloitte Central Europe
jhejtmanek@deloitte.com



Prashanth Kaddi
Deloitte AI Institute India, Lead
Deloitte India
pkaddi@deloitte.com



Chris Lewin
Deloitte AI Institute Asia Pacific Lead
Deloitte Singapore
chrislewin@deloitte.com



Tomotake Kozu
Deloitte AI Institute Japan, Lead
Deloitte Japan
tomotake.kozu@tohmatsu.co.jp



Dr. Kellie Nuttall
Deloitte AI Institute Australia, Lead
Deloitte Australia
knuttall@deloitte.com



Wessel Oosthuizen
Deloitte AI Institute Africa, Lead
Deloitte Africa
woosthuizen@deloitte.com



Sulabh Soral
Deloitte AI Institute United Kingdom, Lead
Deloitte United Kingdom
ssoral@deloitte.com



Richard Eudes
Deloitte AI Institute France, Lead
Deloitte France
reudes@deloitte.fr



Philipp Wendland
Deloitte AI Institute Germany, Program Manager
Deloitte Germany
pwendland@deloitte.com



This communication contains general information only, and none of Deloitte Touche Tohmatsu Limited, its member firms, or their related entities (collectively, the “Deloitte Network”) is, by means of this communication, rendering professional advice or services. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser. No entity in the Deloitte Network shall be responsible for any loss whatsoever sustained by any person who relies on this communication.

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee (“DTTL”), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as “Deloitte Global”) does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the “Deloitte” name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.