

Use Generative AI to Enhance Content and Customer Experience

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Initiatives: [Executive Leadership: Artificial Intelligence](#); [Artificial Intelligence](#); [Revenue Technology](#)

Generative AI is a disruptive technology that has a proven impact on content development and customer experience. Executive leaders must examine practical marketing applications to drive creativity and personalized experiences that exploit generative AI's transformative promise.

Additional Perspectives

- [Summary Translation: Use Generative AI to Enhance Content and Customer Experience](#)
(25 August 2022)

More on This Topic

This is part of 2 in-depth collections of research. See the collections:

- [Applying AI – Industries](#)
- [Applying AI – Business Domains](#)

Overview

Key Findings

- Generative artificial intelligence (AI) delivers high-value artifacts (e.g., words, images, designs and code), expanding the AI toolkit beyond classification, optimization and prediction.
- Generative AI supports artifact creation and basic tasks (e.g., editing, resizing, color correction), enabling enterprises to reallocate human resources to support higher-value concept development and creative work.
- Generative AI has the potential to create new intellectual property, but the technology to prevent copyright infringement requires a more disciplined framework and consistent use than is currently available through vendor applications or supported by governmental policy.
- Strategic marketing applications of AI should be part of a larger enterprise vision that explores the potential ethical impact of AI, along with proper training and testing among data scientists.

Recommendations

Executive leaders who are shaping innovation strategy through the application of generative AI for marketing should:

- Pilot generative AI in areas that require a larger volume of artifacts. This includes content creation and optimization of assets and messaging, such as images, copy, audio and video.
- Explore industry-specific applications of generative AI today as they meet your primary use cases for asset creation and customer experience enhancement. Once proven within your organization, look to expand to specific areas where AI can support the entire workflow from concept to execution.
- Budget for the staff necessary to support the creative process. Most applications still require people to set parameters, guide learning or provide governance and will require these resources for success.
- Develop a cross-functional application of generative AI to develop virtual influencers and brand avatars for social interactions to alleviate friction in the buying journey and support customer service teams.

Strategic Planning Assumptions

By 2025, 30% of outbound marketing messages from large organizations will be synthetically generated.

By 2024, the European Union will pass legislation to mandate the “watermarking” of AI-generated artifacts.

By 2023, more than 80% of organizations will use some form of computer vision to analyze images and videos.

Introduction

Practical Applications of Generative AI for Marketing

Generative AI can augment, accelerate and create new content and experiences. The ability to create original content, synthetic data, models of physical objects and code to improve response time to customer engagement is providing breakthrough innovation opportunities for marketing.

How Does It Work?

Generative AI learns from existing artifacts to generate these new, realistic artifacts that reflect the characteristics of the training data, but don't repeat it. It produces new content artifacts such as video, narrative, speech, training data and product designs. Generative AI can generate within the same modality (e.g., picture to picture) or across modalities (e.g., picture to narrative) and produce entirely unique artifacts or improve existing ones.

Generative AI promises a new level of creativity and enhanced experiences through two primary methods:

- **Augmented:** Generative AI creates artifacts to support higher-order creative tasks by humans. It optimizes existing creative workflows collaboratively with human operators that shape the AI's generation behavior through reinforcement, such as by saying “more like this” generated element or “less like this.”
- **Automated:** Generative AI produces unique artifacts in bulk with little human involvement beyond shaping the parameters for production. For example, humans set the brand guidelines for automated copy development.

How Can Generative AI Benefit Content and Customer Experience?

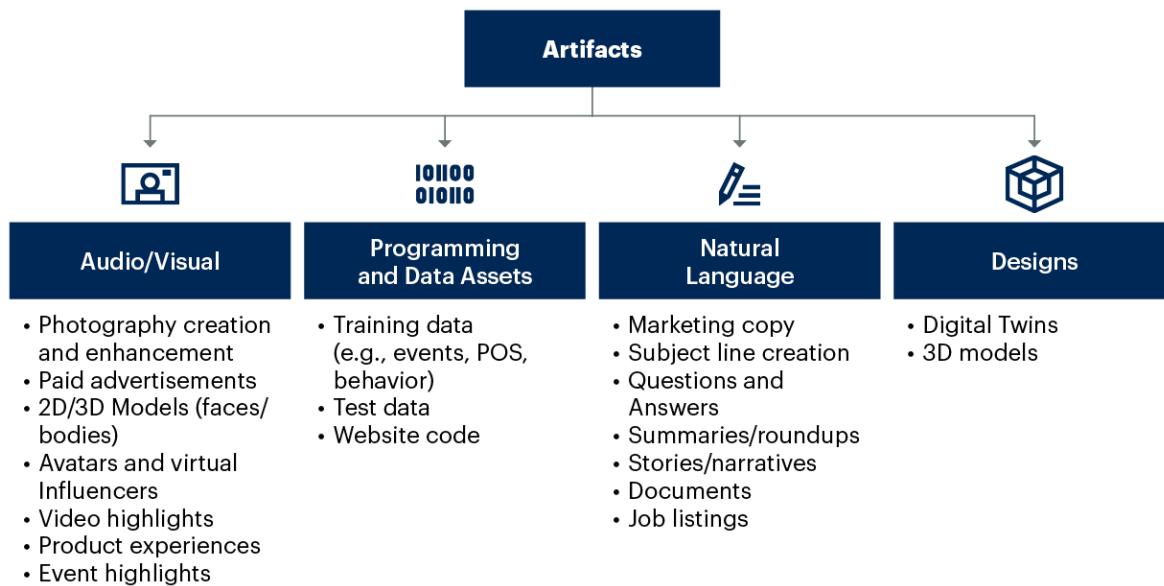
Generative AI is an emerging technology that is quickly gaining traction for commercial applications. Most use cases have less than 1% of target market adoption, with some exceptions.¹ Generative content creation, however, has a significant presence in marketing, with varying levels of practical impact. The improvements in computer vision (CV) are increasing the transformative potential. CV involves capturing, processing and analyzing real-world images and videos to allow machines to extract meaningful and contextual information from the physical world. It requires massive amounts of unstructured data to learn creatively, but when applied properly, can improve operational efficiencies and strengthen the results of these use cases.

Specific marketing applications include (see Figure 1):

- Text generators like GPT-3 can be used to create marketing copy, news stories and job descriptions. Short form content like subject line creation can support A/B testing.
- Images can be generated for logos; human images can be generated for modeling; and images can be altered for different poses, aging and many other aspects.
- Video can be created to showcase event highlights, immersive product experiences and multilingual versions.
- Ads can be optimized by assembling content artifacts into combinations to support personalization.
- Computer vision (CV) can be used to improve image quality, develop digital twins and create deep fakes.
- Avatars and virtual influencers can be used to engage customers on social media and in the metaverse, and to provide customer support.

Figure 1. Generative AI Can Create These Types of Artifacts for Content and the Customer Experience

Generative AI Can Create These Types of Artifacts for Content and the Customer Experience



Source: Gartner
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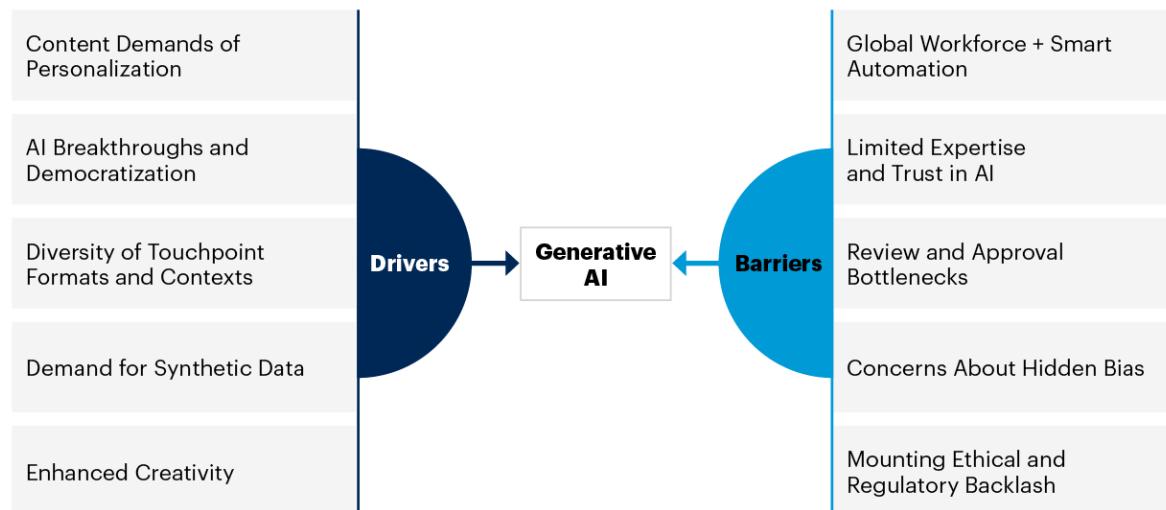
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As with any innovation, you need an understanding of the drivers and barriers that come with using generative AI (see Figure 2).

Figure 2. Drivers and Barriers to Generative AI

Drivers and Barriers to Generative AI



Source: Gartner
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Executive leaders should use this research to explore proven applications of generative AI including high-volume text generation; image optimization and diversity; multichannel video and local relevance; and 3D content, virtual influencers and Omniverse Avatars. Then, apply the recommendations to determine how generative AI for content and customer experience enhancement can have near-term impact on your efforts to fuel dynamic, personalized experiences.

Analysis

High-Volume Text Generation

The practical applications of generative AI for text generation are the most proven in-market. This includes two primary categories of natural language generation (NLG):

- **Short-form** – Versions of email subject lines, body copy, website content or other textual material that can be deployed and tested in support of customization and personalization efforts.
- **Long-form** – Text generators like GPT-3 that can be used to create marketing copy, news stories, poetry and resumes.

Reward: Increased engagement due to more relevant content. Copywriters and marketing teams can focus their efforts on “big-picture” creative and new campaigns. Generative AI can develop more versions of content to support A/B testing and scale personalization efforts. Long-form text generation can drive more accurate job descriptions and support hiring of marketers with unique and desired skill sets.

Potential Risk: Copy generation can lack variation due to shared AI learning models. Creative teams must continue to evaluate copy even with brand guidelines in place to ensure that the machine remains on brand as it learns how customers engage. While the combination of NLG suggests a future of automated message variations tuned to accelerate a customer’s journey, providers have so far only proven the market for slower, batch-style campaigns and content development for owned channels. Executive leaders who want to scale NLG to support journey development must wait for the technology to mature further.

Case in Point: JPMorgan Chase

The economic value of GAI has proven significant enough to convince JPMorgan Chase, for one, to adopt Persado’s AI-based natural language generation (NLG) platform to improve customer acquisition, customer value, and digital servicing. Chase reports between 50% and 250% higher engagement and conversion rates from NLG.²

Image Optimization and Diversity

Generative AI can support image creation in many forms, including image crops and edits, the application of image filter styles, creation of new images from text and synthetic generation of images. CV can take low resolution images and video and refine pixels to create high-production value content. This eliminates the need for sophisticated equipment to capture content and opens content development to a larger number of creators and methods. The use case for e-commerce is already evident with human images being generated for modeling and showing alterations of different poses, ages and diverse representations.

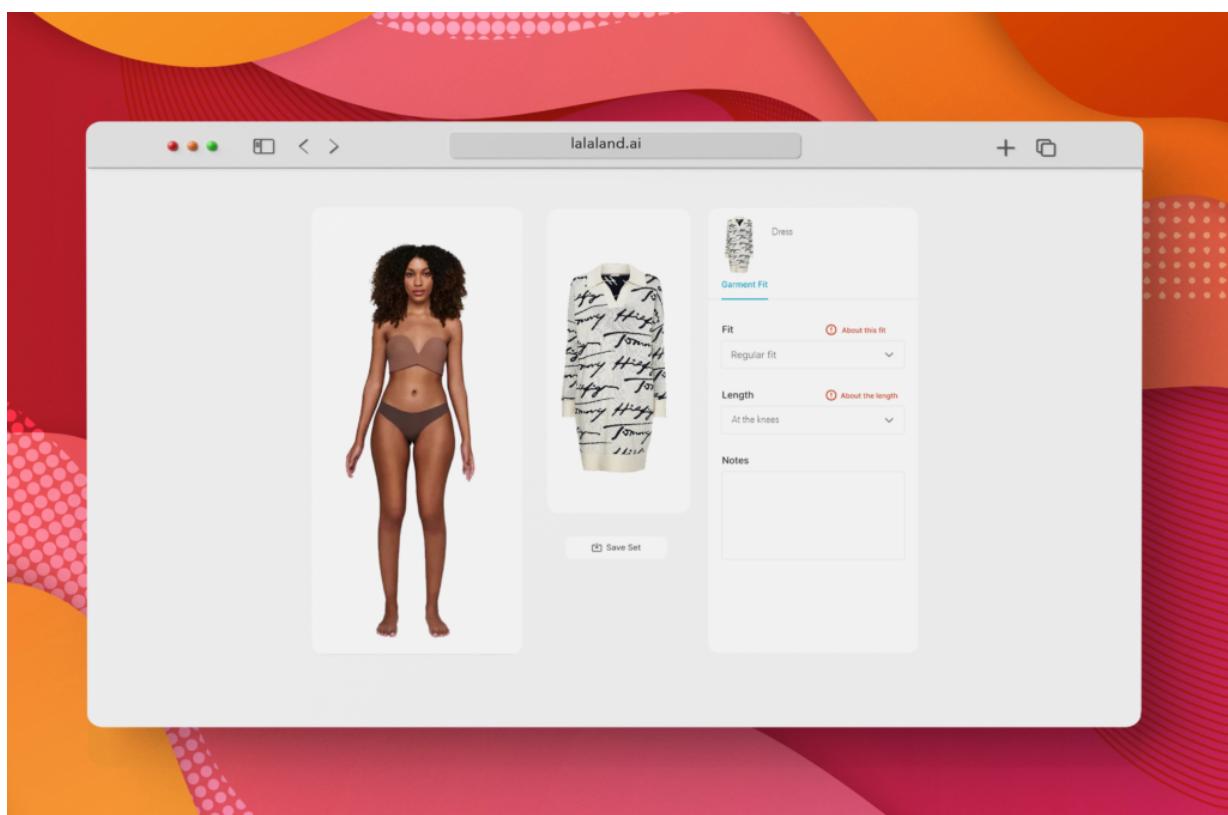
Reward: Increased customer acquisition opportunities and purchase satisfaction rates. People can see how clothes and accessories will look on models similar to them, allowing for diverse representation. This use of AI can also have a positive environmental impact on particular industries, like fashion and luxury, due to fewer returns and the associated waste that comes with it. Time to market is also improved without the delays of creative shoots. The ability to develop new content without traditional production constraints has the potential to support creative teams during times of disruption and transform process.

Potential Risk: Enhancing existing discrimination based on the bias of generative AI. There is a lack of the cultural awareness that is needed for global and local scale of imagery. The future of data privacy comes sharply into play. Executive leaders will need to plan now to build and collect permission that allow for the collection and use of visual content meant to reflect and persuade individuals.

Case in Point: Lalaland

The use of AI creates synthetically generated virtual models for e-commerce platforms. Full body models represent diversity and show users exactly the type of model they want to see. Lalaland is a Dutch tech startup that currently has over 60,000 models that vary in size, age, skin and body dimensions.³ These AI-generated models have potential applications across any industry that uses human models (see Figure 3).

Figure 3. Lalaland Synthetic Images



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Source: Lalaland.ai

Multichannel Video and Local Relevance

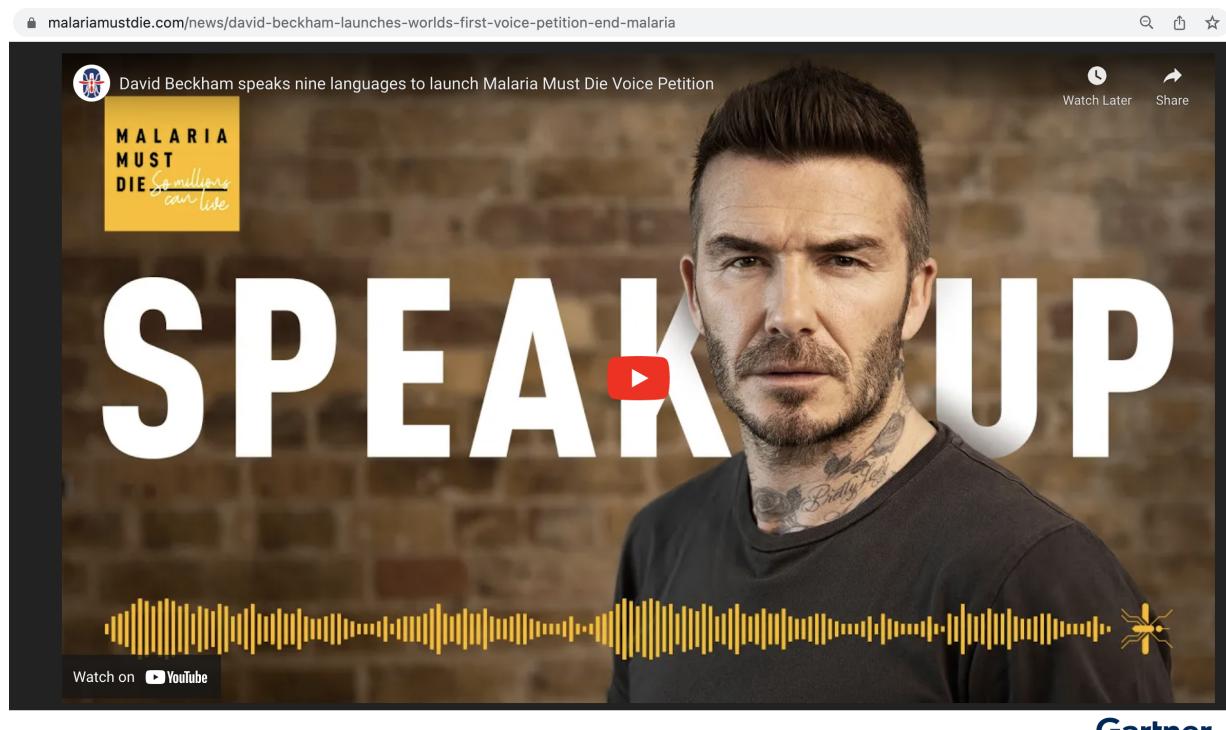
Incorporating video across platforms is now table stakes across many industries, but can be time-consuming and expensive. AI creative videos do not currently have the quality or sophistication of video production houses, but they can supplement what teams are already doing by producing bite-sized and quick-hitting videos. The use of CV for video applications requires that the video be broken into frames. This allows for image refinement, restoration and product identification. As the applications of video image analysis progress, the near-term applications on shoppable video and regionally specific product representation are clear.

Reward: Customers remain highly engaged with video content across paid and owned channels. Generative AI can create short videos from longer versions and create new videos from text. It can also be used to test consumer reactions to advertising and optimize new videos based on the consumer response. Ad networks can support the dynamic assembly of content artifacts to develop personalized creative based on response, shortening the time to creative optimization. The ability of generative AI to support language variations while altering video imagery to match can have a particular impact for global organizations looking to meet regional needs.

Potential Risk: Generative AI use cases for video creation are primarily driven by advertising platforms that support personalization and retargeting. AI-based video creation will require upskilling existing content creation teams on new technology and will still require reviews and approvals as this application of generative AI expands.

Case in Point: Malaria No More

An AI-enabled campaign, Malaria Must Die, featured David Beckham speaking in nine different languages to generate awareness for the cause. The campaign generated great results with more than 700 million global digital impressions and 420,000 online search results, and reached the disease's peak awareness in about three years. This AI campaign won the CogX award for Outstanding Achievement in Social: Good Use of AI (See Figure 4). ⁴

Figure 4. David Beckham for Malaria No More**Gartner**

Source: Malaria No More

The Next Creative Frontier: 3D Content, Virtual Influencers and Omniverse Avatars

Marketers continue to seek the elusive delivery of the right content, at the right time, on the right channels. This aspiration becomes even more complex as customers engage with new platforms and content types. Generative AI already helps to develop 3D models that can support product development, marketing and e-commerce. Now CV techniques are pushing these use cases forward. CV can create deep fakes and virtual influencers by replacing original video with precise visual facial features from another video or set of images, allowing developers to update speech and imagery. CV combined with 3D models and digital twins are providing even more value as they form the basis for virtual influencers and avatars in the metaverse.⁵

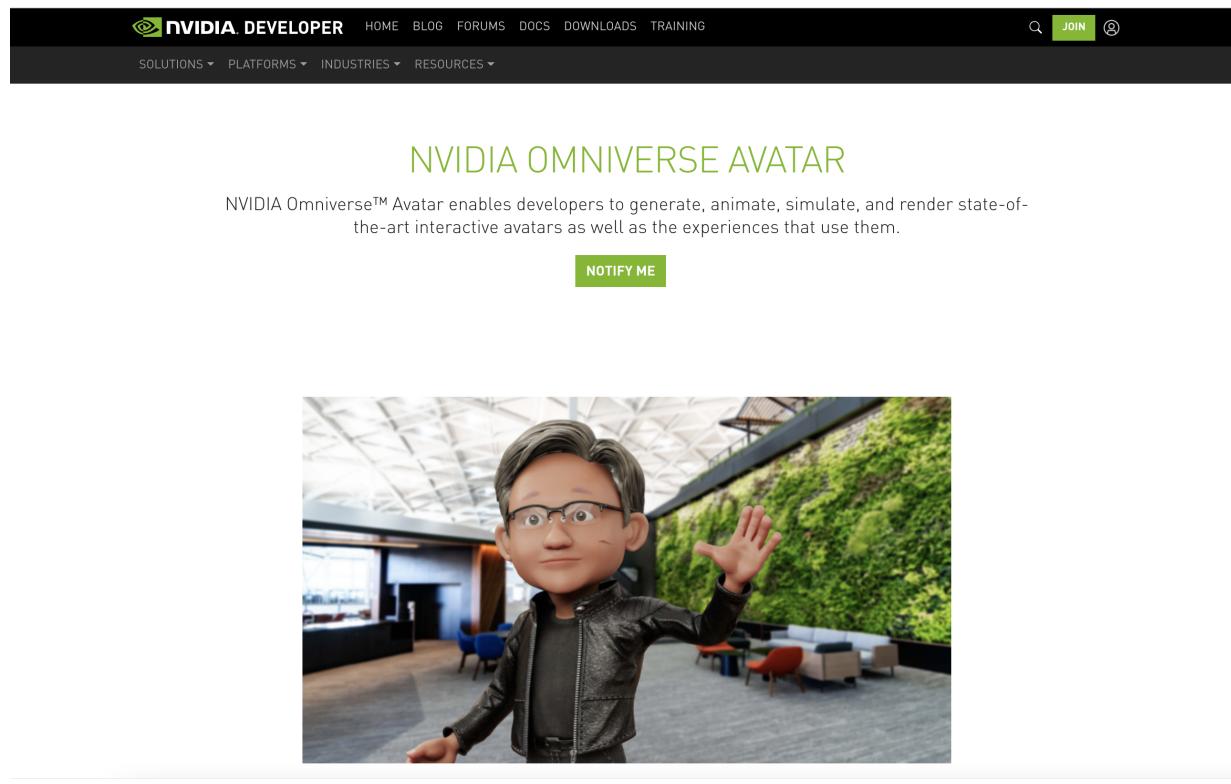
Reward: Increased brand presence and message consistency across platforms. Ability to improve customer satisfaction and more easily facilitate complex customer journeys and next best actions. Facilitate a test-and-learn approach to new channels and content types.

Potential Risk: The lack of transparency and the inability to authenticate content could lead to an increase in fakes and bad actors. Marketers will need resources to monitor use and engagement. Bias may be enhanced if these more advanced engagements are trained on improper data.

Case in Point: NVIDIA Omniverse Avatar

NVIDIA's Omniverse Avatar connects the company's technologies in speech AI, computer vision, natural language understanding, recommendation engines and simulation technologies. Avatars created in the platform are interactive characters that can see, speak and converse on a wide range of subjects and understand naturally spoken intent. Avatars serve as an extension of the brand in the metaverse and can help support customer-service interactions (see Figure 5).⁶

Figure 5. NVIDIA Omniverse Avatar



Source: NVIDIA

Evidence

¹ Innovation Insight for Generative AI

² [Influence Engineering: A Behavioral Marketing Trend, 2022](#)

³ [How This AI Startup Plans to Shake Up the Online Fashion Industry](#), Forbes.

⁴ [David Beckham Speaks Nine Languages to Launch Malaria Must Die Voice Petition](#), YouTube.

⁵ [Improve Computer Vision Use Cases With Standardized Implementation Patterns](#)

⁶ [NVIDIA Announces Platform for Creating AI Avatars](#), NVIDIA News.

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[Client Question Video: What Do I Need to Know About Generative AI?](#)

[Applying AI in Industries](#)

[Predicts 2022: Generative AI Is Poised to Revolutionize Digital Product Development](#)

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