



Driving business success with generative AI in consumer and retail

New technology will help with pricing, personalization, and customer experience

Introduction

Generative artificial intelligence (AI) is a potential game changer for the consumer and retail sector. It has the ability to drive better business outcomes on a broad front, including commercial effectiveness, operational efficiency, and cost optimization. This fast-growing technology can be used to help companies optimize pricing, serve better-targeted ad content, generate more engaging product descriptions, and enable a faster, more customized user experience. It also has the potential to facilitate better customer service interactions by reducing tensions in the return process, especially where customers are dissatisfied with traditional chatbot capabilities.

To uncover in more detail how this incredible new technology could impact various industries and to gauge how receptive and prepared executives are

for its adoption, KPMG LLP fielded a survey in March 2023 of 300 executives across multiple industries.

Survey respondents in the consumer and retail sector told us their organizations are most likely to apply generative AI in analyzing customer data and creating personalized recommendations (66 percent see it being used this way); trend analysis/predictive analysis for inventory management (64 percent); and generating content, including marketing copy and product summaries (62 percent). Fifty-eight percent also see it being used to develop higher-functioning customer service chatbots, and 40 percent envision it helping to set competitive prices (Exhibit 1).

Exhibit 1 Consumer and retail companies see generative AI driving customer-centric operations

Which of the following areas of generative AI have a likelihood of being applied within your company?



Source: KPMG Generative AI survey, March 2023

Generative AI expectations for consumer and retail organizations and the hurdles they face

For now, consumer and retail organizations are primarily focused on generative AI's application to marketing and sales, with 70 percent of executives in this sector—versus 49 percent in all sectors—identifying it as the area where generative AI will have the greatest transformational impact. It also is the functional area where consumer and retail companies are most likely to be exploring the technology's use right now, with 68 percent doing so, versus 42 percent of all companies. In fact, the marketing and sales function is leading the generative AI effort at 16 percent of consumer and retail companies in the survey, versus just 5 percent of all companies. Also, 57 percent of marketing and sales functions are active in their organization's generative AI response in the consumer and retail sector, versus 31 percent at all organizations.

Many consumer and retail organizations have been exploring how to better leverage existing internal and third-party data using AI for years. In the fast fashion industry, some are already using AI to predict and analyze trends, create virtual models that can display outfits, anticipate customer needs, and help customers enjoy a more personalized shopping experience.

Still, with all of the incredible potential to positively impact the consumer and retail sector, only 23 percent of surveyed consumer and retail organizations have appointed a central person or team to organize the response to the emergence of generative AI (versus 31 percent of organizations across all sectors). To make the most of this emerging technology, that situation needs to change. We believe this is the time to lay the groundwork for the effective and productive use of generative AI.



70 percent of consumer and retail executives identify marketing and sales as the area where generative AI will have the

greatest transformational impact



What to do next

To jumpstart your company's generative AI agenda, we believe there are five key actions your organization should be taking right now:

Assemble trusted data sources and start mapping out ways to vet outcomes

Generative AI requires two key degrees of trust for adoption: trust in data sources and trust in outcomes. Generative AI engines are trained against a vast expanse of data that is largely available to the public. Not all publicly accessible data sources are reliable, though. Nor, in most cases, do they include all the data your organization will need to leverage generative AI.

These shortcomings illustrate the importance of building a bespoke data infrastructure that will allow generative AI to deliver focused insights, drive better decision-making, spot risks, and capitalize on opportunities that might otherwise go overlooked. Importantly, a bespoke data infrastructure can help your consumer and retail organization connect the customer journey end-to-end across interactions and products. And it can help your organization capitalize on cross-functional data to better know its customers. Finally, building a bespoke data infrastructure will create opportunities for your organization to use other advanced AI capabilities more effectively. Right now, only 9 percent of consumer and retail executives surveyed by KPMG highly agree their company has the right technology and data infrastructure in place for generative AI, versus 22 percent of all executives.

Meanwhile, one of the pitfalls of current-state generative AI is that it can create outputs that seem entirely reasonable while also being entirely inaccurate—it can “hallucinate” facts and make mistakes in reasoning. Accordingly, it may be fine for producing art but of little value in general business applications until

it can be more widely trusted. For consumer and retail organizations to make real use of generative AI and trust its output, they will need some idea of how much of that output is grounded in fact and how much might be hallucinatory. This is the time to start building that capability.



Develop a “responsible AI” framework to govern all your AI applications

Chances are your company is already using AI in some form. If so, we hope you have created a framework for the responsible use of AI—for using it, that is, with a high level of governance and ethical intentions, taking into consideration the impact on customers, employees, and other stakeholders. If not, the introduction of generative AI into your tech stack will make having a responsible AI framework all the more important, as it will be critical to being authentic with customers, gaining their trust, and, in the process, protecting your reputation for responsible use of their personal data.

You will want to ensure that the technology is being used not only ethically, but also legally. You will want to make certain you understand the risks around

using generative AI relating to inaccurate results, fraud, protection of your own intellectual property, and potential infringement on someone else’s intellectual property. And you will want controls in place to protect against those risks. In addition to mitigating risk, building a responsible AI framework will allow your organization to develop and use AI in a more optimized fashion, allowing for faster speed to value for the business. All this work is particularly important today, when only 8 percent of surveyed consumer and retail executives highly agree their company has the right governance models and policies in place to integrate generative AI into their business.

Experiment, strategize, and develop a backlog of business use cases

As part of your broader data and AI strategy, be sure to specify that generative AI is worth an investment. Develop a clear strategy spelling out roles and responsibilities, including who is responsible for decision-making around your generative AI agenda and who has accountability for the technology’s use. In the meantime, don’t wait to start experimenting. Put this technology in the hands of your people and watch innovation and the art of the possible flourish. Performing an opportunity identification exercise to uncover a backlog of potential use cases now, while you can easily lean into creativity, will be important to getting started and identifying value. In addition to the consumer and retail use cases cited above, such as optimizing pricing and enabling a better customer experience, generative AI could be used in demand forecasting and in building and curating advertising or marketing campaign content. Establishing a roadmap and conducting a proof of concept or pilot using generative AI will help you ramp up quickly and prepare the organization. As this technology’s capabilities are expected to transform rapidly over the coming years, having a technology strategy and performing a continual scan of market capabilities against the requirements of your use cases will be crucial.



We are already seeing the business impact generative AI use cases and broader AI can have for consumer and retail companies. That said, building a high-quality data foundation is essential to enabling business insights from generative AI.”

– Sam Ganga, KPMG National Consulting Leader



Deploy an enterprise-class generative AI engine

Like most organizations, your company has probably already embarked on a journey to effectively manage and organize data. Now, to take full advantage of that data, you'll want to deploy an enterprise-class generative AI engine, one that you can train in a secure environment on your own proprietary data uniquely applicable to your business. In addition to safeguarding your data while sharpening the value of your generative AI output, this also will allow you to safeguard the questions or "prompts" you give the engine to trigger new output. Those prompts or questions have inherent value, and you wouldn't want them helping to train a public platform that could be used by your competitors. Note that we're not talking about building a generative AI

platform from scratch. Rather, we're suggesting that you work with a third-party expert that can help you select the right enterprise-class generative AI engine, perform customizations where needed, and then train it on your own data. Look for a partner that has the data science skills and functional or domain knowledge for the use cases you want to build. Having both skillsets is key; data science expertise alone is not enough. You will also want a partner that can help you not only with identifying your strategic vision, but also with testing and learning as you explore generative AI's capabilities. Lastly, look for a partner that can help uplift and train your people to be more data aware and data literate.



Acquire the requisite technical capability to take advantage of generative AI

For consumer and retail organizations to properly execute on their generative AI strategy and implement use cases will require specialized talent. These positions will include experienced data scientists, software engineers, data engineers, and others with industry and domain expertise, all of whom have been important to leveraging AI in the past. But now you also may need new specialists, like prompt engineers, who can help test and validate chat bot functionality. Prompt engineers are trained in knowing what to ask generative AI chat agents, and how, in order to get the right response. It is one of the fastest growing fields in AI today and is crucial to making the technology effective in the consumer and retail space.

Having both data science and domain knowledge combined, not only on IT teams but also in individual team members, will be required to drive maximum value from generative AI. Stronger domain knowledge also will be required to understand if outcomes are accurate. As generative AI brings data science capabilities closer to business stakeholders, skillsets on the business side of the organization will need to evolve as well. Simply put, data science can no longer happen in a silo but must involve multi-disciplinary teams cross-trained in technical and business domain knowledge. Unfortunately, the very newness of generative AI means few organizations have the requisite capabilities or experience in their own ranks to begin building their own generative AI platforms or to quantify what percentage of generative AI output is grounded in fact. To get ready for tomorrow, consumer and retail organizations need to invest now in talent and experience to undertake their generative AI initiatives or, at the very least, find external partners who can lead the way for them.



How KPMG can help

An early and enthusiastic advocate for the power of AI, KPMG is well positioned to help your organization leverage generative AI. Drawing on our deep experience in machine learning and natural language processing, we can help guide your organization through strategy, use case development, vendor selection, and implementation—and then provide ongoing support to help you enhance your investment in this transformative technology. We understand both the promise of generative AI and the process and cultural changes that will be required to realize its full potential.

KPMG also recognizes that all users of generative AI have a responsibility to learn about the technology's risks and how to control those risks to prevent harm to customers, businesses, and society. Those risks will grow and evolve as AI technology advances and becomes more pervasive, and as public pressure from regulators increases.

Contact us



Sam Ganga
*Principal, Advisory
National Consulting Leader,
Consumer and Retail*
KPMG LLP in the US
sganga@kpmg.com



Martin Sokalski
*Principal, Emerging
Technologies Leader*
KPMG LLP in the US
msokalski@kpmg.com



Kelly Combs
*Director, Leader of Responsible AI
Lighthouse*
KPMG LLP in the US
kcombs@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.



kpmg.com/socialmedia

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.

DASD-2023-12717

June 2023