Generative AI for Future-Focused Retailers
Generative AI has enormous potential to transform the world of retail and beyond. One study forecasts a financial impact of $9.2 trillion through 2029. With a strong foundation, retailers can use generative AI to streamline tasks like lease analysis, SKU rationalization, and developing highly personalized marketing materials.

As with any new technology, generative AI’s promises also bring new vulnerabilities and challenges. With robust data governance policies and tools, including data protection and compliance protocols, retailers can mitigate risks like AI bias, hallucinations, and privacy violations.
Fostering Successful Adoption

While retailers recognize the current and anticipated impact of generative AI on the industry, many are still uncertain of how to adopt and successfully leverage this new technology. Retailers are eager to see the benefits of generative AI — chief among them, time savings, enhanced automation, and idea generation — but thoughtful implementation at the onset is key to unlocking these benefits.

**Retailers should start by establishing a taskforce that will focus on learning about the nuances of generative AI.** At first, this taskforce may experiment with publicly available tools like ChatGPT — cultivating in-house experience and sharing knowledge with their colleagues. As the taskforce begins to tailor their generative AI usage to their organization’s specific goals, the need may arise for an in-house solution, which harnesses a retailer’s proprietary data to address their unique business challenges.

Next, retailers should identify the right problems to solve and the use cases that would be most beneficial to the organization. What common challenges could generative AI help solve? The taskforce should work with internal teams and departments to get a sense of the inefficiencies or pain points for which generative AI could be leveraged for support. One way to do this is by conducting a “day in the life” analysis — diving deep into a regular day across various roles in the organization to uncover potential generative AI integration points.
To move from ideation to action, organizations must build a strong foundation for their use of generative AI. We recommend breaking this foundation down into three critical pillars:

1. **Data is the driver**: Generative AI cannot be useful if the underlying data is unorganized, incorrect, unstructured, or unsecure. A critical part of setting a foundation is structuring data and resolving inconsistencies to create an accurate picture of the business. Retailers must also take a considered approach to data governance and access to ensure data is trustworthy, compliant, and usable.

2. **Prioritize data security and ethics**: Because retailers operate in an industry that collects billions of data points on consumers every day, protecting their data is paramount. Due to the vast amount of data AI and generative AI use to learn, retailers are often targets for breaches. Establishing robust data protection and privacy compliance policies is a must. But data security is just one element of a strong foundation — there are also ethical considerations. We address AI bias further down in this piece, but to summarize: eliminating bias within the algorithm and AI solution relies on the integrity and quality of the data being used, as well as the training of said algorithm(s).

3. **Watch the watchmen**: Standing up one’s own generative AI solution is challenging and takes time. Therefore, it can be easy to forget that organizations must also vet any vendors they are using or licensing for AI or generative AI purposes, too. Investigate different elements such as the vendor’s algorithms, training methodologies, data sourcing, data governance, ethical safeguards or operations, bias remediation protocols, performance metrics, security standards, and more.

After the foundation for generative AI use is established and the technology itself has been integrated into the organization’s technology stack and governance structure, it is finally time for formal enablement. Fostering adoption across the organization is paramount for the use of generative AI to be successful. Tactics should include developing a training program for employees, as well as a communication plan so that everyone understands ‘the why’ behind ‘the what.’ How will generative AI help different functions? How will it enhance workflows and improve customer retention? Explain these answers to employees to generate buy-in from top to bottom. Consider hosting hackathons and innovation sessions to hear new ideas and potential use cases that the organization can explore further.

All of this contributes to an overarching culture of ideation, which is especially important in today’s retail environment. Generative AI has the potential to greatly help retailers with some of their biggest challenges today: real estate portfolio optimization amid skyrocketing interest rates, improved inventory forecasting via custom-generated, predictive SKU rationalization plans, and hyper-personalized marketing content to better target niche customer bases.

Continue reading to find out more about these specific applications for generative AI.

**LOOKING FOR MORE INFORMATION ON LAYING DATA-ANALYTICS GROUNDWORK?**

Read our [whitepaper](#) to learn how to move from analytics to AI.
Unlocking New Opportunities

Generative AI has innumerable potential applications, with several use cases emerging within the retail industry. These use cases are not limited to large companies with endless resources. Just the opposite, generative AI presents opportunities for retailers of all sizes, including small businesses, to uncover new efficiencies and accelerate growth. Below are three use cases we recommend retailers consider as they begin their journey with generative AI.

**Lease Analysis**

Many retailers struggle to keep track of costs across large real estate portfolios. Additionally, poor cost tracking prevents them from maximizing value from each lease. Generative AI-powered lease analysis allows real estate managers to easily sift through, locate, and track lease information, like when it was signed, and the cost of rent and security deposit. Generative AI can also suggest ways to optimize the usage of each storefront by leveraging location-specific data, like sales, foot traffic, and shrinkage.

**SKU Rationalization**

With generative AI, retailers can leverage data from multiple sources to inform SKU management strategies, including localized sales data, customer behavior data, and information from their supply chain. Using generative AI to analyze this information, retailers can forecast inventory management needs across their entire omnichannel portfolio. Beyond this, generative AI can develop SKU rationalization plans, put forward recommendations, and even generate formal inventory management roadmaps. Generative AI-powered SKU rationalization also offers greater insight into improving product targeting practices for particular stores and regions.

**Hyper Personalized Experiences**

Retailers tailor marketing content to potential customers in order to increase the success of promotional campaigns. Using generative AI to analyze demographic information and spending history, retailers can develop highly specific marketing materials to target potential customers with much greater precision. By training generative AI on existing promotional campaigns, retailers can feel confident that these marketing materials are always on-brand — incorporating the brand’s unique personality while reflecting the idiosyncrasies of their audience. Generative AI can develop marketing assets quickly and thoroughly, saving retailers time and resources.
Generative AI Possibilities in Marketing

**GENERATION**

- Product photos, descriptions and postings
- Marketing materials
- Seller review suggestions
- Resolve customer complaints and disputes
- Automated reporting
- Code for product features
- Tailored marketing materials that align with brand identity

**INSIGHT / ANALYSIS**

- Conduct research on topics of interest to clients
- Analyze client data from social media, product reviews, comments, and customer service interactions to generate recommendations
- Provide tailored data-driven recommendations

**IDEATION**

- Ideate new features
- Develop customized product designs
- Generate customer experience improvements
- Co-collaborate with AI

**SIMULATION / EMPATHY**

- Simulated customer persona panel
- Empathize with the client journey
- Tailor marketing and communications for specific audiences
- Conduct sentiment analysis on reviews or survey responses

Curious to learn how generative AI will change the future of retail years from now? Dive deeper into our interactive Future Proof Retail platform.

EXPLORE BDO'S FUTURE PROOF RETAIL INTERACTIVE EXPERIENCE
Understanding and Reducing Risk

The use of generative AI carries risks both familiar and unfamiliar — from cybersecurity and consumer trust to ethical concerns. Identifying these risks is the first step retailers must take towards mitigating them.

**Consumer Trust**
Generative AI enables companies to delve deep into consumer behavior, analyzing activity like spending patterns and social media usage to craft targeted marketing materials and improve inventory strategy. Retailers must take great care to harness this capability without compromising the hard-earned trust of their customer base.

This mandate goes beyond preventing the release of personally identifiable information (PII) to the public. Companies must also closely monitor and restrict internal access to such data, ensuring that not just anyone with an employee ID can access sensitive information. Especially when working with data that could be used to identify individuals — inadvertently or not — retailers must preserve their customers’ privacy or risk losing their trust and, ultimately, sales altogether.

**Security**
When integrating generative AI into an organization, leaders must be wary of adoption that is too fast — or too widespread — which may inadvertently lead employees to disclose sensitive data, such proprietary insights, and the PII of customers and employees.

These risks are magnified when an organization employs an in-house generative AI solution. Because an in-house solution leverages company-specific data, rather than a generic dataset, it presents not only a greater quantity of data to protect, but also a more attractive target for cyberattack. As a result, it is critical for companies to develop mitigation strategies, determine accountability for cybersecurity practices and protocols, and implement robust training programs for all employees whose work is impacted by this new technology.

**Ethical Concerns & Accuracy**
As a tool developed by humans, and built on datasets that are generated by human processes, generative AI has shown a tendency to adopt human biases. When AI is trained on biased or otherwise unrepresentative data, it may perpetuate these biases, leading to outcomes that are inaccurate or even outright discriminatory. Retailers have a moral and strategic mandate to make their generative AI usage as transparent and fair as possible. This means not only minimizing biases in AI training and usage, but also implementing ethical standards that continue to evolve as AI technology advances. Training generative AI solutions to learn from diverse data sets helps to offset risks and avoid biased outputs.

Generative AI has no inherent “understanding” of truth value. Instead, it uses logic to uncover patterns in text. Sometimes, this logical process results in outright fabrications, phenomena called “hallucinations.” For example, generative AI may create SKUs for fake products or describe sales data for stores that don’t actually exist. For any generative AI use case, retailers must establish policies to thoroughly vet the outputs for hallucinations and other inaccurate information.

To learn more about the benefits of an ethical data strategy, check out our recent insight.
Charting the Path Forward

The possibilities of generative AI are vast. Retailers who adopt this technology will soon realize that the use cases of today will evolve to become even more sophisticated — and add more value — tomorrow. As they embark on this journey, retailers must work to minimize errors and bias, mitigate risk, and protect sensitive information.

For many retailers, the risk of data breaches associated with publicly available tools like ChatGPT is a major barrier to entry. To experiment with generative AI in a secure environment, reaping the benefits of tailored outputs and insights without sacrificing the security of proprietary data, companies may find it beneficial to work with a third-party advisor.

With BDO’s in-house GPT solution, retailers of all sizes can take advantage of generative AI within their own Microsoft Azure ecosystem, keeping data encrypted and safely stored. BDO’s GPT offering has highly customizable features for all retailers. Even small and mid-sized retailers that may have previously found it prohibitive to justify investments into generative AI can enhance communication materials, conduct and compile better research, design new products, improve customer service responses, and much more.

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