



Are Retailers Prepared for the **AI Era**?

New Survey Reveals Critical Gaps



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AI and the widening gap between retail's winners and losers

Artificial intelligence (AI) has become a major focus across the retail industry. Rapid technological advances have made it clear that the industry is on the edge of something big.

AI and machine learning (ML) have the power to increase revenue, decrease costs, and create loyal customers.

But retailers still have questions to confront.

For example: How and where should they apply AI and ML? How well do they understand the various types of AI? Are they prepared for the coming changes? Are there gaps they need to fill? Will they scale up their commitment to AI going forward?

Blue Yonder and its research partner surveyed 150 retail executives to determine the current state of AI in the industry and what the near future will look like.

At first blush, the survey results portray an industry ahead of the AI curve. The overwhelming majority of executives say they know a lot about AI and are already applying the technology.

But many responses from the executives give reason to question these confident self-assessments. Blue Yonder's Corporate Vice President for Product Management Commerce and Data Science, Srinivas Pujari, sums up the matter: "The executives surveyed say they are very knowledgeable about AI. But once you ask them about different types of AI and how they are using various tools, **you see a lot of missed opportunities.**"

The latest research also raises doubts about how well retailers are leveraging AI. This report digs into that research as well as the Blue Yonder survey results. It points to blind spots in many retailers' understanding and use of AI.

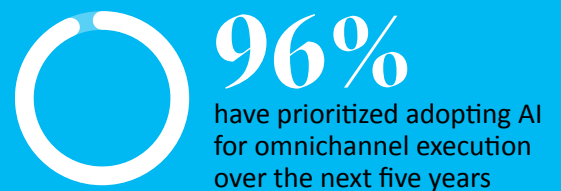
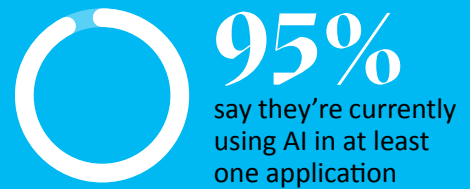
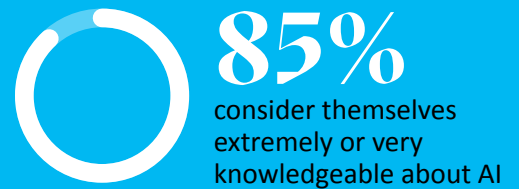
Retail executives can't afford to ignore these oversights. The self-confidence this survey reveals could undermine them at a time when, as McKinsey & Company notes, "the gap between winners and losers is widening."¹

To survive, businesses need to move forward with AI — and do it quickly.

“By far the greatest danger of Artificial Intelligence is that people conclude too early that they understand it.

Eliezer Yudkowsky

Retail executives are confident in their AI plans




Retail executives and AI: When does confidence become overconfidence?




In the Blue Yonder survey, nearly all executives say they stand in a good position on AI. For example:

95% 
say they are already using AI
in at least one application

96% 
have made it a priority to adopt
AI for omnichannel execution
over the next five years

85% 
consider themselves
extremely or very
knowledgeable about AI

85% 
have no hesitations about
applying AI to their business
operations

Does this mean retailers are well prepared for the AI revolution?

Not at all.

In fact, these findings call to mind a statement by AI researcher Eliezer Yudkowsky:

“By far the greatest danger of Artificial Intelligence is that people conclude too early that they understand it.”²

Consider the evidence. A January 2023 survey showed that at Fortune 1000 companies, “data, analytics, and AI efforts have stalled — or even backslid.”³ Top researchers raise concerns about retailers’ ability to compete using AI and ML:

- **Boston Consulting Group:** “The vast majority [of retailers] are missing out on an opportunity to embrace solutions powered by AI that promise to improve resilience and deliver long-term structural advantage.”⁴
- **Harvard Business Review:** “Even as Walmart, Amazon, and a few other leading retailers operate at the leading edge of the analytics frontier, . . . most of their competitors still use very basic tools that are far better able at tracking where they’ve been than where they should be going.”⁵
- **Retail Insight Network:** “The future of the retail industry will be shaped by a range of disruptive themes, with AI being one. . . . However, not all companies are equal when it comes to their capabilities and investments. . . . Understanding how companies are positioned and ranked in the most important themes can be a key leading indicator of their future earnings potential and relative competitive position.”⁶

Pujari spent two decades overseeing commerce and the customer experience for prominent retailers. Now, at Blue Yonder, he helps retailers transform their digital supply chain and build out omnichannel commerce. Pujari notes that retailers’ understanding of AI is “more advanced than it was a few years ago.”

That said, he still sees holes in many executives’ understanding of AI. The survey findings reflect those gaps. “When people say AI, they tend to put everything into one bucket,” Pujari says. “But understanding general concepts is not the same thing as knowing all the different kinds of AI and where each is best suited. Lots of things that go under the umbrella term ‘AI’ have important distinctions. For instance, what is ML versus data science versus predictive analytics?”

These holes help explain why so many retailers miss opportunities to strengthen their business through AI and ML.

“The vast majority [of retailers] are missing out on an opportunity to embrace solutions powered by artificial intelligence.

Boston Consulting Group



Where the gaps are: Revealing responses from retail executives

Retail executives also express confidence when asked about their understanding of different forms of AI. In the Blue Yonder survey, **more than 4 out of 5** say they are extremely or very knowledgeable about predictive AI, generative AI, conversational AI, and autonomous AI.

These findings seem encouraging. Predictive analytics is one of the most powerful tools retailers can use — and AI increases its power significantly. As Forbes has noted, “AI-gleaned insights can sharpen forecasting, making predictions more accurate and timely than in the recent past.”⁷

Notably, the retailers say they know a lot about predictive AI’s “application to commerce business processes.” So how many are actually using AI-powered technology to strengthen their predictive analytics?

Only 29%.

Even fewer — **18%** — use AI to optimize their inventory by keeping their dynamic safety stock up to date. And just **16%** apply AI to improve the accuracy of their estimated ship dates.

Why do such low levels of adoption matter? Pujari uses dynamic safety stock as an example. “Without the powerful real-time insights AI offers you,” he says, “you may hold back too many units of a particular product. That means you lose sales. On the flip side, you might hold back too few. Then you’re selling products you don’t actually have in inventory. That means you’re disappointing customers.”



Only 29% of retail executives are using AI-powered technology to strengthen their predictive analytics — a huge missed opportunity.

Pujari continues: “It all comes down to keeping your promises to your customers. AI makes predictive analytics incredibly powerful. AI can take in all sorts of variables — your labor availability and productivity, current inventory and demand, the effect weather patterns will have on transit times, and much more. Then it can show you — in real time — the impact all these factors will have on your outcomes. Ultimately, that means the impact they will have on your customers.”

Even the most widely used AI applications leave plenty of room for increased adoption. Fewer than half of survey respondents apply AI to fulfillment optimization (48%), labor scheduling and workforce optimization (45%), demand forecasting (42%), and inventory placement (42%).

And those are the top 5 use cases in commerce.

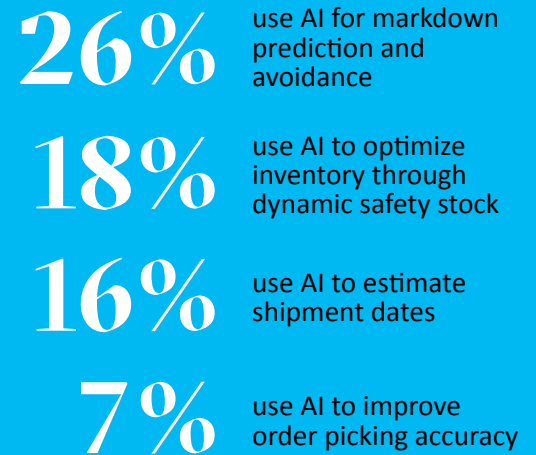
Three out of four executives surveyed say they use AI in the area of supply chain and logistics. That’s a good start. But how, exactly, are they using AI there?

Here again, the results reveal significant room for improvement. For example, a minority of respondents are using AI for anomaly detection (37%), virtual agents or chatbots (25%), or digital twins and scenario planning (11%).

For all of the executives’ confidence, these more detailed responses suggest that retailers are passing up chances to boost sales, productivity, and customer satisfaction.

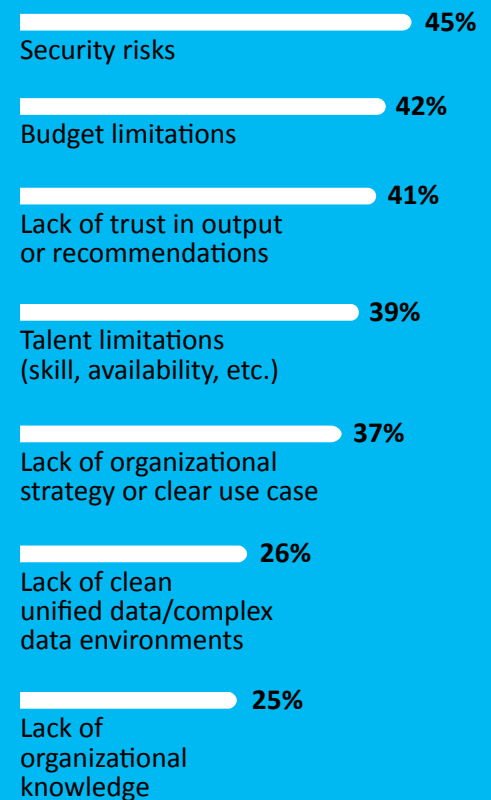
Missed opportunities to leverage AI

Only a small minority of retailers employ AI technologies to make better promises to customers and keep those promises:



Barriers to adopting AI

The percentage of retail executives who cited these factors as barriers to AI adoption in their organizations:





How to stay competitive using AI

Once you understand the many ways AI can be used in retail, the scope of transformation can seem overwhelming. But remember two words: *Start small*.

According to the Blue Yonder survey, virtually all retailers — **96%** — plan to adopt AI for omnichannel purposes over the next five years. But given intense competition and the rapid rate of technological advances, retailers can't afford to wait. Get going now.

The *Harvard Business Review* reports, "Companies that start small, with a focus on delivering immediate business value and establishing a foundation one step at a time, have been most successful in building data-driven organizations for the long haul."⁸

Blue Yonder's Pujari agrees. "If a company is using AI, the first question to ask is, How has AI affected your outcomes? If you can't tell me in concrete terms the impact the technology has had, you need to rethink your approach."

So where should you start delivering value through AI?

By focusing on your customer. Before you jump into weighing particular AI use cases, Pujari says, you need to think about two fundamental concepts: **"Make the promise, keep the promise."**

Every potential transaction comes down to a promise you make to a customer: I'll give you this item in this quantity at this time. If you can't make an attractive promise, you'll lose the sale and maybe the customer altogether. And once you've made a sale, you need to keep that promise. Otherwise, you'll disappoint that customer and lose future business.

Retailers already understand this pain. **In the Blue Yonder survey, they cite inaccurate inventory counts as the number one cause of poor customer experience or broken promises.** More than half of executives say they've dealt with this problem over the past year.

Pujari says, "AI and ML are most important to retailers where (1) they allow you to make better promises to the customer — smart forecasts based on historical data and a wealth of real-time information — and (2) they enable you to monitor your system, detect anomalies, and take corrective actions to ensure you meet your promises."

What does making a better promise look like? Pujari reveals the insights AI and ML produce: "You can predict labor availability, carrier transfer times,

inventory quality, safety stock, and item markdowns and stockouts. All these help you make a crisp, accurate promise to your customer."

As for keeping the promise, "AI shows you what the actual labor situation looks like versus what you forecast. It shows you regional delays that result from weather or a labor strike or some other cause. It shows you carrier delays. It shows you a sudden decline or spike in inventory. And then you can do what you need to keep your promise to your customer. Or if that's not possible to do in a profitable way, you can be proactive in your communications with the customer."

“Artificial intelligence and machine learning are most important to retailers where (1) they allow you to make better promises to the customer and (2) they enable you to meet your promises.

Srinivas Pujari, Blue Yonder





Don't fall behind

Retail is undergoing a major transformation, and the pace is accelerating. The top 10% of retailers already create 70% of the sector's profit.⁹ Their share has been growing for years. And now, since industry giants stand at the leading edge of the AI revolution, they are poised to reap even more rewards.

One conclusion is inescapable: Retailers that don't embrace AI will almost certainly fall behind.

According to Blue Yonder's survey, most retail executives believe they are embracing AI. But there's ample evidence to suggest that they're missing crucial opportunities.

Even certain survey responses point to gaps that executives aren't acknowledging. For instance, respondents say that inventory control, resource forecasting, and fulfillment optimization are the areas that would benefit most from the application of AI. And yet most retailers aren't using AI there.

When used well, AI tools can boost revenue, lower costs, and improve the customer experience. And once you start with AI, you can reap benefits quickly.

Consider a few examples of companies that have recently worked with Blue Yonder:

The Source, Canada's largest tech retailer, embraced AI to refine inventory and order forecasting. The results? The company **reduced inventory investment by 19%** in just two years and saw **98% sell-through** on Black Friday.

Bonprix, a top fashion retailer in 30 countries, used AI-powered pricing to drive **double-digit sales growth** and increase profit per item sold.

Constellation Brands, a leading international producer of beer, wine, and spirits, used predictive analytics to **boost sales up to 6%** in various categories.

DM, Germany's largest drugstore chain, developed precise demand forecasts to ensure accurate inventory and **optimize delivery times**.

Remember: *Make the promise, keep the promise.* By leveraging AI in service of those goals, you can ensure a profitable future for your business.

To learn more about how Blue Yonder can help your business achieve higher revenue, lower costs, and happier customers, visit blueyonder.com



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