



Living in an AI World 2020 Report:

Retail insiders

**KPMG survey says: Retailers are
checking out AI, but barriers to
wide adoption remain**



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Methodology

The KPMG Living in an AI World 2020: Achievements and Challenges of Artificial Intelligence across Five Industries survey was conducted by Ketchum Analytics to support KPMG’s thought leadership efforts on AI. The findings in this report are based on the results from a survey of 751 U.S. business decision-makers with at least a moderate knowledge of AI in their industry.



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This study was designed and conducted to assess the perception of AI as it relates to five specific industries: healthcare, financial services, transportation, technology, and retail. The survey serves to uncover the pain points, perceived risks and challenges of U.S. companies related to AI. This report is focused solely on the retail industry.



A woman with long brown hair, wearing a maroon long-sleeved shirt, is using a white and black VR headset. She is pointing her right index finger towards the right. The background is a blurred retail store with clothing racks and bright overhead lights.

85% of retail insiders believe AI has the potential to significantly improve organizational efficiencies

Two of the most profound trends in retailers – hyper-personalization and deep retail¹, both of which rely on extensive use of data, advanced analytics and other technologies – are setting the stage for the revitalization of a long-struggling industry.

Artificial intelligence (AI) is poised to play a key role in getting more cash registers ringing and in fattening razor-thin margins. For instance, a vast majority of retail insiders (85 percent) believe AI has the potential to significantly improve organizational efficiencies for their company.

However, much more needs to be done before retailers fully capitalize on the power of this transformative technology. Only slightly more than half (51 percent) of retail insiders believe the industry is ahead of the curve when it comes to AI adoption, and a similar number (52 percent) say AI adoption is at least moderately functional in their organization.

¹ KPMG's Retail Trends Study (2019)

AI in the retail industry

These are among the insights gleaned from KPMG's new study, "KPMG Living in an AI World 2020: Achievements and Challenges of Artificial Intelligence across Five Industries"

Results revealed how 751 insiders across five industries – including retail – view the future of AI in their sectors, and the steps they are taking to maximize its benefits and mitigate its challenges.

According to Bill Nowacki, Managing Director, Decision Science, KPMG, retailers of all sizes across every segment of this mercurial industry are executing an AI plan or at least have a vision of how AI can transform their business: "All retailers are embracing AI, believe it has a place within their operation, and are at various levels of adoption. It's pervasive."

While retail insiders are skeptical about the current impact of AI (64 percent say the use of AI to help business is more hype than reality right now), many are seeing strong benefits from the technology – with more on the horizon. More than three-fourths (80 percent) of retail insiders say AI technology – such as chatbots and self-checkout – is regularly being used to alleviate customer service issues.

Nowacki believes AI's biggest impact is in helping omni-channel retailers perfect what many see as the greatest opportunity for competitive differentiation: perfect local execution. "If you want to win nationally or globally, you have to win at the hyper-local level every time," he stated. "There's a push to say, *Can I get better with local relevance and placement? Am I in the right locations? Is my format right? Do I have the right items in the store?* AI is really helpful in all these areas."

To that point, retail respondents are ready to reap the rewards of AI, and believe major benefits will occur within the next two years. Their predictions, though, vary among several applications, with 56 percent stating that customer intelligence will have the biggest impact, followed by self-checkout services (55 percent), chatbots for customer service (45 percent), supply chain planning (44 percent) and marketing/advertising (43 percent). ●





80% of retail insiders say AI technology is being used to alleviate customer service issues

The challenges of AI adoption in the retail industry

Nevertheless, more work is required before widespread adoption of AI in retail will happen. Respondents pointed to a number of key challenges or barriers that must be overcome to fully realize AI's advantages.

A key challenge is the workforce itself. Just 43 percent of respondents believe their employees are prepared for AI adoption, perhaps because just 52 percent say their companies offer any type of AI training. This gap in employee acceptance and skills levels may explain why respondents believe only 26 percent of retail employees are supportive of AI adoption overall, the lowest percentage of all surveyed industries.

This wariness is seen in the C-suite, too. Not only do 62 percent of retail insiders believe their workforce is worried about AI taking away jobs (the highest of any industry), but 54 percent are worried that their own jobs could be replaced by AI someday. Nevertheless, they know that talent with AI-specific skills is a necessity for retailers to reap AI's rewards and stay competitive.

"If you look at all the top MBA schools, you didn't see master of science degrees in analytics offered a decade ago. Now, every one of them has it," Nowacki observed. "They're minting these resources as quickly as they can, but there's just not enough of them yet. I think there's a fierce competition for machine learning and other cognitive data sciences, and the inability to get talent quickly is one of the gating factors to AI adoption." ●

What retail companies need to know before using AI

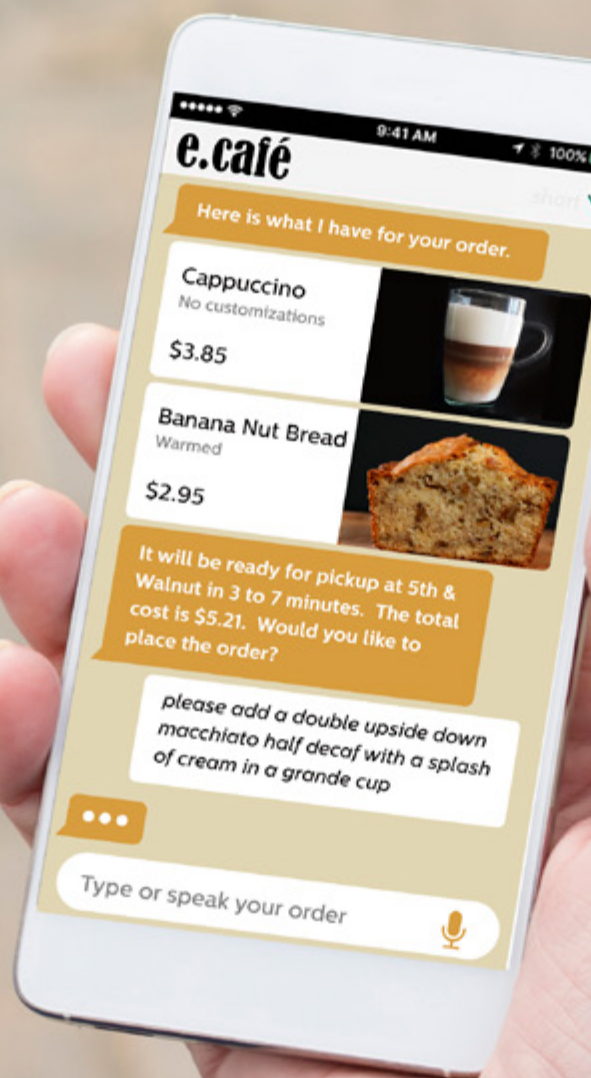
While Nowacki agrees that intelligent automation will replace some jobs in retail – in such back- and middle-office areas as accounting and procurement – AI may be useful in solving a significant workforce issue: retaining hourly and part-time employees in a full-employment economy.

“I think AI can let companies look at the full fabric of their entire retail footprint by using predictive intelligence to see which stores have the largest flight risks due to local macroeconomic influences,” he explained. “If AI can predict that, and suggest remediation, stores may not suffer an exodus of critically-needed hourly employees.”

Retailers are also cognizant of other challenges that may be slowing AI adoption, such as perceived threats involving consumer data security and privacy, which was identified by 70 percent of respondents. Relatedly, 90 percent agree that their companies need to be responsible for implementing a code of ethics to govern AI work.

But retailers are aggressively striving to overcome AI adoption challenges, because they know its benefits can be business-altering. “Every CEO is asking, ‘What is our strategy against Amazon?’ And there is no good way to answer it unless you are rapidly approaching world-class in terms of intelligent automation and AI.” ●

45% of retail respondents predict that they will be able to reap major benefits from customer service chatbots in the next two years



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