Thriving in an AI World 2021

Healthcare

Healthcare organizations have opportunities to use artificial intelligence to improve productivity, reduce risk and save lives.

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Methodology

The KPMG *Thriving in an AI World 2021* survey was conducted by Ketchum Analytics to support KPMG LLP's thought leadership efforts on AI. The findings in this report are based on the results of a survey of 950 U.S. business decision-makers working at a company/agency with 50 or more employees and possessing at least a moderate knowledge of AI in their industry.

Read the full report:

Thriving in an AI World was designed and conducted to assess the perception of AI in seven industries: financial services, government, healthcare, industrial manufacturing, life sciences, retail, and technology. It identifies AI-related pain points, risks, and challenges for U.S. businesses in these industries. This report is focused solely on the healthcare industry.

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A far-reaching opportunity

Few industries have more opportunities to use artificial intelligence for the common good than healthcare. As healthcare providers use the technology to automate back-office processes and boost productivity, they will have even more time to apply AI to improving patient operational risks to provide safer patient care, and by pinpointing evidence-based approaches to diagnosing and treating illness.

82%
of healthcare executives wish their organizations would more aggressively adopt AI.

"The opportunity is as far-reaching as it can be," says Vince Vickers, Healthcare Consulting Industry Leader at KPMG. "In healthcare, we are not just talking about using artificial intelligence to know customers better or to reduce expenses. We're talking, in some instances, about saving lives."

There's room, though, for many healthcare organizations to move faster toward seizing these opportunities. While 67 percent of healthcare executives surveyed by KPMG say AI is at least moderately functional at their organizations, 79 percent of total American business decision-makers say the same. Indeed, 82 percent of healthcare executives say they would like their organization to move more aggressively. Only 35 percent say the healthcare industry as a whole is moving too fast with the technology, this trails total American business decision-makers surveyed (44 percent).

Healthcare executives are broadly optimistic about AI's potential. Eighty-five percent say it has the power to make their organization more efficient, and approximately nine in 10 are confident in the technology's ability to help with tracking the spread of COVID-19 cases (91 percent) and with vaccine development (94 percent) and distribution (88 percent).

Still, results have been uneven.

"To some extent, the story of AI in the healthcare industry is actually two stories—one for the front office, and one for the back office," says Melissa Edwards, Advisory Managing Director, KPMG Lighthouse. "Early on, a number of healthcare organizations, especially those associated with academic institutions, began deploying AI to mine and visualize data as part of their research into curing disease. In that sense, they were early movers. But in the back office, where AI tools can be used to automate processes and drive efficiencies, many healthcare organizations have tended to move more slowly." ●

Confronting challenges to AI adoption

Healthcare organizations face the same challenges in getting productive use out of AI as organizations in other industries. Common hurdles include a global shortage of computer scientists with sophisticated AI skills, misunderstandings about the amount of work required to give AI initiatives a solid data foundation and cultural resistance from workers who in some cases are worried that AI will steal their jobs.

Although healthcare executives tend to minimize the challenges more than their counterparts in many other industries, a clear majority acknowledge them. Sixty-four percent concede that it is difficult to stay abreast of the constantly evolving AI landscape, and 66 percent say their organization struggles to select the best AI offerings. Forty-two percent personally fear being replaced by AI. And while 77 percent of healthcare executives say their workforce is at least somewhat prepared for AI, only 29 percent consider their workforce "very prepared."

Healthcare executives also are alert to the potential risks of incorporating AI into their toolkits, e.g., privacy violations (cited as a key risk by 54 percent of industry respondents) and potential biases in AI technology (50 percent). Bias could lead to inaccurate results that impact some segments of society differently than others. Healthcare is the only industry among the seven examined in our survey to name it as a top-two AI-associated risk.

While bias is a significant issue for this industry, Edwards says, it cuts both ways. "Healthcare organizations don't want to build biases into the AI tools they develop," she explains. "On the other hand, they have an opportunity to use AI to root out bias in the treatment of patients."

Healthcare organizations also will be challenged to integrate AI's capabilities deeply into their operations in alignment with their overarching business strategies.

"There is a significant change-management exercise that needs to be undertaken in healthcare," says Vickers. "Part of it revolves around how you use the tools and the insights AI can deliver—balancing the art of being a physician, for example, with trusting in a new science. And part of it is preparing the workforce at large to understand how AI can make them better at their jobs. However, the most critical variable is how AI is approached by the organization. So far, a lot of AI work has been executed at the departmental level—one-off initiatives that haven't been adopted by the enterprise at scale and, as a result, aren't delivering enterprise-level benefits."

That said, KPMG sees encouraging developments on this front, with a number of large healthcare providers and insurers setting up enterprise-wide centers of excellence to pursue AI on a scale that can drive meaningful results. ●

Where new AI initiatives will be impacting healthcare

When asked where they see the greatest potential benefits of adopting AI at their organizations, executives in the healthcare industry point first to reducing operational risk—49 percent cite it as a benefit, a higher percentage than among retail and industrial manufacturing executives.

"The focus on reducing operational risk makes sense because mistakes in the healthcare industry can cost money and lives," Edwards says.

By way of example, KPMG has helped one healthcare organization by applying AI to the automation of tracking that practitioners are operating with current and valid licenses. Other hospitals have used AI to eliminate the risk of conflicts of interest among researchers funded by government grants. We see further opportunities for hospitals to use AI to identify potential problems with medical suppliers and take early action to remove them from their supplier base where warranted.

Beyond the risk arena, other common areas where healthcare executives say their organizations will be focusing their AI investments over the next two years are telemedicine (cited by 38 percent of respondents), robotic tasks (37 percent), and delivery of patient care (36 percent). The specific AI technologies they expect to have the biggest impact on the industry are biometrics (cited by 41 percent) and machine learning (29 percent).

Ultimately, we believe AI will enable dramatic advances in healthcare—in diagnosing patients, in personalizing treatments, and in reducing risks to patients. That's a bright future for patients and healthcare providers alike. ●

How can KPMG help?

We help our clients realize the promise of AI by providing insight on the best tools for innovation and by offering outcome-driven pragmatic approaches to implementing sustainable processes built on AI insights. Our wide-ranging domain and industry expertise means we are able to execute on your agenda from strategy to full-scale production.

With our patented KPMG Ignite AI platform, we're able to bring together machine learning, deep learning, natural language processing, document ingestion and OCR capabilities and apply them to structured and unstructured data, voice and images. KPMG Ignite enables rapid AI solution development and delivery by enhancing, accelerating and automating decisions and processes that drive growth, manage risk and optimize cost. Organizations are able to achieve real value from their data and AI investments in a flexible, easy-to-use and secure environment. Specifically built to work with a range of leading platforms including Microsoft Azure, Google Cloud, IBM Watson, Appian and a host of other leading open source AI tools, KPMG Ignite can help advance our clients' digital transformation initiatives. ●

Related Materials

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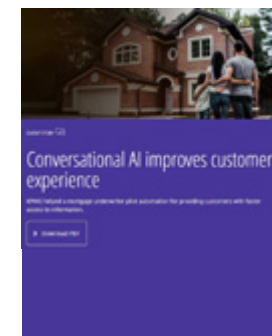
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