



Living in an AI World

**Achievements and challenges
in artificial intelligence across
five industries**



“

Algorithms are playing an increasingly important role in business decision-making so it's essential that people trust those decisions. To do that, we must ensure the integrity, fairness, explainability, and resilience of our AI models. ”

– Traci Gusher, Principal, Innovation and Enterprise Solutions, U.S. Lead, Artificial Intelligence



Progress...but more work ahead

Game on.

After all the predictions and debates, artificial intelligence (AI) is becoming embedded in the fabric of business. Yes, we still face some challenges, but they are primarily functional in nature, such as, how to reskill our workforce to speed AI adoption, how to evaluate and resolve privacy and security issues, how to optimize governance so AI can truly deliver on its promise, and how to overcome a “failure to launch” out of the lab and into full scale production.

This AI progress report analyzes these challenges and also looks at how AI is being implemented across five industries in the U.S.: healthcare, financial services, transportation, technology, and retail. It shows that while there is some variation in AI adoption across industries, there is also a depth of engagement that is highly encouraging.

Most importantly, the report demonstrates that AI is starting to have real impact. Across industries, respondents report that AI is changing the way they do business – from improving access to medical care in the healthcare field, to mitigating customer service issues in retail. And much of the frustration expressed about AI stems from concerns that it’s not being implemented *fast enough*.

All this is heartening, but we shouldn’t declare victory quite yet. In our experience, executives at times underestimate AI’s “time to value” – how much effort is required to implement AI and see notable results. True business value only emerges when AI implementation has been tightly linked to business strategy and when AI-powered output has progressed into normal business as usual operations far enough to yield substantive value.

So, while we should certainly celebrate AI’s progress, we need to remain focused on helping it take firm root in our organizations. First and foremost, that means building our teams’ AI literacy. As I note in this report, the goal here is not to turn all of our resources into data scientists – that’s not practical and frankly wouldn’t be productive. But rather, it is to help them understand the role that AI plays within the organization and adjust to the impact it may have on their jobs. It is to prepare them with the right tools and knowledge to both challenge and trust the AI-driven insights and processes that are becoming part of their role. This is also fundamentally a change management exercise and requires formal training, mentorship, and cohort knowledge sharing.

In parallel with managing organizational and workforce change is ensuring that organizations are building and managing AI responsibly. It’s important that AI rests on a solid ethical foundation. We must eliminate unfair bias from AI algorithms not only at their inception, but throughout their lifecycle. And we need to make sure that the design of our algorithms aligns with our corporate values and with quality and security standards. We must always be guided by an “AI compass” to help us uncover the right places to use AI, for the right types of outcomes, and with the *right* kinds of guardrails. Algorithms are playing an increasingly important role in business decision-making, so it’s essential that people trust those decisions. To do that, we must ensure the integrity, fairness, explainability, and resilience of our AI models through appropriate controls and governance.

None of this, however, takes away from the significant progress these industries have achieved in integrating AI into their organizations. We’re now living in an AI world. And we are very much “game on.”



– Traci Gusher, Principal, Innovation and Enterprise Solutions, U.S. Lead, Artificial Intelligence

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Methodology

The Artificial Intelligence: Risks & Challenges across 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.

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.

Key findings



Speed of adoption: The promise of AI

While two-thirds of insiders feel AI adoption is moving at an appropriate speed within their industry, most respondents still wish their organizations would be more aggressive in adopting AI technology.



Hype versus reality: The state of AI

Most industry insiders within technology (57 percent), transportation (69 percent), healthcare (52 percent), and retail (64 percent) feel that AI is more hype than reality right now, with financial services (42 percent) being the exception.



Employee preparedness for AI adoption: Fact or fiction

While confidence in employees' preparedness for AI adoption is highest among C-level leaders (79%), it is much lower among managers (38%), who are more likely to work directly with employees on a daily basis and have a better understanding of their skill sets. Here there is a clear disconnect between levels of management on how prepared they really are for AI adoption.



Technology industry: Leading the way in AI adoption

Almost two-thirds (63 percent) of technology insiders report that AI is at least moderately to fully functional in their organizations. This gap is recognized by insiders in other industries who perceive the technology sector as the most advanced in the space.



Financial services industry: Disruption among banks

Financial services insiders (85 percent) are confident in AI's ability to help solve industry challenges such as detecting fraud. Separately, over the next five years, financial services insiders (64 percent) believe consumers will no longer rely on traditional banks to access money.



Retail industry: Improving customer service

Within the next two years, retail insiders (56 percent) believe that AI will have the greatest impact in customer intelligence. Additionally, 80 percent of retail insiders say AI is already alleviating customer service issues.



Healthcare industry: Improving patient experience

As healthcare insiders look to the future, 90 percent believe AI technology will improve the patient experience and have the greatest impact on diagnostics (47 percent), electronic health records [EHR] management (41 percent) and robotic tasks (40 percent).



Transportation industry: Insiders cautious about AI

Ranking higher than any other industry, transportation insiders (82 percent) believe that government should be involved in AI regulation to some extent and 77 percent believe AI is a direct threat to consumer data security/privacy.

The world we live in

Within 10 years, we'll all likely be in the passenger seats of autonomous vehicles. In less than five, we'll access our money without ever swinging by a local bank. And in less than two, we should see big improvements in how we diagnose disease, avoid traffic delays, and prevent fraud.

What's behind these weighty expectations? Artificial intelligence (AI).

AI encompasses a range of technologies – from supervised machine learning to natural language processing (NLP) to deep learning. And it's increasingly seen as playing an enormous role in transforming virtually every aspect of our personal and business lives.

That's not just our opinion. Those are the expectations of insiders across five industries (healthcare, financial services, transportation, technology, and retail) as they contemplate the future of AI within their fields. They were surveyed as part of KPMG's study, *Artificial Intelligence: Risks & Challenges across Industries*.

The research shows that the five sectors are at different stages of AI adoption and deployment, but one thing unites survey respondents across all industries: a desire for organizations to step up their game in implementing AI – to keep pace with rising expectations with AI approaches and the potential to deliver real benefits to employees and consumers.

In outlining these findings, this report serves as a report card of sorts about AI – a snapshot of the advances it has achieved and challenges it still faces as we enter a new decade. ●

Rising expectations

From the research, it's clear that to most industry insiders, AI is not about a future promise. It's here now – changing the way companies operate today and having deep and wide-ranging impact on their industries. But it's also clear that these insiders expect AI technologies to deliver even greater benefits in the future.

Which AI technologies specifically? Insiders across all sectors think machine learning (48 percent) and robotic process automation (41 percent) will have the greatest impact. But there are some industry variations. Forty-eight percent of healthcare insiders, for example, see biometrics as most impactful, while 37 percent of insiders in the technology industry cite deep learning.

More important than respondents' rankings on approaches, however, are their views on how AI is changing the way they do business and interact with customers. Eighty-nine percent of healthcare respondents, for example, think AI has already created efficiencies in the healthcare system, and 91 percent think it has increased patient access to care. Similarly, 80 percent of retail respondents say AI is often able to alleviate customer service issues.

Insiders across industries also express optimism about AI's ability to change the way businesses operate in the future. For example, just about nine in 10 respondents – ranging from 85 percent of retail insiders to 92 percent of transportation insiders – expect AI to help their organizations run more efficiently.

Eighty-five percent of financial services insiders are confident in AI's ability to detect fraud, while more than two-thirds (68 percent) in healthcare are confident that AI will diagnose patient illnesses and conditions. And fully 82 percent in transportation believe consumers will be driving autonomous vehicles within the next 10 years, thanks to AI, with 35 percent predicting this will happen within five years.

Respondents, in fact, are looking for AI to deliver significant benefits within shorter and shorter time horizons – even within the next two years. Specific benefits, however, will vary somewhat by industry.

- **The healthcare and retail industries**, for example, expect AI to have the greatest impact on customer value – for diagnostics in healthcare (47 percent) and self-checkout services in retail (55 percent).
- **The financial services and transportation industries** will benefit primarily from gains in operational efficiency – for risk management (49 percent) and fraud protection (47 percent) in financial services, and transportation delay prediction systems (51 percent) and traffic management systems (47 percent) in the transportation sector. Healthcare and retail will also benefit from enhancements in electronic health record management (41 percent) and customer intelligence (56 percent), respectively.

- Additionally, there will be gains in process automation within healthcare for robotic tasks like reading X-rays and CT scans (40 percent); within financial services for advances in process automation (56 percent); and within transportation for improvements in autonomous vehicles (46 percent).

Looking at individual industries:

- **Transportation insiders** expect AI will have the most immediate impact on the freight (32 percent) and airline (25 percent) sectors.
- **Financial services insiders** think AI will have the most positive effect on customers and end-users (44 percent) vs. the back office (37 percent) or middle office (19 percent). Financial services insiders are also bullish about the impact of AI on the market share of traditional banks and other financial services institutions. Seventy-four percent of respondents say that these organizations will either gain or maintain market share, with that number evenly split between the two options. However, 64 percent of financial services insiders see a future over the next 5+ years in which consumers will no longer rely on traditional banks to access their money. ●

The state of AI deployment

While the research shows that respondents across all industries are optimistic about AI's immediate and future impact, it also highlights noticeable differences across industries and the pace with which AI is being implemented.

The technology industry is clearly the most advanced. Almost two-thirds (63 percent) of technology respondents say that AI is at least moderately functional in their companies, while healthcare occupies the other end of the spectrum with just 37 percent of respondents making that claim. The other industries straddle the mid-point – with transportation at 55 percent, retail at 52 percent, and financial services at 47 percent.

The technology industry's lead in AI adoption is also widely recognized by insiders in other industries. Respondents across all sectors believe the technology industry is the most advanced in leveraging AI, although they are each quick to say that *their* industry is the next most advanced.

A similar view emerges when respondents are asked directly whether their industry is *ahead* or *behind* in AI adoption. More than half of industry insiders say their industry is ahead, although the strength of that sentiment ranges from a high of 87 percent in technology to a low of 51 percent in retail. The other industries land somewhere in between – with financial services at 62 percent, transportation at 60 percent and healthcare at 53 percent.

Respondents also seem to think that AI adoption is moving at an appropriate speed within their industry. Roughly two-thirds of all insiders feel that way, with sentiment highest in financial services (66 percent) and lowest in transportation (55 percent). Indeed, transportation insiders are more likely than insiders overall to feel that AI adoption is moving slower than it should. Twenty-one percent of respondents feel that way.

While most insiders are content with the speed of AI adoption, the majority still wish their organizations would be more aggressive in adopting AI. Again, insiders in the transportation industry are the most impatient with 79 percent saying they wish their business would be more aggressive. That's followed by 73 percent of those in technology, 69 percent of those in healthcare, and 68 percent of those in both financial services and retail.

This sense that companies could be more aggressive in adopting AI may account for another study finding: industry insiders are wary about the hype surrounding AI. In fact, more than half of respondents believe that AI is more hype than reality right now – a reflection, perhaps, of the gap between their high expectations and the reality of their day-to-day experience of integrating AI into their organizations.

“Executives underestimate the time and effort required to derive value from AI,” says Dr. Sreekar Krishna, Principal, Innovation and Enterprise Solutions at KPMG. “Value doesn’t necessarily begin with the completion of a production scale system. It comes from continuing to run the system, and as your processes are transformed by what the model is doing. So, the fact that you’ve completed an AI installation in six months doesn’t mean you’ll see benefits at the end of those six months. But six months after that, you’re going to begin gaining insights. And at the one-year mark, you’ll begin to see tangible benefits.”

“The good news, however, is that executives, while sometimes frustrated, are not feeling discouraged about AI. It’s a matter of building AI literacy. It’s why we advocate for getting as much of the organization as possible involved in AI implementation. AI can’t be built in a silo. You need to leverage people across functions, so AI ends up being smarter and more widely utilized. That’s when the organization starts to appreciate what it takes to build AI and make it work,” adds Krishna. ●



Overcoming AI adoption hurdles

What’s holding certain industries back from adopting AI more aggressively – particularly

industries like healthcare, financial services, and retail? In some cases, says Bharat Rao, Principal, Advisory at KPMG, it has to do with regulatory requirements around data.

“Healthcare is a prime example,” Rao says. “The Health Insurance Portability and Accountability Act (HIPAA) sets standards for protecting a patient’s sensitive health data, including requirements around physical, network, and process security measures. Given this, healthcare companies have been reluctant to take data to the cloud and to use cloud environments for AI-related programs. That’s now starting to change, however, thanks to the emergence of trusted clouds that are HIPAA compliant.”

“The same is true for the financial services industry,” says Traci Gusher, Principal, Innovation and Enterprise Solutions, Artificial Intelligence at KPMG. “Because of the sensitivity of their client data, companies in the financial services sector have been reticent to take customer data to the cloud. But like the healthcare industry, a shift to the cloud is now occurring as trusted environments become available.”

“The retail industry is another matter entirely. Ironically, retailers were early adopters of AI – primarily for marketing-related functions, such as customer segmentation and analyzing customer churn. But that’s where adoption stalled. It’s only now that retailers have started applying AI to middle- and back-office functions that they are beginning to reap important benefits – particularly in cost reductions. As retailers continue to connect their front-, middle- and back-office capabilities, we expect them to emerge as fast followers in the AI adoption race,” Gusher adds.

Challenges to AI adoption



Reskilling the workforce needs to happen at every level of the organization because each level has a different role to play in fostering a data-centric organization.



– Bob Parr, KPMG Advisory
Chief Data Officer

Indeed, for all their expectations around AI, industry insiders are clear about the challenges of integrating AI technology into the workplace. At the top of their list of challenges is a lack of understanding of technology capabilities, cited by 46 percent of respondents. That's followed by lack of training, cited by 36 percent, and lack of initial investment funding, cited by 32 percent.

Then there are industry-specific concerns. Transportation insiders, for example, have unique concerns about opposition within their organizations to new technologies, cited by 43 percent, and long-term upkeep costs, cited by 35 percent.

Meanwhile, survey respondents in the retail, healthcare, and financial services industries expressed concerns about how prepared their employees are in terms of skill sets for AI adoption. Only 43 percent of retail and healthcare insiders, and 49 percent of financial services insiders think their employees have the skills needed to adopt AI. That contrasts with 61 percent of insiders in technology and 63 percent of transportation insiders.

Interestingly, senior executives are more confident in their employees' AI preparedness than lower level managers: 79 percent of C-level insiders believe their employees are well-prepared, compared to only 38 percent of manager-level insiders.

What accounts for this disparity? Managers presumably are closer to employees and should be in a better position to assess such matters. Are senior executives just out of touch?

A more important question, says Gusher, is how AI is viewed within an organization.

"In some companies, AI is viewed simply as a technology play," Gusher says. "Executives are hearing great things about AI, and they're also hearing from their CIOs that their companies are implementing AI technologies – and this is very often

true. But they need to look at AI as a strategic enterprise-wide initiative. It's not just about installing AI technologies. It's about using AI as a strategic lever to transform the business. And that requires building deep AI capabilities across the organization – both from the bottom up and the top down - across technology, people, data and process. Also missing is acknowledgement of the effort needed from the workforce to train AI efficiently. AI can be a bit like a toddler – it learns fast – but only through education and observation.”

43% of retail and healthcare insiders and 49% of financial services insiders think their employees have the skills needed to adopt AI.

50% of insiders find it difficult to hire new talent with AI skills.

In terms of training, the healthcare and retail industries report the lowest level of AI training support – with only 47 percent of healthcare and 52 percent of retail insiders saying their companies offer an AI training course. That compares to 57 percent of financial services respondents and 65 percent each of technology and transportation respondents.

Half of all industry insiders also find it difficult to hire new talent with AI skills. Frustration is highest among those who believe AI adoption is moving slower than it should. Fully 77 percent of those respondents find hiring AI-skilled talent difficult. ●

“

We need to make sure that when we're defining 'reskilling the workforce,' we're not talking about trying to turn our resources into data scientists. Having technical AI skills is important, but the broader issue is around building data and AI literacy across the entire organization.”

– Traci Gusher, Principal, Innovation and Enterprise Solutions, U.S. Lead, Artificial Intelligence

Building data literacy



Data literacy is really about creating a data-first culture – a mindset in which employees’ first instinct is to turn to data analysis to solve business problems. To help them do so, companies are hiring more and more data scientists. How well those data scientists are integrated into the employee population, however, can make all the difference in achieving a data literate workforce.

“Data literacy is a two-way street,” says Bob Parr, Chief Data Officer, Advisory, at KPMG. “Data scientists understand data, but employees understand the business. You need both to generate real value in an AI program.”

“The first step is to get people comfortable working together. You can’t just drop a data scientist into a business and expect results. You need to educate teams about what each employee group brings to the table and create a framework in which people can engage with each other productively.”

“At KPMG, we sometimes organize pilot projects that involve helping a local non-governmental organization [NGO] solve a business problem. Using the NGO’s data, our combined teams of data scientists and business advisors collaborate to address the problem. This gives our people an opportunity to work together in a neutral setting and to appreciate the value each brings to the solution.”

“It’s also important to establish supportive communities to help people acclimate to a data-centric world. This is particularly important for the data scientists who may be new to the organization and trying to find their footing in an unfamiliar world. These communities allow people to share experiences – especially in deploying data and analytic tools – and to draw support from colleagues in their learning and development journey. “

“Finally, reskilling the workforce needs to happen at every level of the organization because each level has a different role to play in fostering a data-centric organization. Someone at a manager level, for example, may need to understand the practicalities of applying business data to solve a particular business problem. Someone in the C-suite, on the other hand, may have to alter their decision-making process to incorporate more data analysis. Data literacy needs to cut across all levels of an organization,” adds Parr.

Employee concerns

But how do industry insiders assess their employees' attitudes toward AI adoption at their companies? On a positive note, the majority say their employees are supportive, with support ranging from 81 percent in technology to 67 percent in healthcare. Nearly half of technology insiders (47 percent) say their employees are very supportive of AI, while only about a quarter of the respondents in other industries agree.

Technology insiders are also more likely to describe employees as optimistic (63 percent) or excited (59 percent) about AI, with roughly half of financial services respondents reporting similar attitudes.

At the other end of the spectrum, healthcare and retail insiders report their employees are skeptical of AI (46 percent and 44 percent respectively), and 32 percent of retail insiders say their employees are fearful of AI.

Indeed, when probed further, insiders report that while employees are open to integrating AI at their companies – support ranges from 81 percent in technology to 62 percent in retail – these same employees are concerned about the *application* of AI. Concerns range from a high of 70 percent in technology to a low of 55 percent in financial services.

Respondents report specific concerns about security/privacy and a loss of personal interactions. The former is particularly true of healthcare (75 percent of respondents reported) and financial services (72 percent reported). The latter is most strongly felt by retail and healthcare – both with 59 percent of respondents expressing this view.

There are also concerns about job losses – the subject of much media attention and public debate over the past few years. Roughly two in five respondents say their employees share this concern, although that figure jumps to 62 percent of respondents in the retail industry.

The concern about jobs also seems to be highly personal. When asked whether they worry about being replaced in their job someday, 54 percent of retail insiders agree, followed by 43 percent in transportation and 37 percent each in technology, financial services, and healthcare.

When probed further about data security and privacy issues, roughly three-quarters of respondents agree that consumer data security/privacy is threatened by AI technology. Two in five transportation (45 percent) and technology (39 percent) insiders strongly agree.

Respondents in the healthcare industry also agree that AI represents a potential threat to patient data security and privacy. Fully 70 percent agree with that statement, although 86 percent also say their organizations are taking care to protect patient privacy as it implements AI technologies. ●

2 in 5 respondents say their employees have concerns about job losses as a result of AI.

70% of respondents in the healthcare industry agree that AI represents a potential threat to patient data security.

Building an AI governance framework



Government regulation of AI seems inevitable. Most survey respondents welcome some level of government oversight, and organizations like the Organization for Economic and Cooperation Development (OECD) and the World Economic Forum (WEF) have already issued guidelines on responsible AI deployment. What can companies do to prepare? Traci Gusher of KPMG offers this advice¹:

It's only a matter of time before legislation is introduced to regulate AI, yet only 25 percent of very mature organizations have a formal AI governance structure in place. Such a structure should encompass guardrails for what AI will and will not be used for and how an organization will ensure that AI is ethical and properly validated. KPMG's framework for AI governance and control includes the following recommendations:

Prepare employees now. Help employees adjust to the role of AI in their jobs by creating and piloting training programs – potentially partnering with academic or other knowledge-leading organizations. Acknowledge that AI is a change management challenge.

Develop strong oversight and governance. Establish clear enterprise-wide policies about how AI will be deployed, including how data is to be used and standards of privacy. Make sure your AI is focused on areas that align with your organization's ethical compass.

Align cybersecurity and ethical AI. Build strong security into the creation of algorithms and the governance of data. Clearly understand the context and purpose of your AI models and maintain records of who trained the algorithms and the provenance of all data.

Mitigate bias. Clearly define and document the goal and purpose of critical algorithms. Be sure that algorithm design is consistent with all standards and guidelines and appropriate measures are taken to validate and stress test critical decision-driving algorithms.

Increase transparency. Create "contracts of trust." Explain to customers and consumers how data is being used and the steps you're taking to be transparent.

¹ Ethical AI: Five Guiding Pillars, December 2019

The ethics of AI

Given these concerns, it's not surprising that industry insiders want their companies to address the ethics around employing AI. Roughly nine in ten respondents agree with the statement that companies should implement an AI ethics policy to help govern AI work. On an encouraging note, two in five (44 percent) say their companies have already implemented such a code, and another third say their companies are working on one.

In fact, more than two-thirds of respondents say that employees working in AI at their companies have already taken a course in ethics, and nearly the same number report that these employees are trained to recognize biases in algorithms. Indeed, more than three-quarters say their employees working in AI are aware of potential biases in AI.

That number ratchets up to 90 percent for respondents at companies that have implemented an AI code of ethics or where AI is *fully* functional. That's a significant increase over respondents at companies that are still working on an ethical code (75 percent), that do not have and aren't developing such a code (41 percent), where AI is only moderately functional (81 percent), or where it is being used in a limited capacity (67 percent). ●

90% of respondents agree that companies should implement an AI ethics policy to help govern AI work.

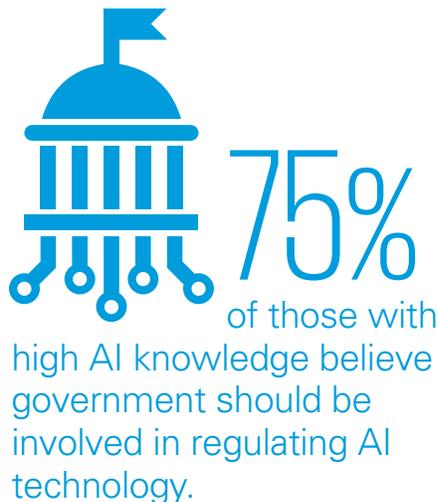
44% say their companies have already implemented an AI code.

Governing AI

So, what can companies do to ease employee concerns about AI, speed its adoption, and more fully benefit from AI integration in their organizations? The answer, in a word, is investment – into research and development around AI (supported by 47 percent of respondents), into reskilling employees to work in AI (supported by 39 percent) and into allocating more budget to AI initiatives (supported by 36 percent).

There is also wide-ranging support for some level of government regulation of AI.

Even though survey respondents are more likely to look to academia and business rather than government as the authority on AI, a clear majority believe government should be involved in regulating AI technologies. Support ranges from 82 percent of transportation insiders to 59 percent of financial services insiders. And 41 percent of transportation and 39 percent of technology insiders think government should be *very* involved.



Respondents from the transportation industry, by the way, are also more likely than their peers to view government as a trusted authority on AI. Twenty-eight percent of transportation insiders cite government as an authority, slightly less than the 32 percent who cite business.

It's also worth noting that support for government oversight is highest among those most engaged in and most knowledgeable about AI. Ninety-one percent of respondents whose companies have made AI fully functional at scale and 75 percent of those with high AI knowledge believe government should be involved in regulating AI technology. ●

AI in Control



As more and more organizations turn to algorithm-based applications to make critical business decisions, executives are raising questions about the trustworthiness of those decisions and the underlying data upon which they are based. To address these concerns, KPMG has introduced a governance framework called “AI in Control” that can be used to inform the design, operation, and assessment of AI models.

“If we are to realize the full potential of AI, we must create trust in algorithms and the outcomes they produce,” says Martin Sokalski, Principal, Advisory at KPMG. There are four key imperatives, according to Sokalski²:

- **Integrity:** AI models are safe and secure from harm or adversarial attacks.
- **Fairness:** AI models are free of bias, are inclusive, and avoid unfair treatment of certain protected groups and comply with regulations or policies.

- **Explainability:** the learning and decisions of AI models can be explained in business terms and allow interpretation based on their explanation.

- **Resilience:** AI models are agile and robust.

“Based on these imperatives, organizations should design and set up governance criteria for building and monitoring AI solutions and performance. They should also provide for ongoing assessments, including conducting diagnostic reviews of AI solutions and evaluating control environments to determine organizational readiness for effective AI control. This involves evaluating business-critical algorithms, putting testing controls in place, and overseeing the design, implementation, and operation of AI programs on an ongoing basis.”

“As organizations move down the evolutionary path from strategy through execution, they need to ensure they have the methodologies, tools, and controls to foster transparency and confidence in AI.”

² Controlling AI: AI driving transparency, explainability, and trust, June 2019

What's next

Clearly, in the view of many industry insiders, AI is starting to show real promise – delivering substantive benefits to customers and end-users and offering the prospect of potentially transformational benefits down the road.

To meet these rising expectations, however, enterprises need to be more aggressive in supporting AI. This can be attained by:

Investing in R&D around AI and complementary capabilities to stay ahead of the curve and to vault their deployments into other areas of their business.

Building data literacy across the entire organization to help employees understand the role that AI plays across functions and adjust to the impact it may have on their jobs.

Creating a data-first culture by increasing technical talent, and encouraging an environment where data analysis is used to solve business problems from the top down.

Evaluating and resolving privacy and security issues by designing AI algorithms that align with corporate values and with quality and security standards.

Enhancing their IT groups' skills for modern delivery methods (i.e. CI/CD, cloud, use of containers, agile, etc.) to support the ability to take AI into production and avoid common “failure to launch” challenges.

Increased literacy and commitment to AI should help accelerate AI's adoption across industries and further its acceptance by enterprise employees.

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