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Investing in Trustworthy AI

A report by the Deloitte Al Institute and US Chamber of Commerce

About the Deloitte Al Institute

The Deloitte AI Institute helps organizations connect all the different dimensions of the robust, highly dynamic and rapidly evolving AI ecosystem. The AI Institute leads conversations on applied AI innovation across industries, with cutting-edge insights, to promote human-machine collaboration in the "Age of With".

Deloitte AI Institute aims to promote the dialogue and development of artificial intelligence, stimulate innovation, and examine challenges to AI implementation and ways to address them. The AI Institute collaborates with an ecosystem composed of academic research groups, start-ups, entrepreneurs, innovators, mature AI product leaders, and AI visionaries, to explore key areas of artificial intelligence including risks, policies, ethics, future of work and talent, and applied AI use cases. Combined with Deloitte's deep knowledge and experience in artificial intelligence applications, the Institute helps make sense of this complex ecosystem, and as a result, deliver impactful perspectives to help organizations succeed by making informed AI decisions.

No matter what stage of the Al journey you're in; whether you're a board member or a C-Suite leader driving strategy for your organization, or a hands on data scientist, bringing an Al strategy to life, the Deloitte Al institute can help you learn more about how enterprises across the world are leveraging Al for a competitive advantage. Visit us at the Deloitte Al Institute for a full body of our work, subscribe to our podcasts and newsletter, and join us at our meet ups and live events. Let's explore the future of Al together.

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About the Chamber Technology Engagement Center

Our nation's future economic success, growth, and competitiveness depends on a thriving and innovative technology sector. Every company is a tech company and data-driven innovation is the foundation of businesses across the country. The Chamber Technology Engagement Center (C_TEC) tells the story of technology's role in our economy and advocates for rational policy solutions that drive economic growth, spur innovation, and create jobs.

The US Chamber of Commerce is the world's largest business organization representing companies of all sizes across every sector of the economy. Our members range from the small businesses and local chambers of commerce that line the Main Streets of America to leading industry associations and large corporations.

They all share one thing: They count on the US Chamber to be their voice in Washington, across the country, and around the world. For more than 100 years, we have advocated for pro-business policies that help businesses create jobs and grow our economy.

www.americaninnovators.com www.uschamber.com



A report from the Deloitte
Al Institute and the US
Chamber of Commerce on
trustworthy Al innovation
and investments

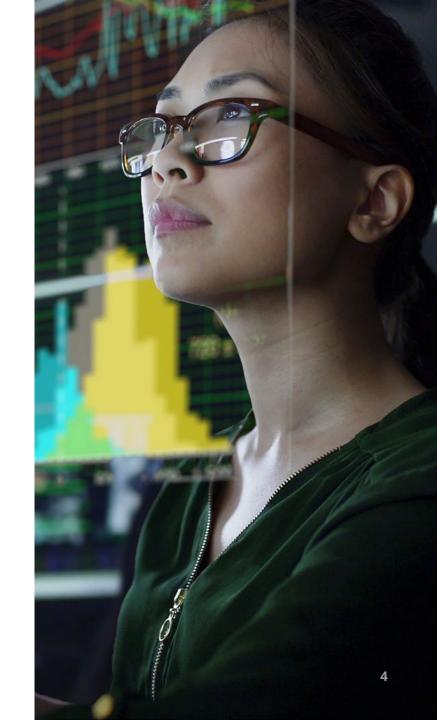
Artificial intelligence (AI), broadly defined to include the wide range of statistical methods and computational technologies that enable systems to learn, respond, make decisions and take actions with increasing autonomy, is rapidly becoming an enabler of growth, and a potential game changer, for almost every global industry.¹ The United States Patent and Trademark Office reports that as of 2018, fully 25% of all US inventors were using AI technologies in their granted patents.² While the potential for the United States in harnessing its Al talent, computing capacity, and private-sector-driven innovation is enormous, Al also brings a unique set of challenges that should be addressed so that concerns over its risks do not dampen innovation, and to help ensure the United States can lead globally in the ethical development of AI-based systems, sometimes called "responsible" or "trustworthy" Al.

Building trust and confidence on the part of businesses, their customers, their employees, and the public that AI adoption will lead to a positive impact on the economy and society can accelerate the social and economic benefits that can come from AI and maintain global competitiveness in this critical technology. A potential key to the execution of this approach is US government leadership through public investments and common-sense policies that balance a culture of growth and innovation and ensure that AI applications are developed and deployed in compliance with existing laws and in consideration of social, ethical, safety, security, and privacy concerns.

Review of current research, consideration of the perspective of leading voices in government and industry, and the results of a survey conducted among participants with roles in AI innovation supports the position that public policies to bolster AI innovation can provide lasting economic and social benefits for US citizens and companies. Building a thriving and sustainable AI-enabled economy will likely require sensible policy solutions to encourage innovators to embed

concepts of trustworthy AI in the development and deployment of AI systems. A trustworthy AI approach can mitigate risks that might otherwise reduce confidence in AI systems and stifle innovation in this critical sector while focusing investment on beneficial applications of AI that can lead to economic growth and improved health, safety, and well-being for Americans.

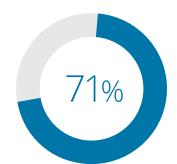
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Emphasizing the benefits of AI applications to workers and consumers can increase trust in AI.

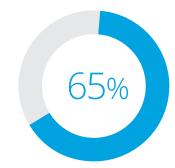
Benefits to consumers

Respondents to the survey indicated that consumer trust in AI systems could increase as consumers saw personal benefit from adoption of AI technologies, whether as users of AI-enabled systems or as customers of new products and services generated or accelerated by AI:



Clarity

Believed that consumers would see benefits from the ability of AI to identify patterns or anomalies in complex and diverse data sets.



Innovation

Noted that consumers would gain confidence in AI as the pace of discovery of new medicines, materials and other technologies accelerated.



Productivity

Indicated that consumers would gain trust in Als that increased their productivity or helped them eliminate low-value tasks.



Speed and accuracy

Suggested that consumers would see benefit from AI technologies that helped them improve the speed and accuracy of their decision-making.



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Benefits to workers

Similarly, respondents indicated that workers could become more confident in using and working alongside AI as they saw it improve their day-to-day work experience, safety, and professional opportunities:



New occupations

Saw the creation of new types of work, especially higher-value occupations focused on creating, managing, and maintaining AI systems.



Safety

Highlighted improved safety on job sites or in transit due to Al monitoring or control of equipment and vehicles.



Automation

Noted the reduction of low-value or repetitive work due to Al-enabled automation.



Higher wages

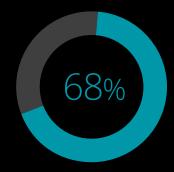
Suggested workers might see increased wages or improved working conditions associated with higher-value work made available by AI systems.



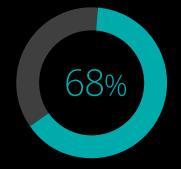
Development of AI technologies highlights several risks that may lead to less consumer and customer confidence in AI technologies.

Concerns

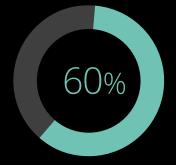
When respondents to the survey were asked to identify which concerns about AI technologies were likely to have a significant impact on reducing consumer and customer trust in artificial intelligence:



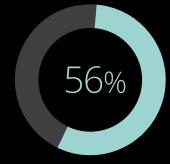
BiasesIdentified biases
influencing decisions
made by AI.



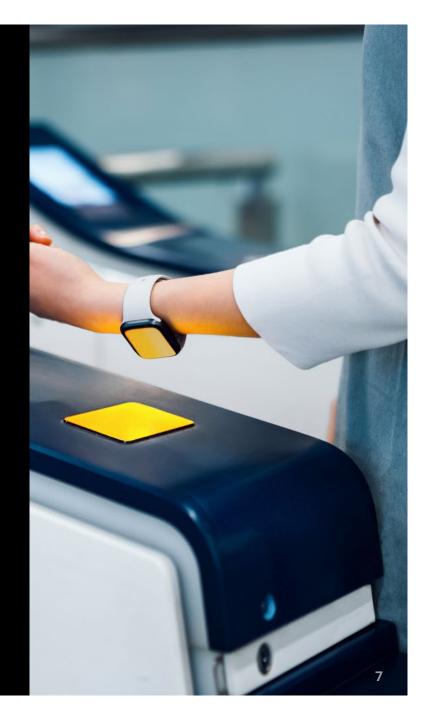
Lack of accountability
Identified a lack of human accountability or liability for Al decisions.



Rogue behavior Identified rogue or unanticipated behavior of partially or fully autonomous agents.



Too complex Identified a lack of explainability of Al algorithms.



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Endnotes

- Beena Ammanath, David Jarvis, and Suzanne Hupfer, "Thriving in an era of pervasive AI," in Deloitte's State of AI in the Enterprise, 3rd edition, Deloitte Insights, July 14, 2020.
- US Patent and Trademark Office (USPTO) Office of the Chief Economist, <u>Inventing Al: Tracing the diffusion of artificial</u> <u>intelligence with U.S. patents</u>, October 2020.