

Thrive with responsible AI:

How embedding trust can unlock value

Contents



Page 4

Introduction

Page 5-8

A new understanding of trust, responsible AI and value

Page 9-16

Delivery of 360° value: The key value levers for responsible AI

Page 17-21

Accelerating the journey to responsible AI maturity and value creation

Page 22

Conclusion

Page 23-24

Appendix

Page 25-29

About the research





When it comes to delivering value, there's more to responsible AI than meets the eye.

Introduction

All the technology in the world counts for nothing if people hesitate to use it to its fullest.

Despite the transformative potential of AI, businesses are proceeding with caution. While continuing to make it a priority, 56% of Fortune 500 companies still cite AI as a “risk factor” in their annual reports, up from just 9% a year ago.¹ Among those flagging AI risks, 74% of organizations surveyed in our new survey had to temporarily pause at least one AI or generative AI project in the past year.

Robust responsible AI capabilities close the AI trust gap within organizations and with customers. Responsible AI allows companies to adapt quickly to changing risks and regulations, fostering continuous innovation. And it empowers companies to tackle AI challenges with purpose and strategy, delivering significant returns.

Our research reveals that responsible AI isn’t just about mitigating risk and supporting regulatory compliance—it actively drives value. Respondents to a recent survey estimate that AI-related revenue will increase by 18%, on average, once responsible AI is fully developed.

Responsible AI enhances customer satisfaction, loyalty, product quality, talent acquisition and more. By compressing investment timelines, organizations can achieve responsible AI maturity faster—accelerating time-to-value by a year or more.

Simply put, responsible AI is AI at its best—essential for achieving the full potential of AI investments. The sooner you develop responsible AI maturity, the sooner you reap its benefits.

Working with our partner, Amazon Web Services (AWS), we conducted a global C-suite survey of more than 1,000 executives across 21 industries in 15 countries to explore responsible AI’s contribution to time-to-value (TTV) and 360° value—financial, risk & regulatory, experience, talent, sustainability and inclusion & diversity.

A new understanding of trust,
responsible AI and value.



What is responsible AI?

Responsible AI is an approach applying intentional actions to design, deploy and use AI to create value and build trust by protecting against the potential risks of AI. To achieve responsible AI, organizations must move beyond defining responsible AI principles and actually put those principles into practice, operationalizing their responsible AI capabilities across their organization.

What does “best-in-class” responsible AI look like?

A fully developed responsible AI capability is one that is operationalized as a platform and adopts a systemic, anticipatory approach to responsible AI efforts. It deploys dedicated resources and processes to continuously assess current and future risks, proactively adapting risk management based on new insights—including data governance and management practices. It shapes new standards, methods and approaches for safe development and use of AI and proactively engages with third-party AI vendors to manage third-party AI risks effectively. This practice of fully developed responsible AI involves active engagement with external stakeholders, regulatory bodies and value chain partners to build trusted relationships, enable collaboration and ensure overarching responsibility.

Companies expect a 25% increase in customer loyalty and satisfaction from offering responsible AI-enabled products and services.

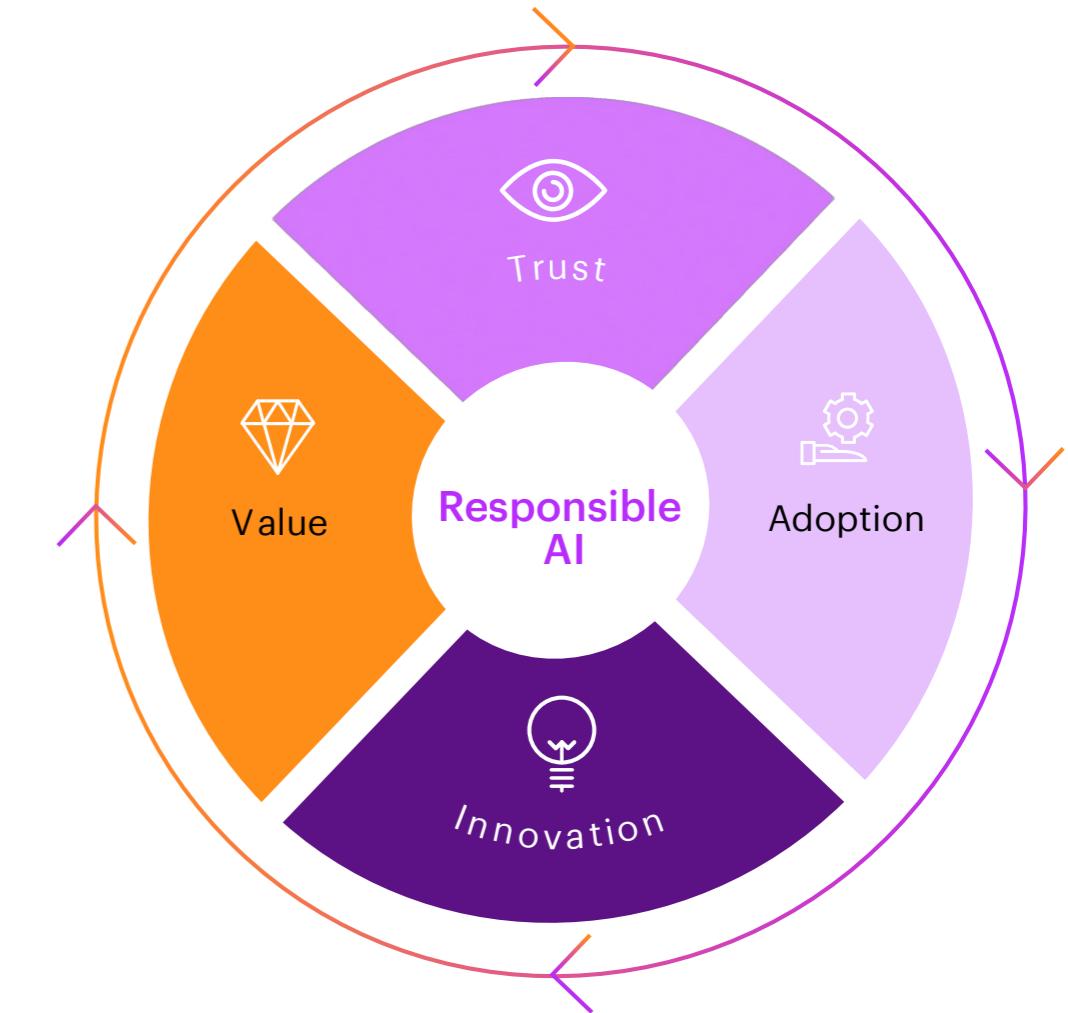
Trust is foundational to every AI strategy—encouraging adoption, unleashing innovation and driving value. Trust is the linchpin of value.

For a company to fully embrace AI, its people must first trust the technology. AI tools must enhance their work rather than complicate it. AI systems should be accurate, minimize unwanted biases and be deployed with the transparency tools needed to help downstream stakeholders make informed decisions about usage. And it's not just about tools—it's about managing a cultural shift within the organization.

By educating employees about the risks of AI and creating policies to mandate responsible AI use, leaders can trust their employees to be AI-ready while guarding against unintended consequences of AI use.

When companies invest in robust responsible AI governance frameworks and ensure that their AI systems are explainable and fair, trust grows. This, in turn, drives increased AI adoption, allowing innovation to thrive—and innovation is the key to value creation and growth (Figure 1).

Figure 1: How responsible AI builds the trust that leads to value



According to our research, 82% of organizations expect that communicating a mature approach to responsible AI will significantly improve employee trust in AI adoption, leading to innovation.

Trust within the organization is the bedrock upon which all other stakeholder trust is built. Companies face increasing demands from a range of stakeholders—employees, partners, customers, shareholders and regulators—to show responsible use of AI. Those unable to communicate a strong and trustworthy AI posture risk missing opportunities for new clients, market segments and partnerships. Conversely, companies that are transparent about their responsible AI commitment are better positioned to foster collaborative innovation and gain stakeholder trust.

Responsible AI starts with trustworthy data. AI models must be built on a high-quality data foundation using responsible AI interventions to create trust and manage risk. Biased data can be mitigated using data profiling techniques. IP infringement can be addressed through IP conformance checks and verifying content authority. Data drift and leakage can be addressed through proper assessment of data quality. When it comes to the AI model pipeline, proper data privacy and security measures can manage the risk of concept drift.

With responsible AI guardrails implemented, AI systems are better suited to identify and remediate risk, and safeguard against unintended and harmful outputs.

As AI becomes more integrated into everyday business processes and human interactions, managing the complexities of AI risk becomes paramount. Companies that fail to address these risks will find it increasingly difficult to scale their AI projects and realize the full benefits of AI.

Responsible AI is not just about mitigating risk, it's critical to unlocking value. And responsible AI is critical to building trust.

Two sides to the responsible AI coin

Side one: Risk mitigation

To date, responsible AI has largely been seen as a compliance requirement, a regulatory obligation or a cost of doing business—and for good reason.

Recent research shows that the number of AI-related incidents, from algorithmic failures to data breaches, keeps going up each year. This includes a 32% increase in the last two years and a twentyfold increase since 2013.² Today, 91% of organizations expect a further increase in incidents over the next three years. Also, 45% of organizations believe there's a greater than one-in-four chance of a major AI incident occurring in the next 12 months.

Why is this so critical? Because, on average, companies estimate a major incident would cause a massive 31% reduction in total enterprise value.

Organizations must have confidence in the AI systems with which they interact. When decision-making is paralyzed by privacy concerns, fairness and safety issues, algorithmic biases—alongside newer threats like hallucinations, deepfakes and cybersecurity breaches—companies cannot progress, innovate and scale. Employees fear job loss, customers fear

scams and spam, and the C-suite fears malfunction, reputational damage and fines. A company proceeds haltingly and more confident competitors move ahead.

A robust responsible AI capability mitigates these threats and establishes trust. This results in the confident use of AI which, in turn, leads to greater adoption for both new and existing use cases.

Side two: Value creation

The benefits of responsible AI, however, extend far beyond risk mitigation and compliance. **Our first-of-its-kind research found that responsible AI has a significant impact across six key value levers.** It delivers value in areas spanning financial performance, experience, talent, sustainability, inclusion & diversity as well as risk & regulatory. With responsible and intentional use of AI, a company can improve core business operations and applications, build trust with stakeholders and position itself as a leader in AI innovation.

To better understand how responsible AI manifests value, we evaluated it across a multifaceted system—Accenture's 360° value framework (Figure 2).

Figure 2: Accenture's 360° value framework—responsible AI value levers





**Delivery of 360° value:
The key value levers for responsible AI.**

Responsible AI is a crucial driver of sustainable business success. So how do individual companies unlock its value?

1. Financial

Under this heading, we cover the many ways responsible AI can help companies to meet financial expectations and achieve greater outcomes for resilience and growth.

For example, by implementing responsible AI, **Mastercard** has significantly boosted financial performance and enhanced operational efficiency.³ With a commitment to responsible AI principles, a comprehensive governance framework and thorough review processes, the company stopped a massive \$20 billion of fraud by implementing responsible AI in its fraud detection systems. Here, responsible AI delivered huge value by helping to streamline operations, improve decision-making processes and achieve rapid scaling. This proactive approach positions it to adapt swiftly in an evolving AI risk landscape, while continuing to be an innovation leader in the financial sector.⁴

Revenue growth

- **Almost half of the organizations surveyed acknowledge that responsible AI has a pivotal role in driving AI-related revenue.⁵**

New technologies have led to massive savings at **Rolls-Royce**, where an AI-driven engine inspection tool, Intelligent Borescope, reduces inspection time by 75%.⁶ Over five years, it is expected to save up to £100 million

in inspection costs. For long-term success, every AI initiative at Rolls Royce is supported by its responsible AI Aletheia Framework.⁷ This comprehensive guide ensures responsible AI development and includes 32 principles categorized into governance, accuracy/trust and social impact. The framework also features a tool for detecting and mitigating AI bias, reinforcing Rolls-Royce's commitment to building trust with employees and customers in safety-critical environments.

The framework is not limited to engine maintenance and can be adapted to any industry, enabling new collaborations across diverse applications such as education, oncology and music.⁸

- **64% of the organizations we surveyed anticipate a strong or very strong impact from responsible AI on improving contract win rates.**

For example, **Accenture**'s responsible AI compliance program has strengthened Accenture's reputation as a transparent, purpose-driven partner in AI and set a new standard for responsible AI use. The success of this program⁹ has contributed to the 800% YoY revenue growth from generative AI, with over \$3 billion in new generative AI bookings in fiscal year 2024 (September 2023 to August 2024).

Operational efficiency

- With the introduction of responsible AI, 70% of respondents expect strong improvements in product quality. 66% expect gains in Semi/Automation and 67% expect improvements in process industrialization/shortened development cycles.

In areas such as product quality, process automation and industrialization, strategic responsible AI enhancements lead to faster time-to-market, better quality and increased productivity. Reliable, transparent and unbiased AI systems mean fewer costly mistakes, less downtime and better allocation of resources. This enhances overall operational performance and drives higher profitability.

When **Allianz**, a leading global insurance provider, embarked on a transformative journey to integrate AI into its operations, responsible AI played a vital role.¹⁰ Allianz adopted a 'Privacy and Ethics by Design' approach, ensuring human oversight and accountability while embedding ethical AI principles across its operations. A Data Advisory Board was established to ensure responsible AI principles were embedded, and training workshops aligned employees with the company's ethical AI objectives. Allianz Direct, a division focused on direct insurance, achieved a ~15% year-over-year revenue growth and a 30-40% reduction in costs due to its scalable platform strategy. Allianz demonstrated the financial value of AI while maintaining ethical standards and navigating AI related risks, asserting itself as a leader in responsible innovation.

Trust and collaborative advantage

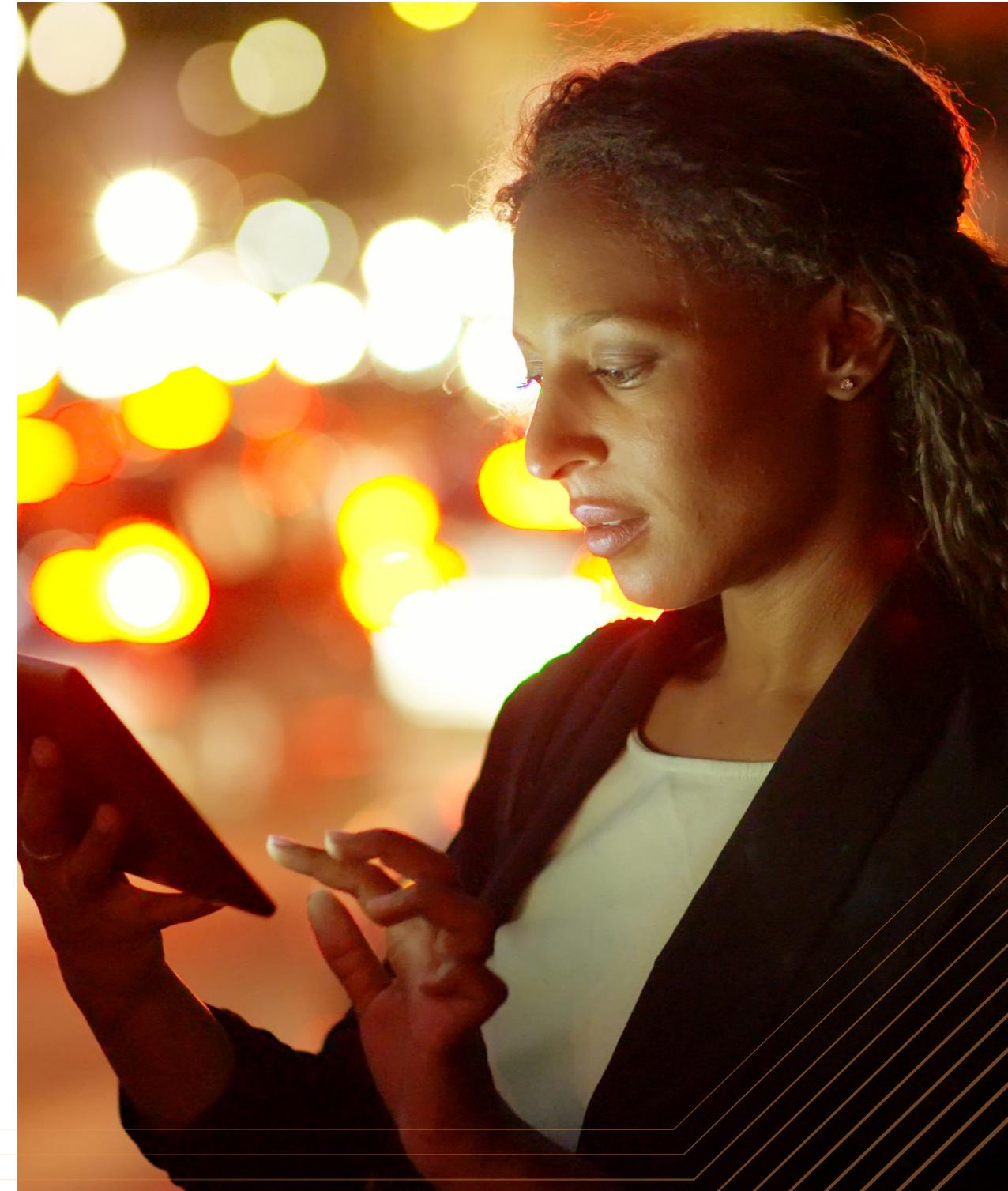
- 79% expect communicating a mature responsible AI approach to improve partner trust and collaboration.

When **Adobe** was building Firefly, one of its creative generative AI models on AWS¹¹, it wanted to ensure the product would be commercially safe, providing transparency to consumers and respecting the rights of artist and creators.¹² It introduced Content Credentials, a technology that indicates whether an image is created by AI or by a human. Content Credentials are built on an open standard developed by the Coalition for Content Provenance and Authenticity (C2PA), so anyone can implement them in their own tools and platforms. This innovation builds trust with customers and has fuelled rapid adoption. By September 2024, Firefly-powered generations across Adobe tools exceeded 12 billion.¹³

New industry expansion

- 66% of organizations expect responsible AI to have a strong impact in opening new geographies, industries and under-represented markets over the next three years.

Investing in responsible AI also better equips businesses to enter new, more highly regulated markets like banking and healthcare where responsible practices and transparency are becoming increasingly important. Having responsible and transparent AI practices in place can also help businesses to appeal to a broader, more diverse customer base.





2. Experience

- **Companies investing in responsible AI expect a 25% increase in customer loyalty and satisfaction.**
- **79% of companies believe that communicating their responsible AI efforts will improve brand perception significantly.**

When a company makes a commitment to fairness, transparency and accountability, that message resonates with today's more conscientious consumers.

With a client list that includes some of the world's biggest beauty brands like Charlotte Tilbury and Max Factor, **Beauty by Holition** (BBH) is a pioneer of beauty tech.¹⁴ It harnesses machine learning and AI to deliver state-of-the-art digital experiences for its customers, like virtual try-on solutions for makeup and accurate AI skin diagnostics. Its 'Neoskin' AI skin diagnostic tool has been proven to increase purchase intent fivefold, product interaction to over two minutes and conversions by 24%. The company attributes the success of its solutions to a responsible-by-design-approach, guided by six core principles: fairness, transparency, non-maleficence, responsibility, privacy and inclusiveness.

By curating its own balanced data sets, it ensures balanced outcomes when training AI algorithms to provide full representation of skin types, tones, genders and ages. BBH also uses peer review and iterative bias testing to reveal underlying bias and identify how data sets can be more finely tuned.

- **Companies offering responsible AI-enabled products anticipate a 21% reduction in customer churn/turnover.**

Customer retention is now as important as customer acquisition and minimizing churn has become a crucial part of sustaining long-term growth. Companies that invest in responsible AI are investing in their reputation and laying the groundwork for sustained success in an increasingly customer-centric economy.

Returning to **Allianz** Direct, while their scalable platform strategy helps boost revenues and reduce cost, another innovation has delivered additional benefit. An AI-enabled hallmark service, the "60-second claim" process that reimagined the customer experience, has led to a more than 15% improvement in self-service rate across countries and significantly enhanced customer satisfaction by streamlining claims handling and delivering faster resolutions.

3. Risk & regulatory

With the rise of AI comes a mounting set of regulatory and compliance challenges—and businesses are scrambling to keep up. With the growing use of generative AI, responsible AI becomes an even more critical tool to help organizations manage regulatory risks and safeguard against cyber vulnerabilities, while delivering value through financial and reputational benefits. By reducing the risk of fines, enhancing cybersecurity and supporting compliance with emerging laws, responsible AI delivers a strong return on investment.

Compliance

- Less than 1% of organizations feel fully prepared to adapt to new AI-related laws over the next five years.**

New laws governing AI, data privacy and cybersecurity are being introduced around the world and businesses are not ready. From the California Privacy Rights Act (CPRA) to South Korea's AI liability law to the EU AI Act, companies need to be proactive to navigate this expanding maze of regulations. When AI systems are operated responsibly and transparently, companies can adapt quickly to stay ahead of regulatory changes and avoid costly fines and litigation.

Legal risks

- 45% of organizations believe that there's better than a one-in-four chance of a major AI incident occurring in the next 12 months.**

Last year alone, the total number of AI-related regulations in the US grew by more than 56%.¹⁵ With new legislation enacted all the time, change is constant and non-compliance is costly. Hefty fines, legal battles and increased scrutiny from regulators can drain resources and divert attention away from the core business. These huge costs can far exceed the initial investment required to implement responsible AI.

In 2021, the **Clearview** facial recognition company faced legal challenges in the U.S., Canada and Europe for violating privacy laws by collecting billions of facial images without consent.¹⁶ In the U.S., Clearview AI faced expensive lawsuits under the Illinois Biometric Information Privacy Act (BIPA), while Canadian regulators ruled that it violated privacy rights and ordered the deletion of the data.

By prioritizing transparency and fairness, responsible AI frameworks can help reduce the likelihood of costly AI errors that could result in expensive lawsuits and regulatory fines.

The Monetary Authority of Singapore (MAS), for example, has set a standard for regulatory compliance in the highly regulated financial sector.¹⁷ By encouraging the integration of responsible AI practices across the industry through initiatives like the FEAT (Fairness, Ethics, Accountability, Transparency) principles and the Veritas and Mindforge initiatives, MAS is helping financial service institutions to gain value from AI responsibly.

Cybersecurity

Cyberattacks are on the rise—and they are more sophisticated than ever. Since late 2022, ransomware attacks have surged by 76% and phishing attacks have jumped by 1,265%.¹⁸ Newer threats like deepfakes, which pose a unique threat to financial integrity, are also on the rise with a staggering 223% increase in the trade of deepfake-related tools on dark web forums between Q1 2023 and Q1 2024.¹⁹ These cyber threats are not only costly in terms of business disruption and recovery but can also cause irreparable damage to customer trust.

With our research showing that nearly 50% of organizations are taking more than 10 days to identify and contain these threats, the integration of responsible AI into cybersecurity practices is critical in mitigating these risks. And the payoff is huge.

- AI Cyber-mature companies are more than two times more likely to contain threats in less than one day in comparison to companies with poor security posture.**
- AI Cyber-mature companies are 1.5 times more likely to remediate threats in less than five days in comparison to companies with poor security posture.**



4. Talent

- **82% of organizations believe that communicating a mature approach to responsible AI will improve employee trust in AI adoption.**

To establish itself as a leader in responsible AI, **Accenture** has created a responsible AI compliance program, with talent as an essential component. To operationalize ethical AI within the organization and in client work, Accenture has trained more than 700,000 employees on responsible AI fundamentals and upskilled more than 200,000 employees in all areas of responsible AI, with 25% of those trained being data and AI experts. This will help Accenture to guide its own ethical AI practices so it can serve as a model for other businesses, helping to establish industry standards alongside policymakers and leaders.

Similarly, **Amazon Web Services** prioritizes responsible AI innovation by embedding safety, fairness and privacy into development processes and educating employees and customers. AWS has dedicated responsible AI experts wholly committed to staying on the cutting-edge of research and

developing rigorous methodology to build AWS AI and machine learning (ML) services in a responsible way. As part of Amazon’s “AI Ready” initiative to provide free AI skills training to 2 million people globally by 2025, Amazon has launched free training courses about responsible AI use on its digital learning centers.²⁰

- **With the introduction of responsible AI, companies expect a 20% improvement in time-to-hire, a 21% increase in the quality of recruits and a 21% boost in talent retention.**

5. Sustainability

With the rise of generative AI tools comes a corresponding rise in energy consumption. This is cause for concern and highlights the urgent need to introduce sustainable green AI practices. Green AI focuses on minimizing the environmental impact of AI systems while maximizing sustainability and efficiency in AI development and deployment.

Effective implementation of green AI requires a comprehensive lifecycle approach, applying sustainable principles across each stage of the AI pipeline: data generation, storage and preprocessing, experimentation, model development and training, and model optimization, deployment and inference. By applying these practices, Accenture research projects potential reductions of ~40%-60% in energy consumption and carbon emissions.

Amazon Rufus is a generative AI-powered shopping assistant that answers questions on a variety of shopping needs and products to help customers make more informed shopping decisions.²¹

To meet the demands of Amazon customers, Rufus needed to serve multi-billion parameter large language models (LLMs) with low latency across the world.

They used AWS Trainium, a ML chip that AWS purpose-built for deep learning (DL) training of ultra-large models, to more sustainably train LLMs, delivering the best performance/watt compared to other accelerated machine-learning solutions.²² For Prime Day, these choices allowed Rufus to scale up over 80,000 Trainium and Inferentia chips across three regions.

By using these purpose-built chips, Rufus achieved 54% better performance per watt than other evaluated solutions, which helped the Rufus team meet energy efficiency goals.





6. Inclusion & diversity

- **Organizations anticipate responsible AI to improve the diversity of hires by 21%.**

Generative AI is transforming industries, increasing productivity and efficiency. However, generative AI based on LLMs poses certain risks. Without appropriate mitigations, any bias in the human-created training data used to build the LLM—including bias based on gender, sexuality, race, religion, socioeconomic status—will be perpetuated in the output. This will decrease the trustworthiness of the model, hamper progress and diminish value.

Similarly, responsible AI plays an important role in reducing unconscious bias in hiring practices. Our research found that organizations anticipate responsible AI to improve the diversity of hires by 21%—helping them to be more inclusive and attractive to a broader pool of candidates.

Accenture’s Connected Customer Experience and AWS’s Connect solutions use generative AI, helping to ensure a consistent and unbiased experience for all customers.²³ They use advanced AI algorithms to analyze and understand customer interactions in real time, identifying and mitigating potential biases that may arise.

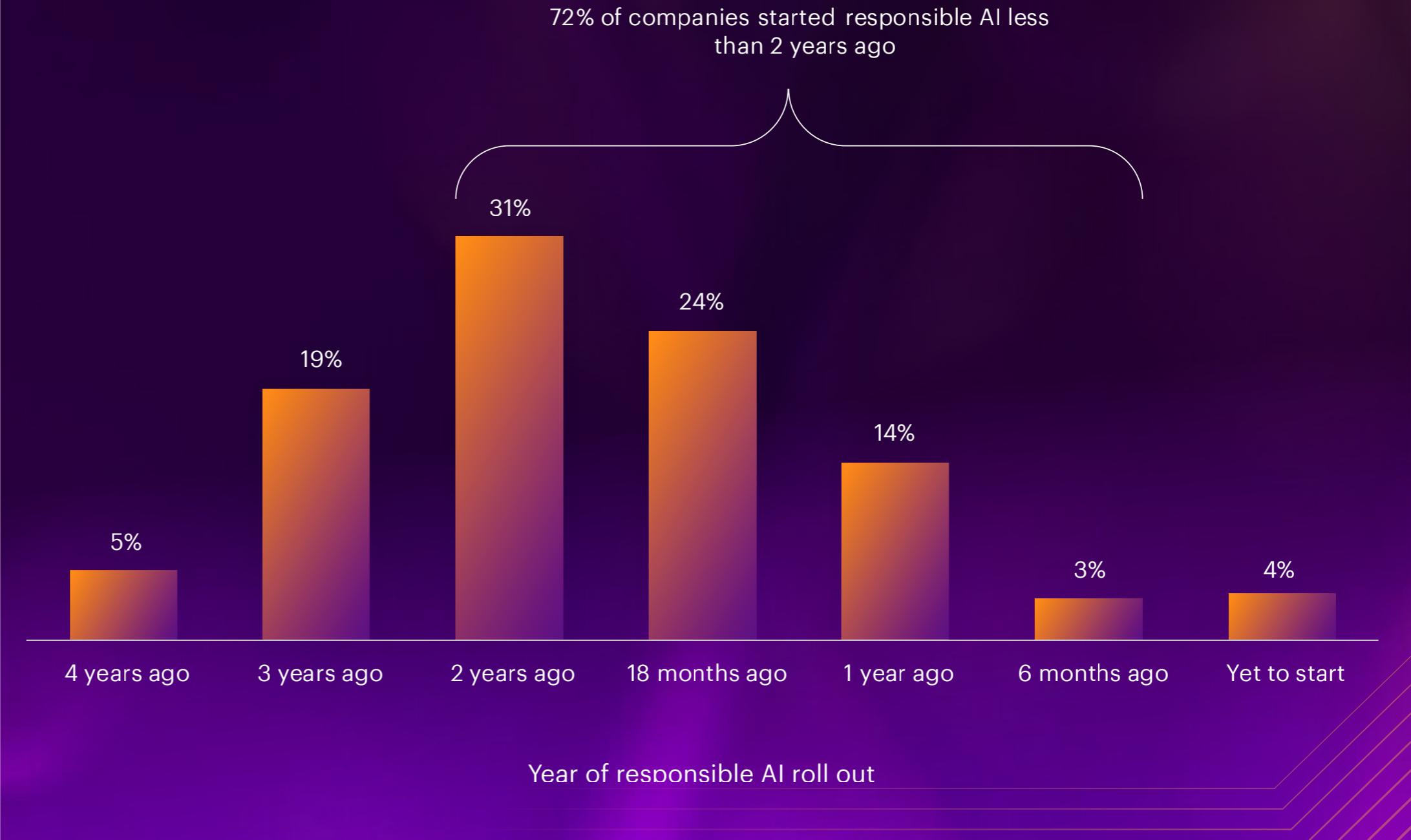
For example, AI can detect and neutralize biased language or tone from agents, helping to ensure that all customers receive fair and respectful treatment.



**Accelerating the journey to responsible
AI maturity and value creation.**

At the heart of value creation is a mature, fully developed responsible AI capability. The more developed the capability, the faster companies generate value. According to our research, 72% of companies have embarked on their responsible AI journeys two years ago or less (Figure 3).

Figure 3: Distribution of when companies started rolling out their responsible AI initiatives



While nearly all companies have started their journey, the real question is: What has come of their efforts? How far have they developed their responsible capabilities in that time? To help address these questions, we used a four-stage model for assessing a company's responsible AI maturity developed by Accenture and Stanford University (Table 1). For reference, a more technically-detailed description of these stages is provided in the appendix.

Based on their aggregate scores, we could designate their overall responsible AI maturity level consistent with the stages defined by the Accenture and Stanford research. Our findings revealed that no companies have reached stage 4.

We also found that the typical journey to stage 4 takes approximately five years to complete. This is based on where companies reported they are today, where they were 18 months ago and where they anticipate being in the next 18 months. On average, respondents indicate they are able to move from one stage to the next in 18 months. Applying this logic to the average respondent, currently at stage 2 and two years into their journey, leads to an additional 3 years required to achieve stages 3 and 4—resulting in a total of 5 years.

The case for responsible AI's value is clear. As illustrated earlier, responsible AI is expected to impact a wide range of 360° value levers.

Table 1: Responsible AI maturity milestones—the higher the stage, the greater the progress

Stage 1:	Stage 2:	Stage 3:	Stage 4:
The company has some foundational capabilities to develop AI systems, but its responsible AI efforts are ad-hoc.	Following a responsible AI assessment, the organization has put in place a responsible AI strategy, approach, processes and governance, without a more systemic enablement with tools and technology.	The company has systematically implemented the following measures across the organization to help meet the relevant regulatory and legal obligations.	The company has fully operationalized responsible AI efforts as a platform to take a more systemic, future-orientated approach that unlocks the true value of AI.

Figure 4: Compressed investment on responsible AI brings quicker Time-to-value. Time-to-value is defined as the duration required for annual benefits (total revenue uplift) to offset annual responsible AI cost (Capex and Opex).



The challenge is that five years to capture this value is too long. So how do you accelerate the journey?

We believe that companies must go “all-in” on responsible AI, moving their investment schedule forward to accelerate time-to-value. Figure 4 illustrates how shifting the allocation of a fixed total investment can alter TTV.

Consider a company with \$5 billion in annual revenues that is two years into their roll-out and has achieved stage 2 maturity (referenced as the baseline in the figure). Assuming a five-year roll-out to reach stage 4, the TTV for a company at stage 2 is about 3 additional years before responsible AI investments generate net value. If this company were to accelerate their investments by 33% in year three, the TTV moves up by a full year. Conversely, spreading that investment out over more years delays the TTV by nearly three years relative to the baseline.

For companies that have been slow to launch their responsible AI initiatives, there's good news. An aggressive investment approach from the start—compressing five years of investment into three—offers them the opportunity to leapfrog competitors on the typical five-year journey. This is denoted as “fresh start” in the Figure 4.

We believe the best approach to build responsible AI maturity and capture its value creation is through embracing a platform approach. By investing more now and embedding platform capabilities, you will not only achieve value faster, but you'll also have the flexibility and adaptability that comes with the more systemic, future-orientated approach at stage 4.

Recommendations

Key considerations to help you build trust and unlock value

In an ever-changing risk landscape, businesses must be future-ready with a proactive approach to risk management to continuously rediscover the value of responsible AI:

Lead with a value mindset

Responsible AI is not just threat mitigation, it's a value opportunity. By regularly measuring the impact of responsible AI across areas like financial performance, experience and compliance, a business can demonstrate its tangible benefits. With clear metrics, organizations can track progress and identify areas for refinement. This approach helps to demonstrate to the business that responsible AI is not a cost of doing business but a key driver of growth.

Responsible AI is not a static goal. The more mature your RAI capabilities, the faster you'll create value for your organization - enabling your organization to benefit faster than competitors. Compressing your investments only accelerates these advantages.

Be "responsible by design"

Companies must embed responsible AI in the core of their business, taking a "responsible-by-design" approach at every stage of the AI value chain. Safe, secure and transparent

AI practices must be built into applications and business operations from the start. With purpose-built tools like Amazon Bedrock Guardrails, which introduce customized safeguards seamlessly aligned with their AI applications and responsible AI policies, companies can foster trust with both internal and external stakeholders.²⁴ With trust, people have the confidence and flexibility to innovate and extract maximum value from AI.

To become "responsible by design", each organization will face different challenges depending on where they are on their responsible AI maturity journey. However, all companies can benefit from focusing on five priorities to help them be intentional in building responsible AI capabilities. These priorities include developing a responsible AI strategy and roadmap; conducting AI risk assessments; systemic enablement of responsible AI testing; ongoing monitoring and compliance; and assessing workforce impact, sustainability, privacy and security.

Adopt a platform approach

With the rapid pace of technological advancement, companies must act with urgency on responsible AI or be left behind forever. That's why leaders across industries are adopting a platform approach to operationalize responsible AI in a more systemic, future-oriented way to unlock value faster.

The platform approach integrates responsible AI principles across all AI initiatives, enhancing scalability, risk management

and operational efficiency—often with greater automation. To realize a fully operationalized, end-to-end systemic responsible AI effort, companies must be powered by the right technology platforms, processes, talent and culture. And they must adopt an anticipatory approach, deploying dedicated resources to assess future risks in an ever-evolving technology and regulatory environment.

A responsible AI platform allows business leaders to evaluate their organization's responsible AI maturity level by conducting risk screenings. It enables companies to continuously refine data governance and management practices and use predictive analytics and real-time data monitoring to better understand and manage the impact of data on its AI systems. With this in hand, companies can then shape new standards for safer development and use of AI, using methods such as data privacy preservation, model explainability and bias measurement. A platform approach also integrates key components such as legislation and regulation requirements, making it easier for a business to rapidly adapt to meet compliance needs.

To achieve the above, companies can deploy pre-existing platforms, such as the Accenture Responsible AI Platform powered by AWS (see Appendix) to integrate core elements of responsible AI and create an ongoing cycle of monitoring, testing and remediating for compliance throughout the enterprise.²⁵

Conclusion

There's no progress without trust.

For too long, responsible AI was seen as a risk mitigator, not a driver of value. Now, it is recognized as both.

Trust lies at the heart of every responsible AI strategy and businesses are beginning to understand that trust is the key to unlock the full potential of AI's transformative technology. This is reinforced by our latest research. Responsible AI is now viewed as a driver of 360° value across a business, with its reach extending to every corner from operational efficiency to shareholder confidence, from talent to compliance. It also plays a particularly noteworthy role in innovation.

AI is not simply a new technology. Much like cloud and the internet itself, it is reshaping our world. Typically, it is startups that have the agility to be aggressive and creative with new technologies. But this is not the moment for larger enterprises to pause AI projects and wait. The opportunity for value is too great. They should act now, deploying the full breadth of their resources and moving with the energy of a startup to realize the full value of AI.

By embedding responsible AI in the core of the business, leading with a value mindset and adopting the speedier platform approach, companies can carve out a clear path from trust to AI value. In addition to developing AI governance frameworks and principles and conducting AI risk assessments, companies should establish systemic enablement for responsible AI powered by the right tools, technology and assets. Companies that invest in responsible AI with the same enthusiasm that they have invested in their broader AI initiatives can be confident that it will deliver tangible value for their business.

To become a leader in AI technology and deliver the expected return on your investments, you must first become a leader in responsible AI.

Appendix

About the Accenture Responsible AI Platform powered by AWS

The Accenture Responsible AI Platform powered by AWS will integrate the core elements of responsible AI to help clients create an ongoing cycle of monitoring, testing and remediating for compliance throughout the enterprise. Tuned for AWS workloads, it offers a unified view of assets, open-source tools and industry standards for responsible AI to help organizations seamlessly incorporate them into their workflows and processes. Delivered through an intuitive user journey with sequential steps, the platform allows business leaders to assess their organization's readiness or maturity level for AI and perform risk screenings leveraging benchmark data from multiple industries.

The new platform will help enable clients to easily understand what they need to do to identify specific AI risks, develop appropriate risk mitigation approaches and support compliance with specific fast-changing regulations. This is especially relevant with the accelerated pace of generative AI pilots and technology advancements.

Responsible AI maturity milestones

In a separate study, in collaboration with Stanford University, we measured companies' responsible AI maturity. To do so, we developed a four-stage framework—the higher the stage, the greater the progress. Based on our analysis of the responses of the 1,000 companies we surveyed, we then placed organizations at their respective stage, awarding a score for organizational maturity and a separate score for operational maturity.

Stage 1	Stage 2	Stage 3	Stage 4
<p>The company has some foundational capabilities to develop AI systems, but its responsible AI efforts are ad-hoc:</p> <ul style="list-style-type: none">Has defined a set of ethical AI principles and guidelines, including policy and rules for responsible and secure data access and usageHas no established processes for governing data quality, data privacy, data security and AI model risk managementOccasionally conducts risk assessment reviews of data and AI projectsHas deployed AI project workflows without systemic integration of responsible AI assessments across the data pipeline, model pipeline and AI applications	<p>Following a responsible AI assessment, the organization has put in place the following steps:</p> <ul style="list-style-type: none">Established a responsible AI strategy for the organization with a well-defined operating model and data and AI governance measures for translating vision into actionDefined a robust approach and process for AI risk assessment across data pipeline, model pipeline and AI applicationsEstablish processes for creating transparency and auditability of training data, model inputs and outputs—with appropriate decision-makingDesigned a framework for monitoring and controls across the data and AI pipeline that can be executed during project workflowsImplemented processes that are still at an early stage and without a more systemic enablement with tools and technology	<p>The company has systematically implemented the following measures across the organization to help meet the relevant regulatory and legal obligations:</p> <ul style="list-style-type: none">Operationalized responsible AI strategy with implementation of principles, guidelines and processes through to enablement across the businessImplemented risk assessment across the data pipeline, AI model and AI applications to enable traceability and transparency across the entire model lifecycle and adherence and compliance through regular auditsImplemented controls for data sourcing with privacy filtering, anonymization and validation to remove sensitive information and mitigate data bias risks embedded into self-service toolingEnabled systemic AI testing with model interpretability tools to ensure explainability, AI model performance testing for bias, accuracy, etc. and help guard that models operate within the required legal, ethical and operational boundariesEstablished a responsible AI control plane with human controls for continuous monitoring across the data and AI value chain to alert and remediate any unintended risks or breachesRolled out a responsible AI academy for employee training and enablement to drive responsible AI adoption	<p>The company has fully operationalized responsible AI efforts as a platform to take a more systemic, future-orientated approach that unlocks the true value of AI:</p> <ul style="list-style-type: none">Fully operationalized end-to-end systemic responsible AI effort powered by tech platforms, redesigned processes with the right talent and culture establishedAdopted an anticipatory approach to their responsible AI efforts, deploying dedicated resources, processes, etc. to continuously assess current and future risksProactively adapts their data and AI risk management and control processes as the external technology and regulatory environment expands and evolvesContinuously refines and advances data governance and management practices, employing predictive analytics and real-time data monitoring to dynamically understand and manage the impact of data on AI systemsShapes new standards, methods and approaches for safe development and use of AI including data privacy preservation, model explainability and bias measurement, adversarial testing and red teamingRecognized as a leader in shaping responsible AI practices and actively engages with external stakeholders—including value chain partners, regulatory bodies and affected communities—to ensure participation and inclusive feedback and support forward-looking regulatory complianceProactively engages with third-party AI vendors to foster improvements, building trusted relationships and new collaborative opportunities to manage third-party AI risks effectively

About the research

Authors

Arnab Chakraborty

Chief Responsible AI Officer, Accenture



Jennifer Jackson

Global AWS Business Group Lead, Accenture



Alister Fraser

Global Lead, Accenture Partnership, AWS



Karthik Bharathy

Director, PMT, MLOps & ML Governance, AI Platforms, AWS



Acknowledgements | Accenture Research

Shekhar Tewari

Manager, Responsible AI

Philippe Roussiere

Managing Director, Global Innovation Lead

Yuhui Xiong

Manager, Economic Modelling and Data Science

Praveen Tanguturi

Principal Director, Global Data & AI Lead

Jakub Wiatrak

Specialist, Human Insights Team

Patrick Connolly

Manager, Global Responsible AI Lead

Bijoy Anandoth Koyitti

Manager, Editorial

Devraj Patil

Specialist, Human Insights Team

David Kimble

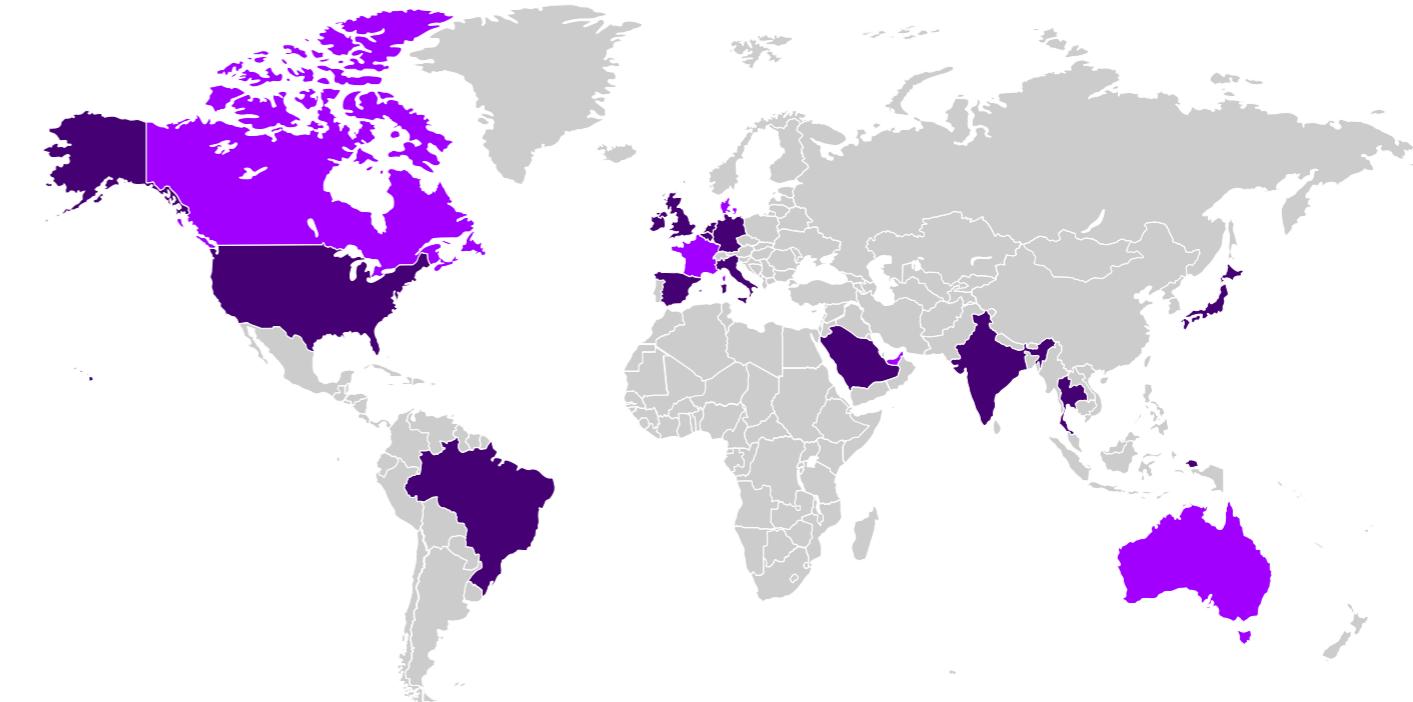
Manager, Editorial

About the research

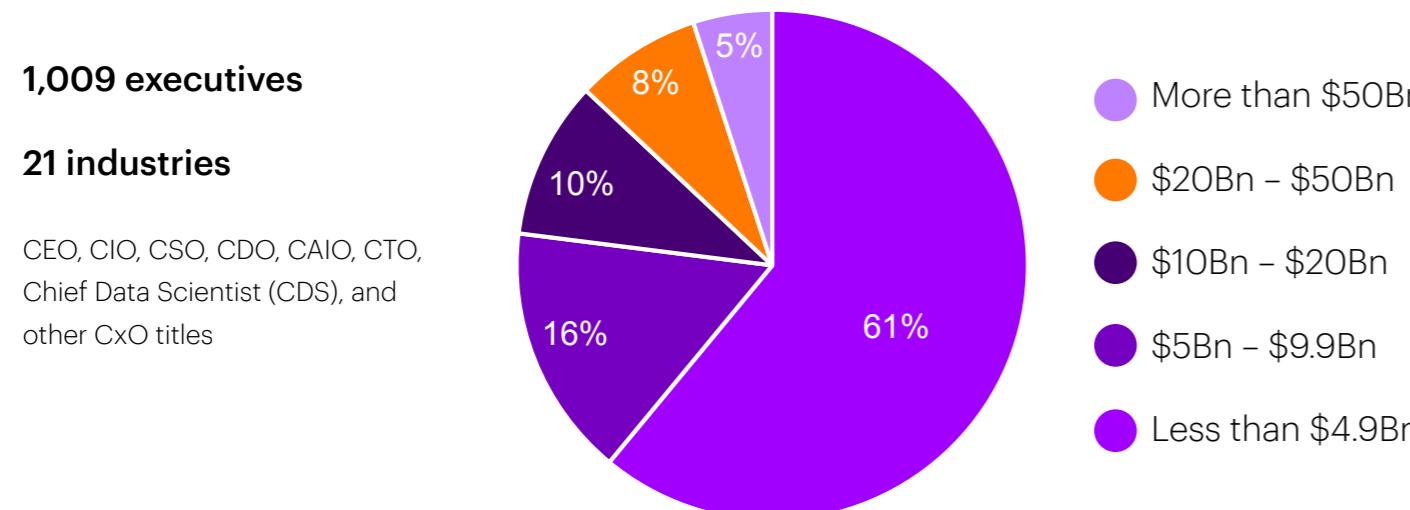
Accenture surveyed 1,009 executives (including CEOs, C-Suite, CAIO's and Data Science Leaders) from the world's largest organizations (with revenues greater than \$1bn).

The survey was carried out across 21 industries and fielded between Sep-Oct 2024.

This survey aims to explore the progress, strategies, and practices of organizations in their responsible AI (RAI) journey. The objective is to understand how organizations design, develop and deploy RAI models to drive both financial and non-financial value. The survey covers a broad range of topics, including RAI strategy, model governance, risk management, data quality, security measures, talent development, and ecosystem collaboration.



Company size



21 industries

- Aerospace & Defense (37)
- Automotive (66)
- Banking (66)
- Capital Markets (41)
- Chemicals (52)
- Telecommunications (58)
- Media & Entertainment (43)
- Consumer Goods & Services (52)
- Energy (46)
- Healthcare (30)
- High Tech (62)
- Industrial Equipment (55)
- Insurance (55)
- Life Sciences – Biopharmaceuticals (36)
- Life Sciences – Medical Technologies (36)
- Natural Resources (55)
- Public Services (30)
- Retail (61)
- Software & Platforms (40)
- Travel & Transportation (35)
- Utilities (53)

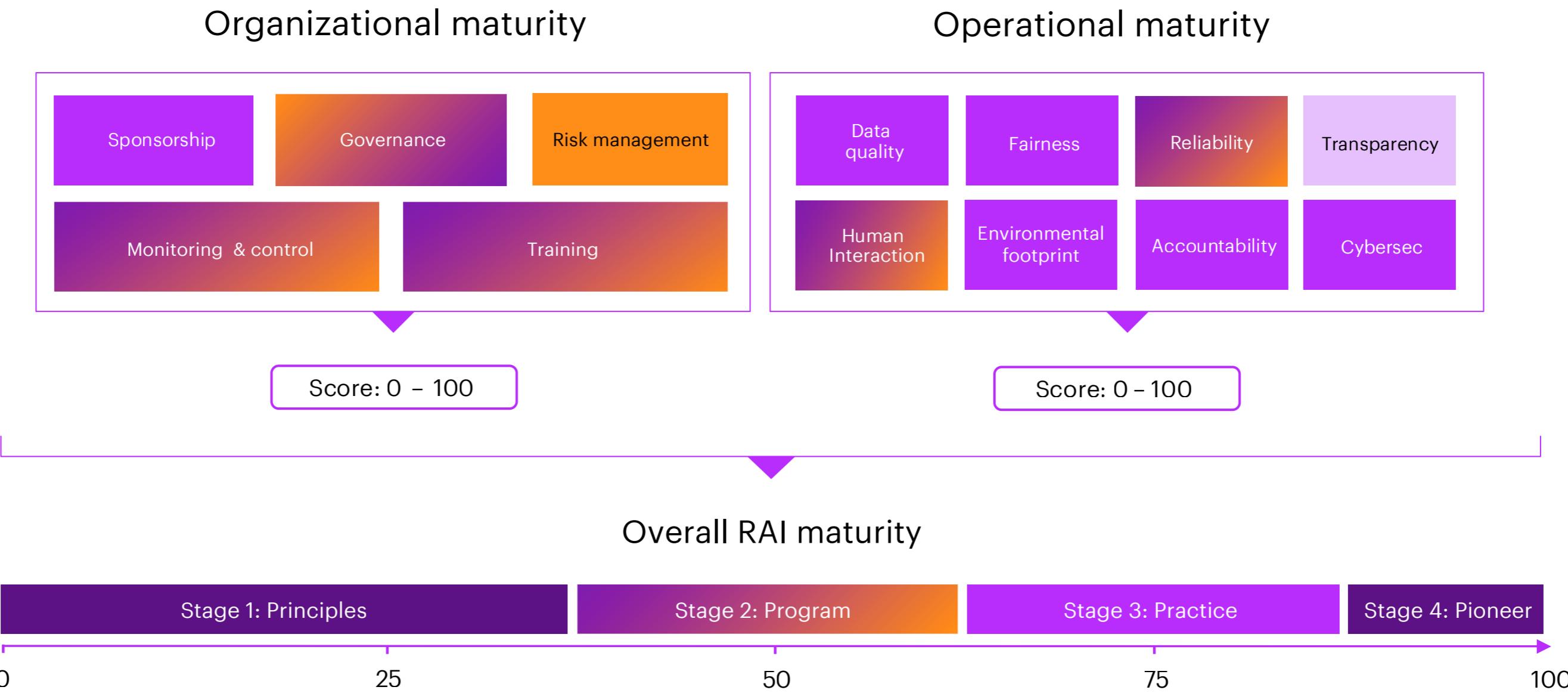
15 countries

- Australia (57)
- Brazil (42)
- Canada (38)
- Germany (81)
- France (68)
- India (73)
- Italy (36)
- Japan (80)
- Saudi Arabia (15)
- Singapore (24)
- Spain (49)
- Thailand (32)
- United Kingdom (99)
- United States (300)
- United Arab Emirates (15)



Methodology: Responsible AI Index

The methodology of the responsible AI (RAI) maturity index is based on two core pillars: organizational maturity and operational maturity. Each of these pillars is assigned equal weight and their combined scores create the overall responsible AI maturity index—offering a holistic view of companies' readiness in the AI landscape.



Methodology: Sustainability green AI model

To assess the operational carbon reduction potential of green AI, we employed a lifecycle approach—examining the emissions across each stage of the AI lifecycle: data generation, storage and preprocessing, experimentation, model development and training, and deployment and inference. First, we quantified the emissions share attributable to each stage. For each stage, we then identified best practices that reduce carbon emissions, calculating their impact by multiplying the stage's emissions share by the carbon reduction potential of these green AI practices. This approach yielded the carbon reduction achievable through software layer optimizations.

In addition, we incorporated the impact of hardware optimizations, which apply across all lifecycle stages and contribute to further energy savings. Beyond IT-specific interventions, we included infrastructure-level optimizations such as power usage effectiveness to achieve deeper reductions. Finally, we accounted for the impact of sourcing energy from greener grids, estimating the combined carbon reduction potential across software, hardware, and infrastructure layers. This comprehensive approach provides an estimate of the overall emissions reduction achievable through green AI.



Methodology: Responsible AI time-to-value model

Model inputs and sequencing to arrive at the baseline and scenario calculation of time-to-value (TTV)

Based on survey data, we have estimated the TTV for responsible AI using the following inputs:

1. RAI Roll-Out Timeline	2. RAI Capital Expenditure (Capex)	3. RAI Operating Expenditure (Opex)	4. Revenue Uplift
<p>Time Since Roll-Out: Estimated based on respondents' answer on when the organization took formal first steps to roll out RAI as part of an organization-wide plan</p> <p>Maturity Progression: Through analyzing the changes of value of the RAI index (see previous page) over time, the average time required to move between stages in RAI maturity is estimated</p>	<p>Estimated based on survey inputs related to:</p> <ol style="list-style-type: none">Technology investment as a percentage of revenueData and AI budget as a share of tech investmentRAI initiatives (compliance, privacy, fairness, etc.) as a portion of the data and AI budget. Pure security budget is excluded based on subject matter experts' inputs. <p>The data and AI budget is expected to grow on average, while the RAI share is assumed to linearly increase from zero since the roll-out of RAI and remain stable over time.</p>	<p>Estimated based on expected full implementation of RAI (equivalent to stage 4 in RAI maturity) on total Opex over the next three years.</p> <p>A linear progression from zero since roll-out to full implementation is assumed.</p>	<p>Estimated using expectations of full RAI implementation impact on revenue over the next three years by excluding the impact from security, based on subject matter experts' input.</p> <p>A linear progression is assumed for revenue uplift between years 1 and 3. This uplift is extrapolated to two years prior to reaching stage 4, hypothesizing that uplift may be observed when reaching stage 3.</p>

Scenario analysis

The average of these elements is used to construct the baseline scenario.

We developed three scenarios by varying the speed of companies' RAI investment:

Quick Scenario	Slow Scenario	Fresh Start Scenario
Assumes a two-year roll-out as the baseline, with years 3-5 of baseline investment compressed into two years	Starts with a two-year roll-out as the baseline but extends years 3-5 of baseline investment into five years	Begins with no prior RAI roll-out and compresses years 1-5 of baseline investment into three years

References

- 1 Fortune 500 companies flagging AI risks soared 473.5% |Fortune
- 2 AI Index Report 2024 – Artificial Intelligence Index
- 3 Generative AI at Mastercard: Governance Takes Center Stage
- 4 How Mastercard Uses AI Strategically: A Case Study | Bernard Marr
- 5 From compliance to confidence: Embracing a new mindset to advance responsible AI maturity
- 6 Harnessing the power of AI to deliver more Intelligent Engine inspections | Rolls-Royce
- 7 The Aletheia Framework® | Rolls-Royce
- 8 The ALETHEIA framework in radiation oncology - Manchester Cancer Research Centre
- 9 Accenture's blueprint for responsible AI
- 10 Integrating 'technology with heart': Allianz and Accenture's insights on GenAI Case Study: The AI-Driven Path to Customer Centricity at Allianz
- 11 Adobe's Journey to Generative AI Leadership with AWS | Adobe Case Study | AWS
- 12 Introducing Adobe Content Authenticity: A free web app to help creators protect their work, gain attribution and build trust | Adobe Blog
- 13 Adobe's Firefly AI Hits 12 Billion Generations
- 14 Responsible AI Deployment (RAID) with NeoSkin
- 15 AI Index Report 2024 – Artificial Intelligence Index
- 16 Face-scanner Clearview agrees to limits in court settlement | AP News
- 17 Financial Services Responsible AI | Case Study | Accenture
- 18 Cybersecurity in the gen AI era | Accenture
- 19 Accenture Cyber Security
- 20 New Amazon AI initiative includes scholarships, free AI courses
- 21 [https://aws.amazon.com/blogs/machine-learning/scaling-rufus-the-amazon-generative-ai \[...\] er-80000-aws-inferentia-and-aws-trainium-chips-for-prime-day/](https://aws.amazon.com/blogs/machine-learning/scaling-rufus-the-amazon-generative-ai [...] er-80000-aws-inferentia-and-aws-trainium-chips-for-prime-day/)
- 22 AWS Trainium | AWS
- 23 Learn how Amazon SageMaker Clarify helps detect bias | AWS Machine Learning Blog
- 24 Amazon Bedrock Guardrails | AWS
- 25 Accenture and AWS Collaborate to Help Organizations Scale Adoption of AI Responsibly

About Accenture

Accenture is a leading global professional services company that helps the world's leading organizations build their digital core, optimize their operations, accelerate revenue growth and enhance services—creating tangible value at speed and scale. We are a talent- and innovation-led company with 774,000 people serving clients in more than 120 countries. Technology is at the core of change today, and we are one of the world's leaders in helping drive that change, with strong ecosystem relationships. We combine our strength in technology and leadership in cloud, data and AI with unmatched industry experience, functional expertise and global delivery capability. Our broad range of services, solutions and assets across Strategy & Consulting, Technology, Operations, Industry X and Song, together with our culture of shared success and commitment to creating 360° value, enable us to help our clients reinvent and build trusted, lasting relationships. We measure our success by the 360° value we create for our clients, each other, our shareholders, partners and communities.

Visit us at www.accenture.com.

Disclaimer: The material in this document reflects information available at the point in time at which this document was prepared as indicated by the date in the document properties, however the global situation is rapidly evolving and the position may change. This content is provided for general information purposes only, does not take into account the reader's specific circumstances, and is not intended to be used in place of consultation with our professional advisors. Accenture disclaims, to the fullest extent permitted by applicable law, any and all liability for the accuracy and completeness of the information in this document and for any acts or omissions made based on such information. Accenture does not provide legal, regulatory, audit, or tax advice. Readers are responsible for obtaining such advice from their own legal counsel or other licensed professionals. This document refers to marks owned by third parties. All such third-party marks are the property of their respective owners. No sponsorship, endorsement or approval of this content by the owners of such marks is intended, expressed or implied.

Copyright © 2024 Accenture. All rights reserved. Accenture and its logo are registered trademarks of Accenture.

About Accenture Research

Accenture Research creates thought leadership about the most pressing business issues organizations face. Combining innovative research techniques, such as data-science-led analysis, with a deep understanding of industry and technology, our team of 300 researchers in 20 countries publish hundreds of reports, articles and points of view every year. Our thought-provoking research developed with world leading organizations helps our clients embrace change, create value and deliver on the power of technology and human ingenuity.

For more information, visit Accenture Research on www.accenture.com/research.

About AWS

Since launching in 2006, Amazon Web Services has been providing world-leading cloud technologies that help any organization and any individual build solutions to transform industries, communities, and lives for the better.

As part of **Amazon**, we strive to be Earth's most customer-centric company. We work backwards from our customers' problems to provide them with cloud infrastructure that meets their needs, so they can reinvent continuously and push through barriers of what people thought was possible.

Whether they are entrepreneurs launching new businesses, established companies reinventing themselves, non-profits working to advance their missions, or governments and cities seeking to serve their citizens more effectively—our customers trust AWS with their livelihoods, their goals, their ideas, and their data.