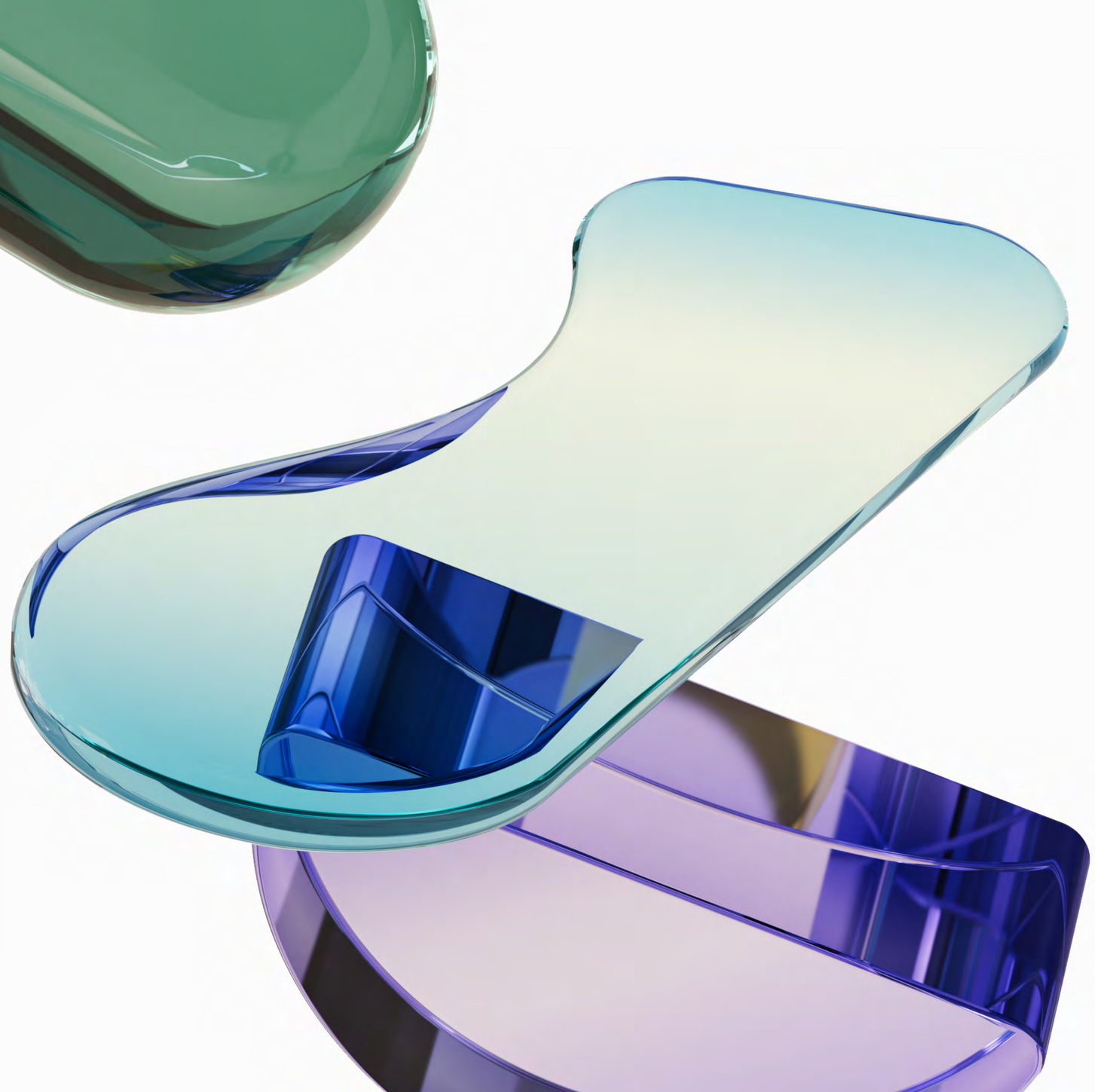
Shaping society 5.0 Building trust in AI as a force for good

Four steps for industry to lead the way in the responsible use of AI



Foreword

By Harold Pradal,
Chief Commercial Officer, BSI

2023 will be viewed as the point that Artificial Intelligence (AI) tipped into the mainstream, with a 286% rise in media coverage of the topic[1]. And whilst headlines were grabbed by ChatGPT, the real AI story is much, much deeper.

This transformational technology is accelerating progress – and has the potential to go further as a force for good and move us towards Society 5.0, a 'human-centered society that balances economic and technological advancement to solve society's problems'[2]. Importantly, it also raises questions around how we build trust in AI and what guardrails are needed to ensure AI shapes our future in a positive way.

In this collection we go behind the headlines to explore the real-world impact of AI through the eyes of BSI experts, drawing on the views of 10,000 people in nine countries. For anyone in doubt, AI is here and it's here to stay – 38% of people use AI in their jobs daily, rising to 70% in China and 64% in India. By 2030, 62% expect their industry will use AI[3].

At BSI we are committed to shaping the impact of technology and innovation for the benefit of individuals, organizations and society. AI sits at the heart of this because it has the potential to be a powerful partner, changing lives and accelerating progress towards a better future and a sustainable world.

We commissioned these essays to turn the spotlight on this generational opportunity – recognizing that the better we understand it, the better we can harness its power. Whether it's creating new workplace opportunities, improving patient outcomes, tackling modern slavery or building a safe global food system, AI has a pivotal role to play.

We examine the importance of embedding digital trust in AI, the critical role for collaboration – between nations, policymakers, organizations and individuals – to unlock AI's true potential, and the fast-evolving regulation designed to ensure consistency and certainty.

With AI crossing over from small, contained environments into mainstream technology at work and at home, this offers a transformational opportunity to unlock a multitude of benefits – provided trust and confidence are present too.

AI is just getting started. At BSI we are excited to partner with our clients as we embark on this journey. We are delighted to present these essays to explore the enormous potential AI offers to shape Society 5.0 and deliver a sustainable future powered by innovation.

1. Signal search analysis 2022-2023.
2. Society 5.0: The Fundamental Concept Of A Human-Centered Society, Open Business Council, Aug 2023
3. BSI Trust in AI Poll 2023

Four steps for industry to lead the way in the responsible use of AI

As a purpose-driven organization, BSI believes AI can be a force for good, changing lives, making a positive impact on society, and accelerating progress towards a sustainable world. In this essay, David Mudd, Global Head of Digital Trust Assurance looks at how industry can shape a positive future for AI.

By David Mudd

Global Head of Digital Trust Assurance, BSI

Great technology brings opportunity – but it also brings questions around responsible use. According to EY, two-thirds of CEOs think AI is a force for good and see the positive impact it can have on society, both now and in the future. Similarly, in BSI's Trust in AI Poll[1], three in ten (29%) people told us that a top priority for AI over the coming decades is to help to reduce our impact on the environment, while 28% said their focus was on it improving medical diagnosis and a fifth (22%) highlighted AI making society fairer and reducing inequality.

Yet the same proportion of CEOs told EY more work is needed to address the social, ethical and security risks of the AI world – and as our survey identified, there is public uncertainty about using AI. More than half of people worry AI risks are exacerbating social divides. There is clear opportunity to harness AI to drive societal progress.

- Industry has a golden opportunity to help ensure AI is a force for good for individuals, organizations, society and the future.
- Organizations can prioritize putting governance systems in place to build trusted and responsible AI that addresses questions of bias, ethics and explainable outcomes.
- AI can be treated as any other business risk or uncertainty but ultimately presents a huge opportunity.

22%

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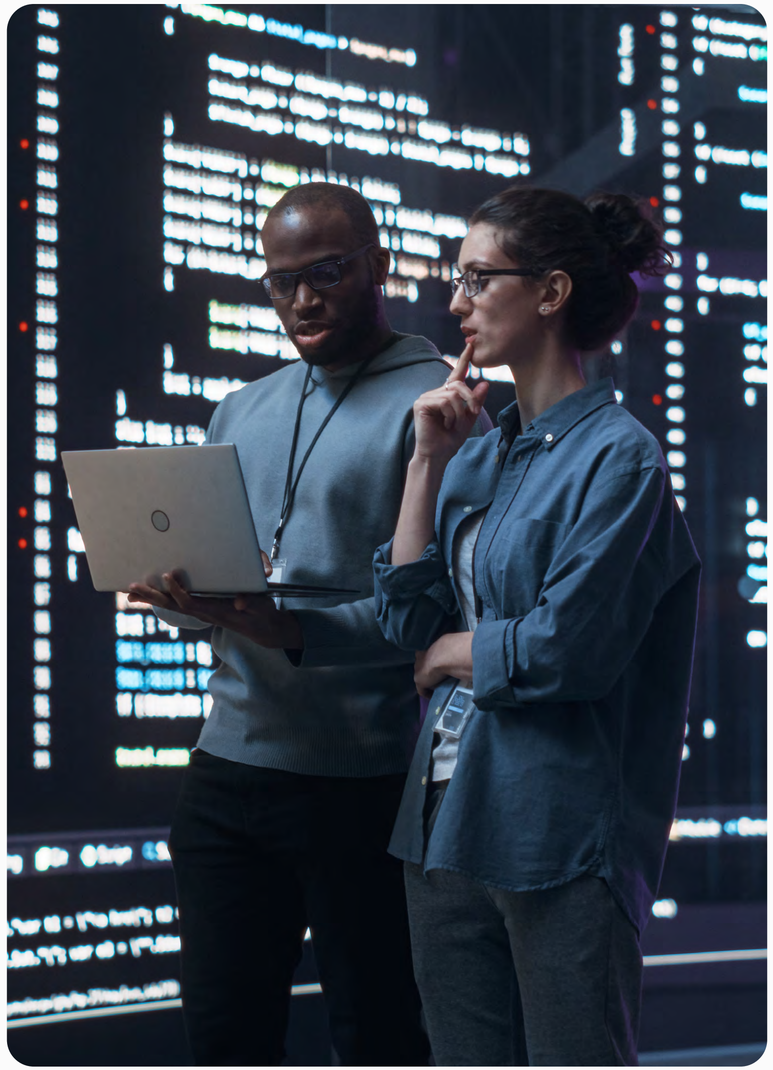
An opportunity for industry

Figures suggest 88% of CEOs are integrating AI into their capital allocation[2]. For industry leaders seeking to unlock AI's vast potential, the mixed attitudes towards AI shown by our survey suggest building public trust will be a critical part of the collective journey to a successful digital future.

In a diverse global economy, with regulation changing at pace, agreeing a common approach on a topic as broad as AI to build that trust may seem a tall order. Equally, AI is a complex ecosystem comprising of everything from the AI model, underlying platform, end application, data, hardware and network – each of which could be sourced from a different provider. No single organization owns all of the pieces. Even if there is an overall integrator, there will be a complex relationship between the partners providing their elements.

But there is a golden opportunity for industry to be a constructive partner, leading the way in responsible use of AI and building societal trust by collaborating across markets and sectors and committing to best practice across the board. Here are four steps leaders can take.



1. Establish the right governance systems

Ensuring AI is used ethically is integral to us realizing its benefits. We saw, for example, that 55% of people support the use of AI tools to diagnose or treat them – with strict safeguards to ensure ethical use of patient data.

With AI's capabilities developing fast[3], having appropriate governance systems in place can enable us to make not just good but great use of AI in every area of life and society.

Before coming to the technical aspects of AI deployment, leaders can focus on establishing a culture of trusted and responsible use of AI. Setting a clear benchmark can empower organizations to proceed with confidence.

A good starting point could be agreeing the intended outcomes and ROI, the impacts on all the stakeholder groups including the workforce and the organization at large. From there, organizations will be looking to put in place an effective governance process to balance the business need against these impacts and the associated risks. Later this year, we will address this head-on with the launch of a certifiable AI management system framework (ISO/IEC 42001).

Good governance, as will be supported by the standard on this, involves understanding the overall business environment – internal and external. In this case, that could mean linking AI strategy to business strategy and shaping the organizational policy on AI based on the overall organizational vision and strategy. From there, steps could include establishing the structure and process to assess implementation and associated risks, appropriate mitigation and ensuring this is aligned with business risk appetite and strategy. Ultimately, AI has the potential to have a positive impact within an organization provided its rollout is aligned to the wider business strategy, risks are considered and the structure and controls are in place to provide suitable oversight.

Establishing and maintaining the appropriate culture of trusted and responsible development and use of AI, in line with business strategy, can help forge a path for AI to be a force for good. While considerations will vary hugely by sector and application, good governance is a unifying factor that can underpin industry leadership.

55%

support the use of AI tools to diagnose or treat them – if there are strict safeguards to ensure ethical use of patient data.

2. Consider built-in bias – from the beginning

Industry can also take a lead by being mindful of bias and how we mitigate it. This isn't solely an 'AI thing' – there's bias in the decisions we make every day[4], from who is appointed to a senior role or what investments or suppliers a company chooses. None of these choices are made in a vacuum.

Nevertheless, bias is an important consideration with AI and justifiably the subject of much discussion,[5] with concerns around things like whether AI search engines will offer gender stereotyped results[6].

Crucially, the issue of bias doesn't start with the AI. It starts with the process that sits around it and the data sets being used[7]. Bias can come from team assumptions, errors and issues in the data or from the direction it's steered from a technical learning point of view.

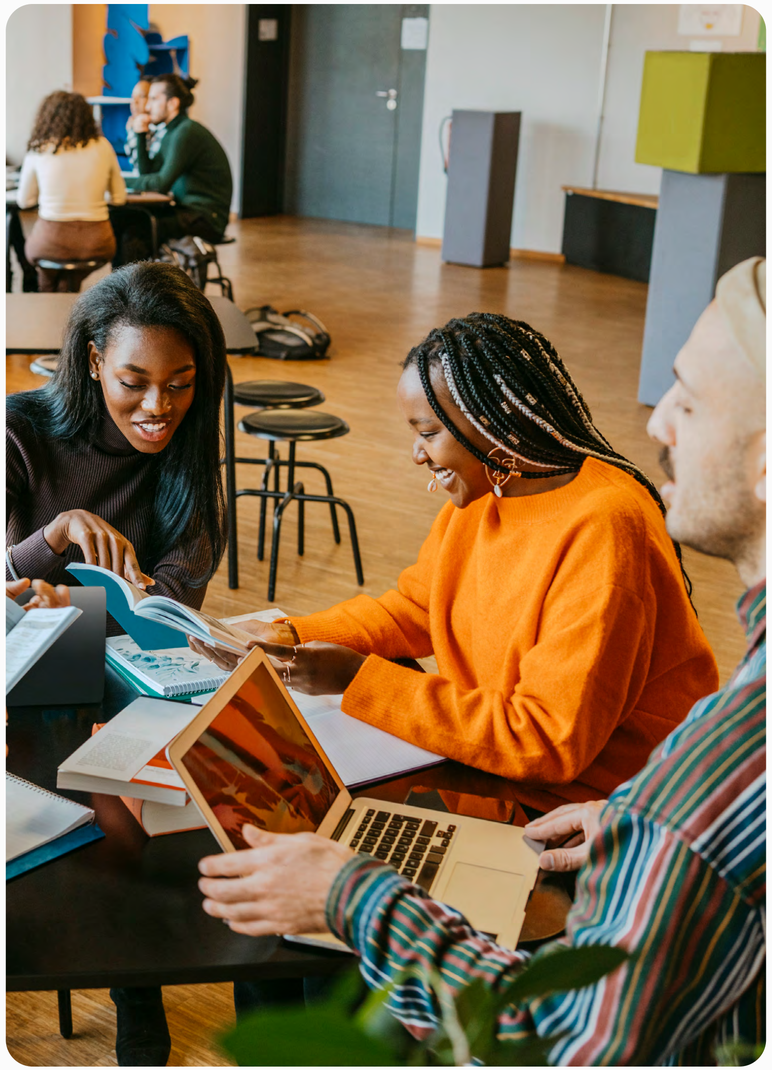
As we have seen with examples such as a US study looking at bias in facial recognition systems[8], if there's even a hint of skewed data, it can end up pushing the algorithm further in one direction. That's because as it learns, it reinforces and exaggerates the bias from the original data set and becomes a positive feedback loop.

As the EU Agency for Fundamental Rights puts it[9], "feedback loops can lead to extreme results that overestimate realities… which is particularly problematic when applied to 'high-risk' AI applications in the field of law enforcement".

All this means that managing the AI development process from the start is imperative. Getting this right from the beginning – and paying attention to every possible area of bias – can help us get the most out of AI.

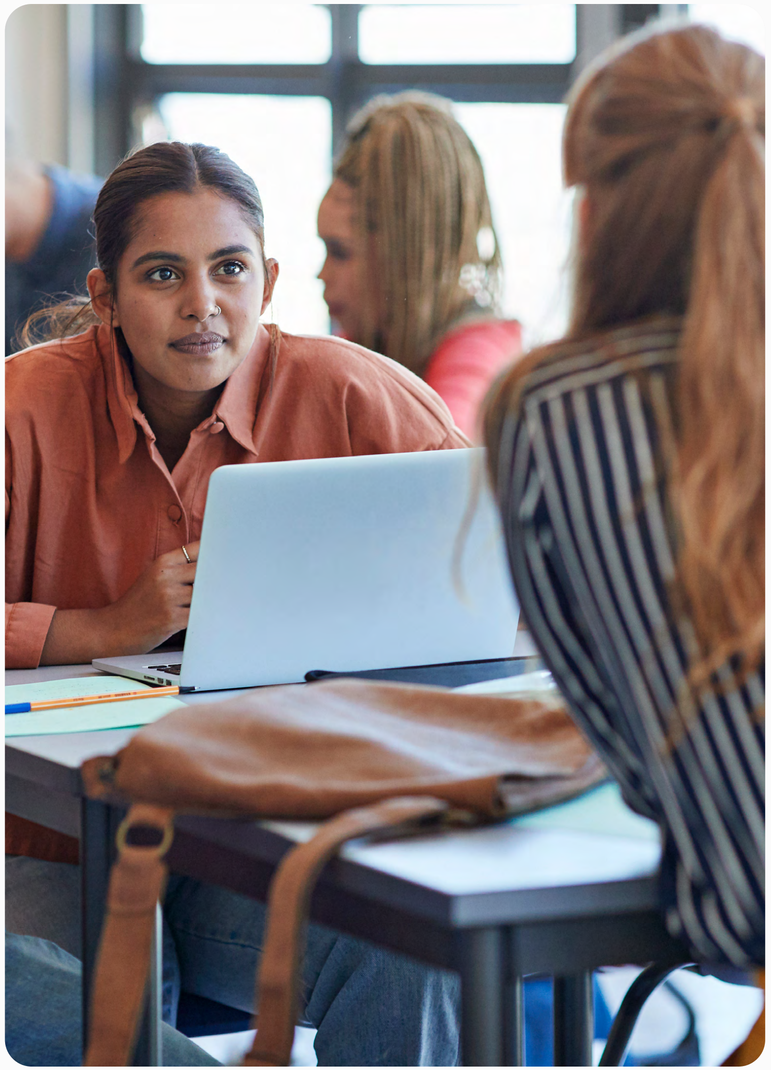
Again, this is an opportunity for industry to take a lead, ensuring that those creating AI are asking the right questions at the outset, have diverse teams in place and are avoiding prioritizing one group over another. PWC break this down to include "establishing governance and controls, diversifying your teams and continual monitoring"[10].

For those choosing an AI tool, it's about due diligence. We might not be able to eliminate bias but by being wise to where bias might occur and the guardrails needed, we can do our best to ensure AI is used fairly to benefit us all.



Responsible AI leadership means treating business risk as an opportunity – and communicating the mitigations that are in place

David Mudd



3. Start a conversation within your organization about AI

Leaders also have an opportunity to instil trust within their organizations that AI is a tool that can positively shape the future. With a secure environment and secure data in place, organizations can proceed with a higher degree of confidence in AI and other emerging technology projects. But they will still need to recognize that if they are using AI-based services, there will be an element of business risk.

The level will vary based on whether the organization is a passive user of AI or more involved in creating AI services, especially if those extend to the supply chain, as well as how the AI is going to be used. But rather than treating that as something to inhibit progress, responsible AI leadership means treating business risk as an opportunity – and communicating the mitigations that are in place.

As a starting point, changing some of the language around AI from ‘new and scary’ to another aspect of business-as-usual that needs to be managed diligently – by everyone, not just the digital team – could be helpful.

Whether an organization is creating or using AI, it should be as part of a clear business strategy where everyone understands what the organization is trying to achieve through the technology, and can see the benefits – personal, organizational and societal. This is particularly pertinent when you consider that current understanding of AI is low – for example, 62% of people are unaware that health and fitness tracking apps like Strava use AI, and 50% don’t know that automated chatbots do. Tackling this knowledge gap is key.

As AI becomes integrated into business activity, leaders can remind people we’ve been here before, for example, with the internet or social media – instances where technology speedily became commonplace without everyone necessarily having literacy in using it. Now we have the chance to apply the education, cyber security and safety lessons we’ve learned along the way to ensure that everyone has access to the benefits AI can offer.

58%

of people use automated chatbots for customer service – but only 36% of those users knew these use AI.

4. Securing AI: trust and the digital vaccine

A key part of building trust in AI is trust that both sensitive data will be protected and that the AI algorithm can't be interfered with. That means that security for the AI ecosystem is paramount.

In this context, ensuring that security is robust can be viewed as akin to having a digital vaccine. If bad actors are the virus trying to get in, then good security practice may not stop the illness, but it can significantly reduce the probability of infection, and, if you get infected, it can greatly reduce the overall impact. If everybody did it, it could push the virus out and dramatically decrease the impact on society. Organizations have the opportunity to build trust in their use of AI by making sure their security measures are strong – in other words, by showing that they are digitally vaccinated.

This is an insight leaders can embrace when it comes to AI's wider deployment. As we've seen, trust is the cornerstone of technological advancement, so ensuring it's prioritized through secure, ethical and responsible use and robust management can drive positive outcomes.

By 2030, nearly two thirds of people globally expect their industry to use AI daily. AI is not a theory but a reality, set to transform every aspect of life and work. Business will be at the forefront of that change. Leaders now have an incredible opportunity[11] to chart a course on the best use of AI, so it can be a true force for good and shape society's future in a positive way.

62%

By 2030, 62% of people globally expect their industry to use AI on a daily basis.

Find out more

With new technologies and capabilities emerging all the time, opportunities and risks grow hand-in-hand. BSI has been working with organizations globally to build trust in digital risk management for decades through information security, cyber and privacy standards, training and certification services, built on the internationally renowned information security management system here.

References

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BSI Group
389 Chiswick High Road, London, W4 4AL
+44 345 080 9000
bsigroup.com