

Do what matters to innovate responsibly with limited resources

We are at a crossroads with trust – it's the bedrock of business, yet emerging technologies are challenging the very notion of trust. As the physical world changes due to climate shifts and cities are reshaped post-COVID, we are more digitally connected than ever. And sweeping advances in AI with ChatGPT and DALL-E are being integrated more into our lives with unknown impacts – all of which makes responsible innovation especially critical now and into the coming decade.

New findings from Avanade and McGuire Research¹ confirm that 75% of organizations expect challenging economic conditions and inflationary impacts to limit digital investment in the coming 12–18 months. With more-limited resources, how should your organization responsibly experiment and innovate to maximize business value and future growth?

We're not fortune tellers, but there are four trendlines that we believe will help your organization shape the future and where navigating the use through trust and grounding in a people-first mentality is paramount.

Supercharging work and workers with AI as a copilot

Partnering with an Al copilot will enable humans to get more satisfaction from – and contribute more to – the way that work gets done. A collective intelligence with machines will supercharge the effectiveness of employees, empowering them to apply creativity and human sensibilities to iterate on Al-generated concepts, reducing dull work and accelerating impact.

Thanks to the possibilities of generative AI like OpenAI's GPT, 85% of Business and IT leaders surveyed expect AI to increase revenue growth in the next 18–24 months.

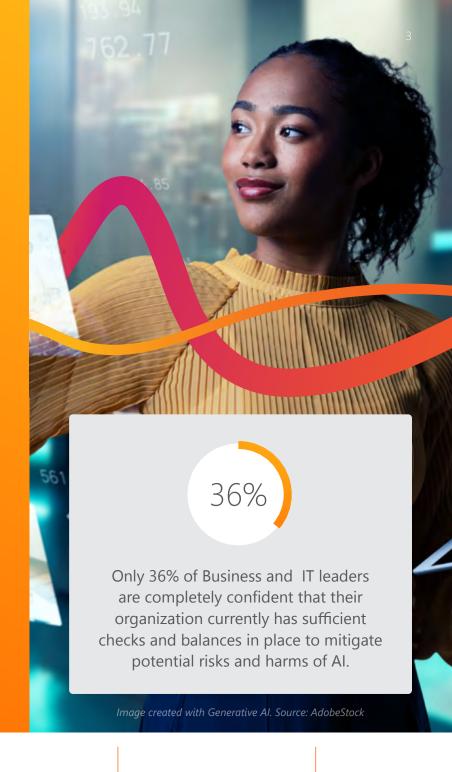
Despite its potential, technology alone can't and won't solve for humanity's challenges. To realize the promise of Al copilots, we will need a much more focused approach around responsibility and transparency with an eye toward equity and inclusion Today, about half (48%) of organizations do not have specific guidelines and/or policies put into effect yet for responsible AI.

Signals of change: There's more technological support for workers than ever, in the form of stronger platforms, easier access to Al and machine learning from remote workspaces, and greater literacy in

software development. This has coincided with an increased desire for more meaning in work – or at least work that fits better with how people want to live.

- Microsoft announced the <u>Microsoft 365 Copilot</u>
 <u>Early Access Program</u> to help organizations
 address an intensifying pace and volume of worl
 with Al as a copilot
- An <u>AI startup</u> hopes to create a conversational interface with your computer that will run every program for you
- <u>Digital nomad</u> is an increasingly popular life-choice powered by remote work and countries like Croatia offering special visas for those who qualify

Getting practical: To promote digitalization and enable employees to become agents of change, Toyota is using citizen development as an effective means of solving onsite problems. Employees with knowledge about their specific workplace needs can use Microsoft Power Platform no-code/low-code development tools to independently transform their business operations.



Ecosystems and multiparty systems drive innovation and growth

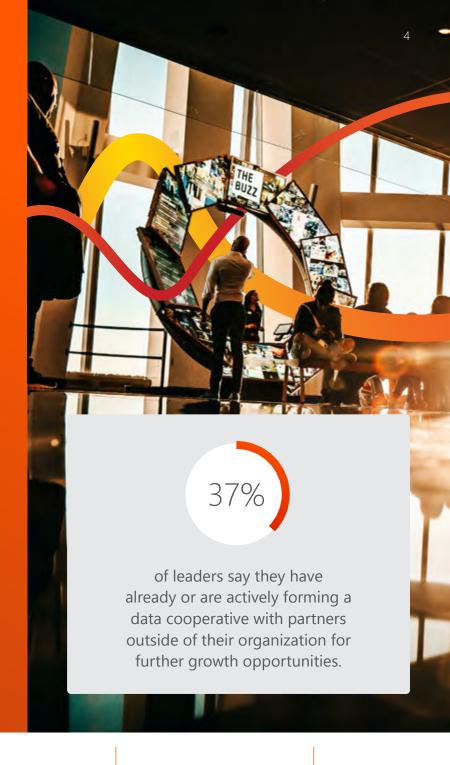
Faster speeds, connected everything: the hyperconnected world in which we live will become interoperable, enabling organizations to generate, collect and leverage more data across one another than ever before. For example, digital assets or products purchased from one platform or marketplace will be transferable and usable in other digital or physical environments. In our survey of business and IT leaders, 92% say their organizations currently supports open innovation with ecosystem partners, and 85% will broaden their use and sharing of first party data with other companies in the next 18–24 months.

The opportunity to extend and access it across enterprise walls – not just among select strategic partners, but with a much wider "open" ecosystem – will offer opportunities for new ways of doing business. Competitors can now be collaborators. And while this requires a new level of trust, the benefits of secure, collaborative sharing are already being realized: 54% say that open innovation has accelerated internal innovation and 53% say it's created new revenue streams.

Signals of change: Composable apps, confidential computing frameworks and advanced computing power enable multiple data owners to work together safely. Privacy and security are still top priorities, but these flexible networks (of both people and organizations) are creating new ways for discrete organizations to intersect and innovate with data.

- MIT Sloan Management Review stresses the importance of organizations forming new types or partnerships to solve systemic challenges
- <u>Utility provider</u> innovates on their networking approach to shape the future of their business
- Companies like Decentriq are <u>promising data</u> encryption to improve collaboration

Getting practical: Washington Maritime Blue's private 5G feasibility study for the Tacoma Tideflats may help the port enable ecosystem data sharing across trucking, rail, ships and the environment to bring together a more holistic operating view.



Trust built into all aspects of AI, network and devices

To embrace continual change, organizations will increase their focus on how to bring trust to the core of everything they do. In fact, 31% of IT and business decisionmakers agree that establishing, growing, and preserving trust is the primary business driver of innovation in the next 12–18 months.

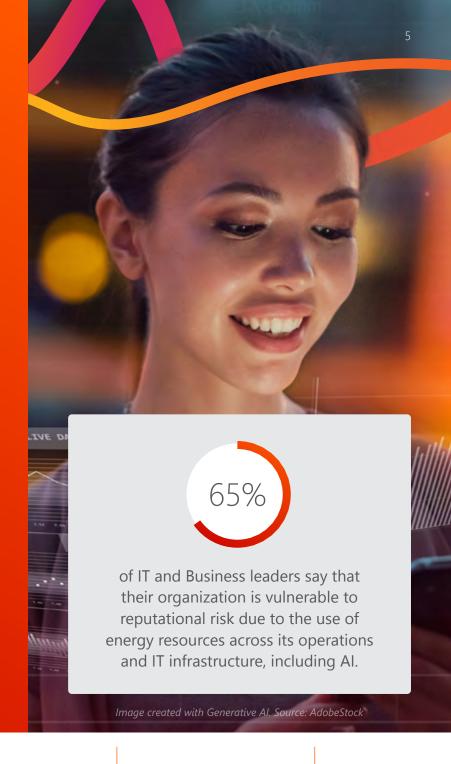
In a time of abundance, where this is seemingly unlimited compute power and storage, the opportunities to test and harness AI feel endless. But Earth's finite resources do not allow for unlimited consumption, which may be why 65% of IT and Business leaders say that their organization is vulnerable to reputational risk due to the use of energy resources across its operations and IT infrastructure, including AI.

To maintain trust in and through technology, organizations need to rethink how they optimize resource usage and internal IT, operations, and their partners, and build resource awareness into their products and services. At the same time, they must codify AI safety rules that successfully resolve complex trade-offs around values. Those that do this will be better positioned to succeed in an <u>AI-First world</u>, increasing trust across employees, customers, and their wider ecosystem.

Signals of change: Many innovations are making Al/ML more resilient and accessible. Meanwhile, we are moving toward a resource-aware ecosystem where partners, suppliers and vendors share information with each other in a privatized way to make better use of Earth's limited resources.

- UK <u>pledges nearly £100 million in funding</u> to help build and adopt next generation of safe Al
- Wastewater treatment company purports to create more energy than it uses
- <u>Digitalization of the smart grid</u> for better energy management, especially pertinent as more intermittent/renewables come online

Getting practical: SSE Renewables is using Al and metaverse technologies like digital twins to actively monitor the environmental impact of its wind farms to ensure they're coexisting seamlessly with the ecology and wildlife in the area.



Reorienting our reality across physical, digital, immersive worlds

There's a new canvas out there that's programmable – the physical world. Physical products embedded with computer chips. New types of flexible hardware and screens, plus smart fabrics and materials. We can now be more creative in the way we use software by interacting with physical things.

For these new physical experiences to be netpositive, we need to build transparency and respect for human needs and capabilities directly into them. The unique capabilities of software – especially its updateability and access across distances – are powerful enablers when applied to physical systems, but there are many considerations organizations need to keep in mind.

Inversely, the way we interact in the virtual world also impacts our physical experience. Digital activities can affect our physiology, well-being, and influence wider social and enterprise dynamics. That could be why 87% of organizations are actively educating employees on the social and psychological impacts of avatars and the metaverse on society. These attributes that help make us uniquely human must be considered in parallel as organizations build a strong digital core that will enable physical, digital, and immersive experiences to automatically reorient to personal preferences and needs.

Signals of change: As we give physical shape to abstract ideas, and virtual controls to real things what we consider "real" is changing. Today a VR headset captures data on users that has never been accessible before, like eye tracking, response times and mapping your physical environment. Digital twins and moldable materials turn passive IoT systems into active participants in our work lives and must be deployed responsibly.

- The US Department of Defense <u>launches wearable</u> that helps detect illness in soldiers
- <u>Synthesis.Al</u> is one of several startups receiving attention for making it easier to create "digital humans"
- <u>Computing with DNA</u> offers potentially massive more amounts of storage – or new ways to solve math problems

Getting practical: KION Group – a global supplier of industrial vehicles and supply chain solutions – updates metrics in near real time and engages service engineers through mixed-reality technology from Microsoft Dynamics 365, as well as remote support and step-by-step holographic technical training through Microsoft Hololens.



Prepare for what's next with trust at the core

Technology is an enabler for trust, but it's never neutral. As the physical world, digital experiences, and Al capabilities increasingly become more integrated, organizations – and all of us as individuals – must commit to building both trust in and trust through technology.

Trust will likely never be perfect, nor complete. But together we can build a future in which our physical, digital, and immersive worlds merge in safe, inclusive ways, one in which technology is thoughtfully embedded to engender trust – not erode it.

Use the trendlines to your strategic advantage.

For a personal briefing on the trendlines customized for your industry and region, contact us.



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As a responsible business, we are building a sustainable world and helping young people from underrepresented communities fulfill their potential.

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