



Becoming AI Driven

Insights for successful AI adoption and ROI in uncertain times

Executive Summary

Rethinking AI for business resilience and results across five categories

Organizations have long seen the potential for artificial intelligence (AI) to drive efficiency and productivity gains. Change is now urgent. As organizations move rapidly through a cycle of [respond, reset and renewing their business](#) they will need to reconfigure their product portfolio and create a scalable operating model, responsive to changing market and employee needs, AI will be a critical enabler. Organizations will also increasingly need to embrace AI to reinvent their business models and address new growth opportunities.

Regardless of the starting point, the path ahead will not be linear. Organizations will need to rethink how they respond, reset and renew their business with AI at the center for continuity, resilience and growth.

Findings from Avanade's global research involved 1,700 line-of-business and IT decision-makers in 2018, 2019 and 2020, across 15 countries. Respondents' companies have global revenues of \$1 billion+ (\$500 million+ in smaller markets) or 3,000+ global employees and participate in a variety of industries. Additional reports include: [AI Strategy](#), [AI Talent and Culture](#), [Digital Ethics](#), [AI Technology and Process](#), [Data Supply Chain and Analytics](#).



What does AI maturity look like?

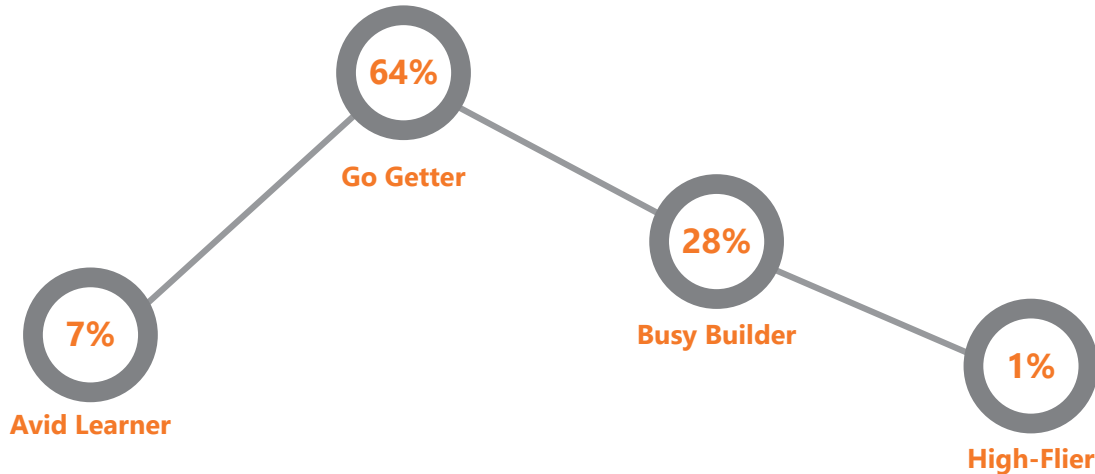
Maturity model highlights organizational progress in AI

[Avanade's AI Maturity research](#) was designed to help understand organizational progress against five categories: AI Strategy, AI Talent and Culture, Digital Ethics, AI Technology and Process and Data Supply Chain and Analytics. Organizations estimated both their overall organizational maturity as well as their progress against the five categories.

We found that most organizations progressing their AI adoption, with **7% falling into level 1-Avid Learner**, and **64% falling into level 2- Go Getter**. Only the minority were **level 3 (28%) Busy Builder** or **level 4 (1%) (the most mature) – High-Flier**.

Following are key takeaways across the five categories, and key recommendations to realize benefit and ROI with AI initiatives. Category definitions are within the scope and research section of this report (pg.12).

Maturity Group



Key takeaways

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It's crucial that AI projects build long-term ROI.

AI has the opportunity and ability to unlock a range of benefits, and a long-term revenue stream should be one of them.

- 83% of respondents who are using AI today agree that AI will be the competitive edge of the future.
- ROI of two to five times is expected depending on the levels of AI adoption.

- The levers for measuring the success of AI will be predominantly measured through increased productivity (64%); increased efficiencies across process, systems and tools (57%); and reduced costs (54%).

AI strategy is in the top three priorities relating to scaling AI.

Most organizations are beginning to adopt AI, but many are hampered in their plans and get stuck before they reach an advanced stage.

- 97% say their organization is evaluating the work that AI could do or augment humans to do.
- 95% of respondents who are currently implementing AI agree that AI strategy is the most critical area to scale.
- Around a third (32%) cite building AI strategy as one of the top three barriers to achieving their business objectives around AI, and a similar amount (35%) are looking externally to get help creating their strategy.

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Key takeaways (cont.)

Nurturing the talent and culture within an organization is a sore spot when it comes to AI.

Organizations see the importance of people in AI success, but making it real is hard.

- 80% of respondents agree that business culture and change are THE make or break for AI's long-term success.
- Over half (54%) are struggling with recruiting AI talent and/or shifting their culture.
- 44% are focused on talent training and development to mature AI within their organization.

Digital ethics considerations are a critical part of enabling a successful AI culture.

The ethics of AI is a rapidly evolving topic and often considered very important. However, it's not fully adopted despite the high level of perceived importance to the success of AI.

- 96% of respondents find that ensuring "digital ethics by design" is necessary when implementing AI.
- 83% agree that digital ethics is the foundation of successful AI.
- 66% of those who are implementing AI are in the process of creating a digital ethics framework at the same time.

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Key takeaways (cont.)

Many organizations are in the early stages of using the most innovative techniques.

Organizations that are using AI have yet to fully immerse themselves and are often using technologies and techniques that are already, or will soon become, outdated.

- Six in 10 have experimented with automation (61%) and/or advanced analytics (60%).
- Far fewer are using computer vision (35%) and/or virtual or cognitive agents (34%).
- More than four in 10 are using AI for IT optimization (46%) or customer experience (44%).
- Only around a third (34%) are doing so for asset optimization.

Sound data practices are vital to expanding AI across the organization.

Organizations seem aware that storing, integrating and using data will be critical to the success of AI.

- 94% of respondents see data supply chain and analytics as the most critical to scale AI within their organization.
- Over 90% of organizations see the data supply chain as highly important when working with AI: data management (98%), governance (98%), integration (97%), quality (98%) (multi-select question).
- 65% of respondents report that their organization's data quality needs improvement when it comes to supporting AI.

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Looking beyond the numbers

Our research shows that while many organizations are taking positive steps toward AI scale and widespread adoption, very few are realizing and exploiting its full power.

Our maturity analysis shows that only a minority are reaching peak AI maturity; most are missing out. Wise organizations are already investing in AI to help them respond, reset and renew their business to be ready for whatever comes next.

AI strategy should not be limited to a proof of concept.

AI technologies are not something that can be simply switched on or plugged in. It's encouraging that many organizations are looking to organically grow and integrate their skills and capabilities to bring AI to its full potential.

However, for that to happen, an AI strategy is needed. After all, if you're setting off on a journey, it helps to know what route you're going to take.

We dive into this topic deeply as part of our maturity analysis, and it soon became clear that those organizations that are mature in their approach, do much more to evaluate the work that AI could do. On the flip side, it's only those that are the least mature that are not evaluating this work at all. If we needed to make it any more obvious, organizations need to build a comprehensive strategy to effect long-term adoption of AI in their organizations.

Culture and talent management trumps all for long-term scale.

Clearly culture and talent management are critical for the long-term success of AI, yet only the minority of organizations have a clear grasp of it yet. Culture needs to be driven from within the business in order to be successful and well received by employees.

Organizations must evolve a talent plan that provides training and re-skilling for old and new roles and drives adoption of AI. This is part of the critical path to success. The evaluation of how work is done can lead to inspiring changes and use cases of AI.

It teases out areas of potential efficiency gains, new experiences and innovations, as well as offloading repetitive and mundane work from people to do more value-added activities and up levelling the value of individual contributors. Leadership plays a key role in evaluating and evolving the use of AI within the organization and showcasing the long-term benefits.

Ethics can determine your win/loss or gain with AI.

Ethical considerations are another critical part of enabling a successful culture when it comes to AI. Practicing “digital ethics by design” is a sign of maturity for an AI-driven organization. Digital ethics efforts are reaching far beyond the initial attempts to address algorithmic bias, extending into the realms of privacy, personal agency, societal impact and much more. With long-term consequences of not paying attention to ethical practices including the loss of customers and employee dissatisfaction, neglecting digital ethics can be incredibly costly for organizations.

Going beyond machine learning.

Most organizations think of AI as applying machine learning, without regard for all components and capabilities of AI holistically. It’s only the minority of organizations that are comprehensively adopting AI and using the most innovative techniques, although many are testing the waters and expanding pilots. AI

adoption continues to evolve, with plenty of upside for maturity and growth among organizations. Scaling AI throughout the organization will require businesses to become AI driven, leveraging agile approaches and operationalizing AI throughout the organization. Those that are unable to expand their use of AI techniques will not realize a sustainable level of maturity.

Data practices govern the throttle rate of AI adoption.

Some of the power of AI is the ability to create, process, manage and store large volumes of different kinds of data – sensor, device, verbal, documents and more. Organizations recognize this, with high levels of agreement that all elements of the data supply chain are important when working with AI. However, we found that only the most mature consider this as being extremely important. Combining cloud processing, storage capabilities, security and data ops with a renewed focus across data management, governance, integration and standards will underpin any and all successful, scaled AI-led organizations.



Three recommendations to help you become AI driven

In short, the potential and power of AI is clear to most organizations; however, building maturity in this field is a case of creating the right structures for it to grow within.

Organizations that move themselves toward a more mature approach will be best placed to succeed in a modern AI-driven world. The initial steps toward improving customer and employee experience are a critical cornerstone of AI, but organizations will need to adopt it more widely to innovate products, mitigate risks and update HR processes.

Here are three key recommendations to help your organization become AI driven:

1. Strategy starts with people

With the acknowledgment that talent and culture are the make or break of any long-term transformation, AI is no exception. To build a data-driven, mature AI culture, an organization must showcase leadership embracing and relying on AI to support decision-making and articulate a clear strategy.

Organizations need to evaluate not just workers, but functions, tasks and the work itself for AI to uplift and offload work. Centers of excellence and change management programs will need to be multidimensional and evolve over time to support a scaled approach.

Those that create a strategy that deeply integrates people – employees, customers, partners, community and a larger ecosystem – will find themselves ultimately scaling farther faster. Deeply integrated feedback loops create cycles and insights to re-purpose into continued and additional efforts.

2. Embody ethics by design

There is no question that data scientists and citizen AI can bring us far in the number and type of use cases that AI can support. Ethics by design needs to go beyond just auditing algorithms for bias and include new dimensions such as security controls, privacy practices, and diversity and inclusion. This area is ripe for new role creation for those organizations that understand the intersections of data, business and AI outputs. The goal should be more than just meeting regulatory requirements and ensuring that no harm is done; organizations should be instilling their corporate values into everything they design, build, deploy and operate.

A key component is the creation of an ethical framework that includes the processes, evaluation guidelines, governance, feedback mechanisms and transparent communications to complete an accountability cycle.

Ensuring an ethics by design approach helps organizations demonstrate their commitment to improving the impact of technology and provides them with a focal point to mature AI capabilities and controls throughout the product lifecycle.

3. Use data as fuel for the AI engine

The deeper the data culture, the better activation of data within the organization. Evaluate your data supply chain for its connections and gaps across organizational and departmental lines, eliminate data silos and open data exploration capabilities.

Easier said than done, right? Standards and governance are foundational and most often where the first roadblock is hit in AI projects – where is the data, who has access, what else does it connect to. Data is the gas that fuels the AI engine and will be the source of new product creation and monetization.



AI is a journey; don't do it alone.

AI maturity is a question of putting the right strategy and practices into place to scale results over time. To convert AI experiments into initiatives and workplace transformation is a journey.

Leadership, strategy, data practices, ethics, standards and, most importantly, people are all critical to long-term scaling of AI. And perhaps most importantly of all to note, this doesn't need to be a journey that you take alone; third-party experts can work with you to create bespoke solutions that overcome your specific barriers.

For deeper insights, consider doing an [assessment with one of our AI experts](#) who can not only assess where you are, but benchmark you against a growing database of participants who are also on their AI maturity journey. We can provide you with insights into the research that supports your evolution across the five categories and help you plan for growth. Become an AI-driven organization today.

Visit www.avanade.com/ai-maturity to learn more.



Scope and definitions

Avanade commissioned independent technology market research specialist Vanson Bourne to undertake the research on which this report is based.

They interviewed 1,700 line-of-business and IT decision-makers in 2018, 2019 and 2020, across 15 countries globally. Respondents' companies have global revenues of \$1 billion+ (\$500 million + in smaller markets) or 3,000+ global employees and participate in a variety of industries.

Category definitions and links to additional reports:

What is AI?

AI is a combination of tools, methodologies and technologies that can sense, comprehend, act and adapt. For the purpose of this research, AI includes automation, robotic process automation (RPA), cognitive services, and/or machine learning technologies or any combination that complements people.

AI Strategy

The level of ability to set and communicate a vision, define a roadmap and business case for how artificial intelligence will be used over time at an organizational level. This includes the levels of leadership engagement over time to create sustainable AI within the organization.

AI Talent and Culture

The level of sophistication in how an organization evaluates work that AI can support, develops AI-specific skills and manages its talent pool, whether by hiring or reskilling, and the change management process needed to support the change toward an AI culture.

Digital Ethics

How an organization applies values within the design, development, implementation and operation of digital technologies to assure they're respectful of individuals, socially responsible, environmentally sustainable and well governed.

AI Technology and Process

The ability to engage with AI-specific technologies and techniques, including levels of automation, and apply them in a business context and across business processes repeatedly. This includes the ability to integrate feedback and meet data and compliance standards with varying levels of intervention. It includes the ability to manage, develop and deploy models throughout the organization holistically.

Data Supply Chain and Analytics

The ability to ingest, manage, use, integrate, mobilize and secure data to support the evolution of AI within the organization. Includes organizational abilities to generate data for testing and data labeling and across more general capabilities of data management, standardization, governance, platforms and providers.

Rethink your AI maturity

Avanade can help you redefine the workplace as a creator of sustainable value. We transform culture, technology, experiences and operations to increase cost efficiency, productivity and growth. Our end-to-end approach combines strategy, implementation and managed services, augmented by industry expertise, specialist tools and IP.

Visit www.avanade.com/ai-maturity to find out more.

About Avanade

Avanade is the leading provider of innovative digital and cloud services, business solutions and design-led experiences on the Microsoft ecosystem. Our professionals bring bold, fresh thinking combined with technology, business and industry expertise to help make a human impact on our clients, their customers and their employees. We are the power behind the Accenture Microsoft Business Group, helping companies to engage customers, empower employees, optimize operations and transform products, leveraging the Microsoft platform. Avanade has 38,000 professionals in 25 countries, bringing clients our best thinking through a collaborative culture that honors diversity and reflects the communities in which we operate. Majority owned by Accenture, Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation.

Learn more at www.avanade.com.

About Vanson Bourne

Vanson Bourne is an independent specialist in market research for the technology sector. Their reputation for robust and credible research-based analysis is founded upon rigorous research principles and their ability to seek the opinions of senior decision makers across technical and business functions, in all business sectors and all major markets.

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