AI Maturity and organizations

Understanding AI maturity

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00.

Overview

Artificial intelligence (AI) is a critical component to help organizations digitally transform. Organizations need to be ready to develop, deploy, and adopt AI-based systems.

This readiness includes an ability to own and operate AI as well as be aware of the characteristics of AI-based systems and technologies. AI-based systems are probabilistic in nature. This is the opposite of many existing technical solutions in which "business logic" is based on predetermined, articulated rules that are compiled into an application. Probabilistic systems operate in the realm of probabilities, which, by nature, requires organizations to understand concepts such as data science-driven experimentation and ownership process changes.

Organizations must have established maturity—which encompasses strategy, culture, organizational structure, and core capabilities—to responsibly own an AI-based system. There are several types of AI that can match an organization's current maturity. The following sections will describe what AI is and how it helps organizations achieve digital transformation. Additionally, we will describe the maturity levels, including how to own and operate AI at any level of maturity and how to increase your organization's AI maturity.
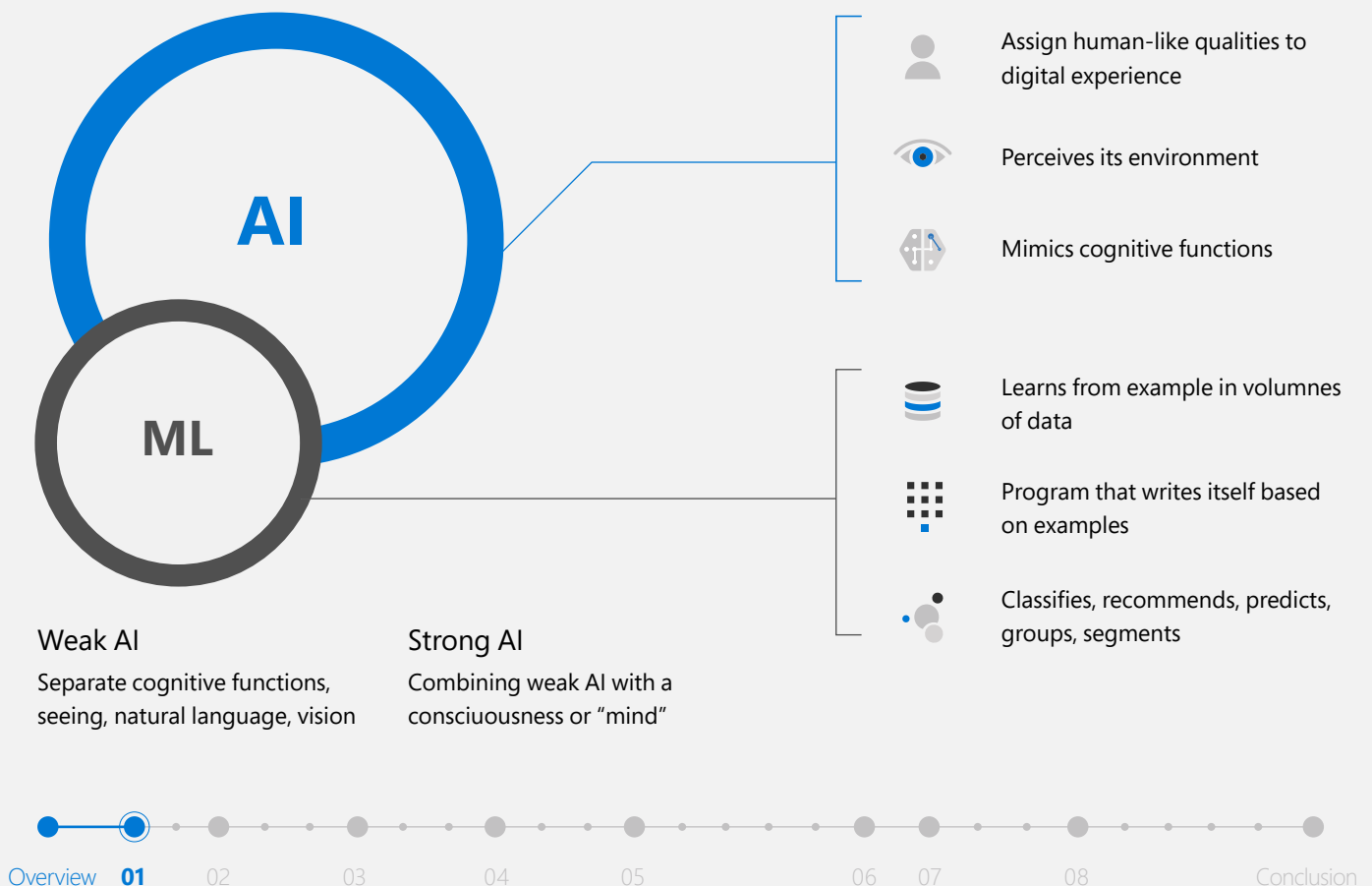
01.

What is
artificial intelligence?
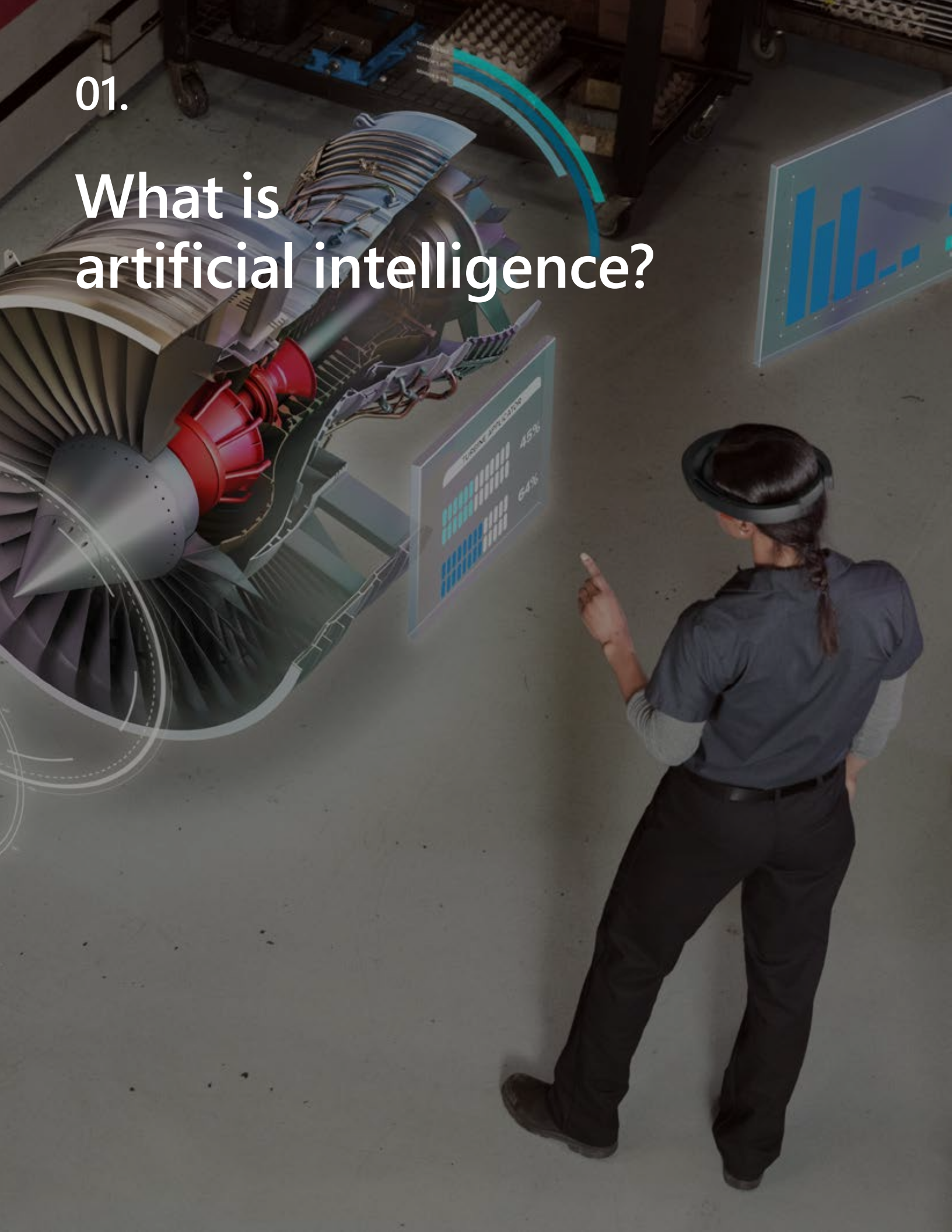
Artificial intelligence is a field of computer science that utilizes a set of technologies to create systems of intelligence that can perceive, reason, and assist humans. The focus of artificial intelligence (AI) is to create computing experiences that include human-like capabilities. When organizations invest in AI, the goal is to create digital experiences and apps that employ skills that can mimic human cognitive functions such as vision, speech, and natural language understanding. By including these human-like capabilities, AI can enable organizations to construct digital experiences that are smart, fast, and helpful to end users.

What is AI?

AI

Assign human-like qualities to digital experience

Perceives its environment

Mimics cognitive functions

ML

Learns from example in volumnes of data

Program that writes itself based on examples

Classifies, recommends, predicts, groups, segments

Weak AI
Separate cognitive functions, seeing, natural language, vision

Strong AI
Combining weak AI with a consciuousness or "mind"

Artificial intelligence is a rapidly evolving field that includes multiple areas of focus.

Machine learning (ML) is a field of study within AI that focuses on the creation of "programs" that learn from examples in volumes of data. Instead of humans utilizing programming languages to explicitly and declaratively describe and define rules for execution, ML focuses on the utilization of algorithms and data to create a program that learns from patterns. These capabilities include classification, recommendation, prediction, grouping, or segmentation.

AI is traditionally divided into two categories. Weak AI is composed of artificial intelligence capabilities that mimic human cognitive functions in deep but separate ways. This includes the creation of capabilities that are adept at understanding spoken and written language, or identifying objects in a photo or video stream.

Strong AI is defined as a system that unifies human cognitive capabilities with a consciousness, or "mind." A system that is strong-AI-capable will combine weak AI capabilities into a construct that mimics the human brain in terms of cognition, composite reasoning, and even consciousness. While researchers and organizations continue to pursue strong AI, weak AI capabilities are available today to be infused into applications and processes that help organizations achieve digital transformation.

As AI continues to enrich digital experiences, it is paramount that a cultural shift take place within organizations to begin to think about ethical considerations of AI implementation. The following section reviews the core concepts of ethical AI and the principles associated with AI implementation, as well as how these principles can be adopted by organizations.

02.

What are the ethics of AI?
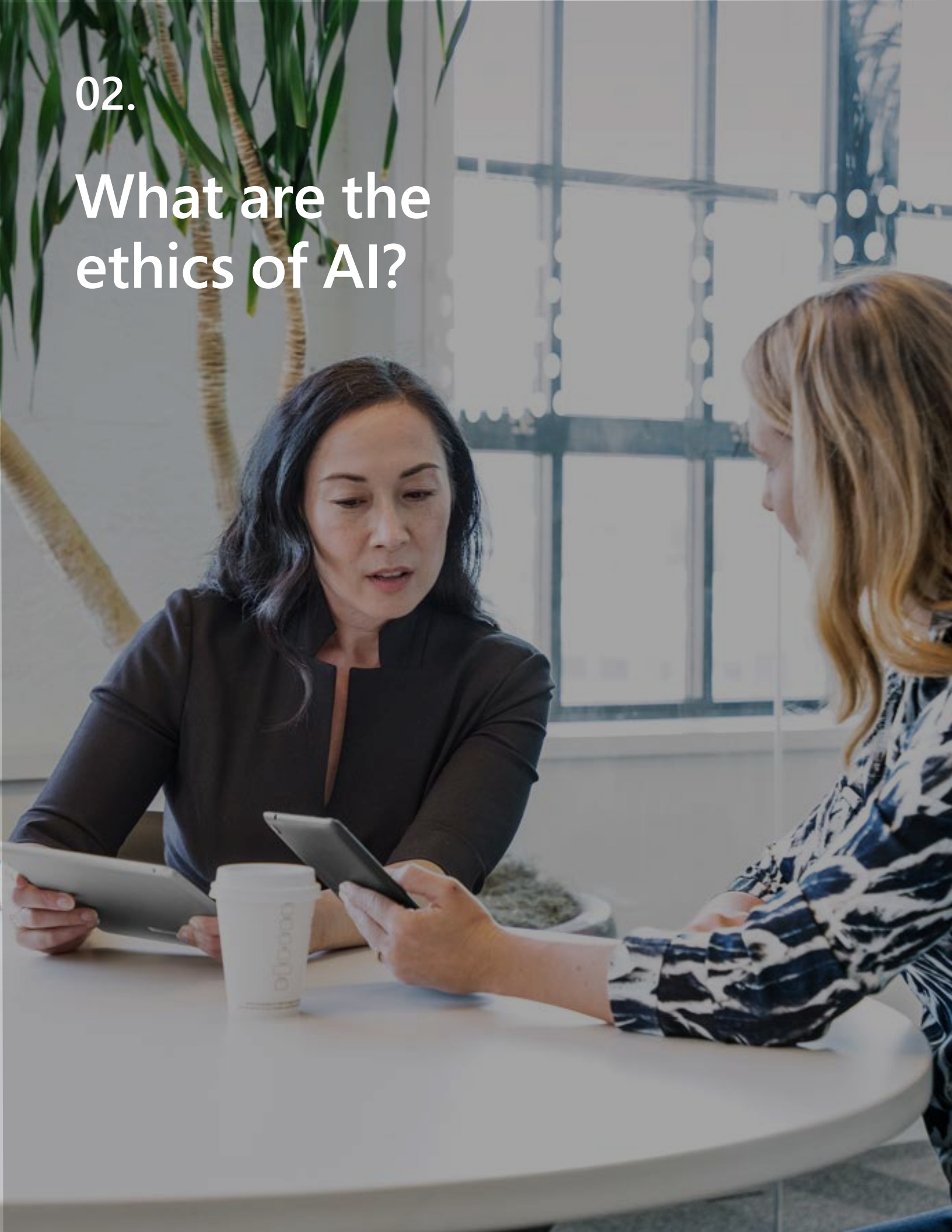
As AI technologies, including machine learning and deep neural networks, combine breakthroughs in research with ubiquitous data and near limitless computing power, they will augment people's ability to make a significant impact on society. As we optimistically look to a future where these techniques are used more increasingly to automate tasks, identify and predict patterns, infer associations, and provide systems with human-like capabilities of language understanding, speech, and vision, this raises some challenging questions about fairness, understandability, accountability, and the ethics of AI.

We believe that every organization involved in the design, development, operation, and/or use of AI systems must first begin with a set of principles designed to protect people. At Microsoft, we have identified six principles that we believe all AI systems should follow. We have published these principles, which are deeply rooted in timeless values, so others can use them as a reference. Which **principles** does your organization follow to protect people?

01. How do we address biases in data and algorithms, so systems are used **fairly** and do not create discriminations?

02. How do we make complex algorithms and probabilistic recommendations **understandable** by those who use AI?

03. How do we ensure that highly autonomous systems maintain **human accountability** through meaningful human control?

04. How do we **govern** the ethical use of AI systems?

These principles need to be reinforced by policies and governance frameworks. As we consider the broad societal impact of AI capabilities like facial recognition, we recognize that these systems can both be used to create safer societies and be misused to surveil individuals out of favor with a government—creating a chilling effect on individual rights and freedoms. As these concerns impact society broadly, we have called for a broad public debate as well as government regulation on these technologies. At the same time, we recognize every organization that uses AI capabilities also needs to create governance controls internally. At Microsoft, the Senior Leadership team established the AETHER committee to deliberate and develop policies and principles to govern and guide the designers, data scientists, and developers of these systems internally. In addition to the principles above, the AETHER committee also developed the Ethical Decision Framework, which is integrated into Microsoft's compliance tools to guide leaders in consideration of sensitive uses of AI that have a broad impact on people and society.

How will you govern the ethical use of AI systems?

As an industry, we need to continue to develop and apply techniques and tools to address the fundamental concerns of data-centric algorithms, including fairness and understandability.

There have been a number of research breakthroughs, such as datasheets for datasets and LIME, which are being created to help designers, data scientists, developers and users of AI systems improve the understandability and mitigate biases in data and algorithms. At the same time, we recognize that consistent processes and practices applied in the design, data wrangling, experimentation and development of these systems can have the greatest mitigating impact on the risks. Recommended practices include the application of DevOps integrated data science processes like CRISP-DM, the secure development lifecycle, and the importance of diverse design and development teams.

What practices does your organization follow to mitigate the risks inherent in the design, development, and application of data-centric algorithms?

03.

What is digital transformation?

Digital transformation is a set of processes and milestones that positions organizations to create new opportunities, disrupt industry verticals and apply innovation and intelligence to create new business models and new ways of doing things. Digital transformation is the goal of many organizations that seek to disrupt competitors while avoiding being disrupted themselves. The path to digital transformation involves infusing AI into crucial processes and milestones. The journey includes digitizing assets, automating processes based on those assets (known as digitalization), and then creating new ways of doing business.

Digital Transformation

Digitization

Analog (Raw) to Digital

Digitalization

Digital to Process Automation

Digital Transformation

Process Automation to New Business Models
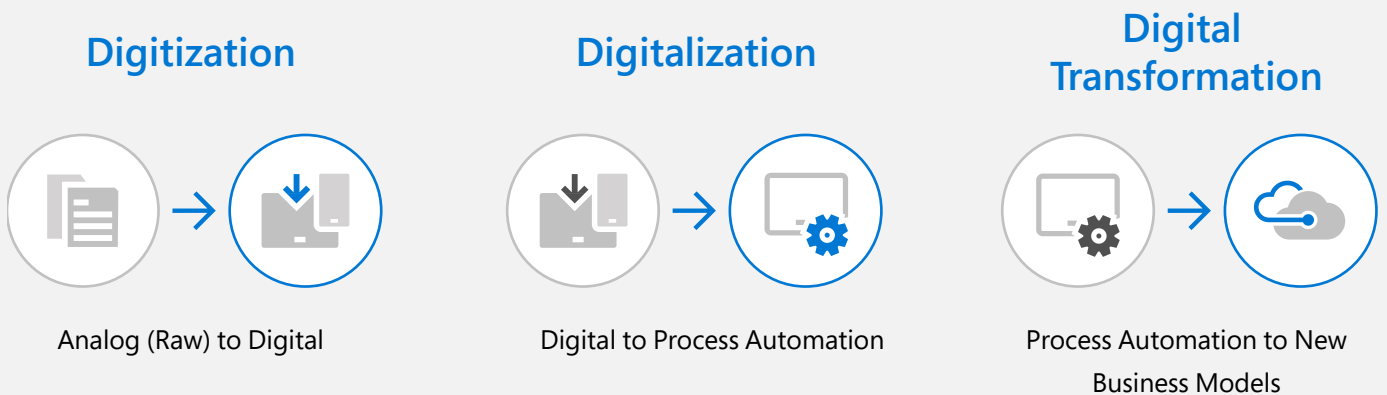
Digitization

Digitization is the process of converting analog assets such as documents, data, images, and other hard copy to digitized equivalents. Scanning documents is a critical first step; however, data must be extracted, stored, and accessible to systems of intelligence. Simply scanning documentation is not strategic because it can contribute to "dark data." These are documents that are simply images, with no relevant data or metadata extracted from them for use in process automation. Utilizing AI-enabled computer vision systems or optical character recognition (OCR) helps the digitization process. Subsequently, extracting that data and placing it into a platform where it can be combined and refined into data sets that can "teach" AI will be extremely valuable to organizations on the digital transformation journey.

Digitalization

Digitalization is a milestone where organizations utilize digitized data to help automate processes that are infused with AI. Organizations should look for human-driven processes that require perceiving, reasoning, and sensing to automate using AI-based systems. By automating these systems, human capital can be refocused on higher-value priorities, which include the ability to innovate new approaches to solve business challenges or even optimize processes further. Digitalization represents a milestone where organizations realize gains in process optimization in terms of time, effort, and human engagement. Infusing AI into the process automation effort will provide unprecedented automation capabilities.

Digital transformation

Organizations that achieve digital transformation have digitized assets, extracted data, and used that data to automate processes. Additionally, they have invested time and effort and gains from optimized processes to create, evolve, or disrupt business models. It's also important to note that digital transformation is a recurring milestone. Organizations will continue to digitize, digitalize, and achieve digital transformation milestones over time. A core underpinning and ingredient to achieving this maturity is AI.

There are various forms, AI components, services, and capabilities that organizations can use in their processes to achieve digital transformation. What drives the choice of AI technology is the ability for organizations to own and operate it. Organizations must assess their own level of maturity to match the right AI technology to their particular strategic, cultural, and talent characteristics. The following section describes the concept of AI maturity and why choosing the right AI technology will help accelerate organizations toward digital transformation.

04.

What is AI maturity and why is it important?

With digital transformation as the goal, organizations that seek the benefits of this milestone should also seek to understand, create, and own AI-based systems.

However, owning an AI-based system is significantly different than acquiring traditional packaged software or even creating a non-AI-based solution through coding. Because AI-based systems operate in the realm of probabilities, they must continuously be trained, monitored, and evaluated for performance. In this manner, organizations that deploy AI-based systems can guard against decay, bias and its associated harms, and AI that diverges from its original intended purpose. Maintaining the performance, predictability, and accuracy of AI is required for continued benefit from these systems.

Organizations that don't assess their own characteristics for creating, owning, and operating AI-based systems may encounter challenges and dangers that are detrimental. These organizations may be subject to various harmful consequences, ranging from inaccurate systems that silently decay over time to systems that may inadvertently harm organization employees or customers.

Dangers of disregarding maturity

Organizations that rush to adopt AI technologies without regarding their own maturity may face minor to disruptive challenges. Probabilistic systems have significantly different considerations than do traditional deterministic systems and code that operates on a rules framework. While organizations may understand the promise of AI technologies over traditional solutions, it is important to understand the challenges with overreach.

The following are a few dangers or potential impacts of disregarding maturity when implementing AI-based systems.

Fairness and bias harms

Fairness can be a subjective concept and mean different things to various individuals, cultures, geographies, and countries around the world. However, the concept of fairness as it relates to AI technologies and experiences deals with mitigating bias and the effects that bias can have if it's not identified or controlled.

Users can experience unfair, discriminatory, or prejudicial experiences if bias is not mitigated when training an AI-based system. This may lead to harms of allocation where the system discriminates the access to resources equally for qualifying individuals (i.e., a loan creditworthiness AI-enabled system that discriminates based on biased data sets). Additional harms include classification and representational harms that can negatively impact system users.

Turning the system off

Many organizations that don't consider maturity may involve talent—in the form of full-time employees or consulting organizations that are adept at AI creation— to implement advanced digital experiences. Once the act of AI creation is successful, organizations may benefit from the system for a time. However, over time, if the organization is not equally adept and mature enough to handle operationalizing advanced AI technologies, the system may begin to decay. This decay can result from the model at the core of the system requiring retraining and evaluation, or even reimplementation, to maintain accuracy and fairness.

Some organizations have found that understanding the reasons why decay happens and then remediating these situations is beyond their current capabilities. A percentage of these organizations have even rolled back to non-AI-based systems and turned off the AI-enabled digital experience as a last resort to prevent harms but continue operations.

Mistrust and withdrawal from AI

There may be groups of individuals that strongly perceive and believe that AI is the key to digital transformation within their organization. Even after unsuccessful attempts to create, own, and operate advanced AI technologies, they may continue to push the organization, without regard to maturity, to try additional experiments and implementations. While the desire for AI-enabled systems is clearly to help achieve objectives and goals, each time a system is not maintained properly, and begins to decay and behave unpredictably, organizational leadership can lose confidence in AI in general.

In some cases, this may mean a withdrawal or rejection of AI technologies based on unsuccessful attempts to adopt AI. Organizations or their customers may lose trust in AI as a technology, branding it as unpredictable or too hard to operate. This outcome will push true digital transformation further away and cause the organization to miss out on the powerful impact that AI can have on their business.
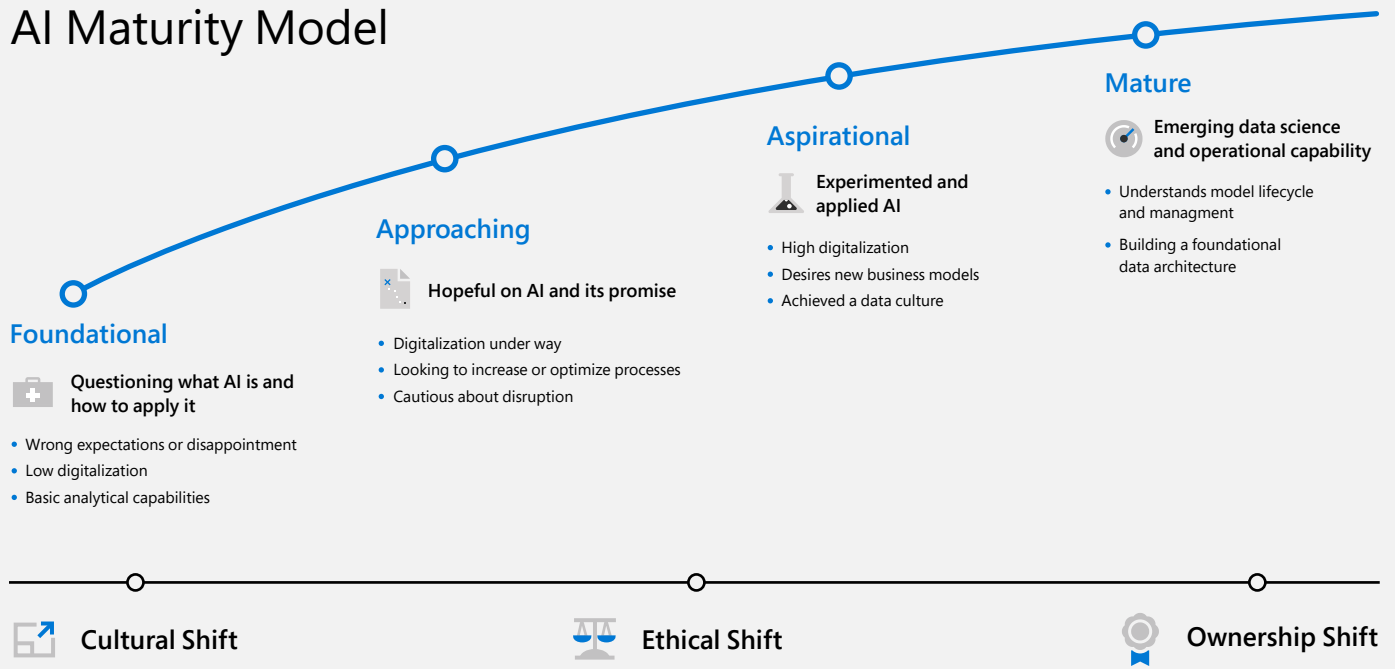
05.

The AI maturity model
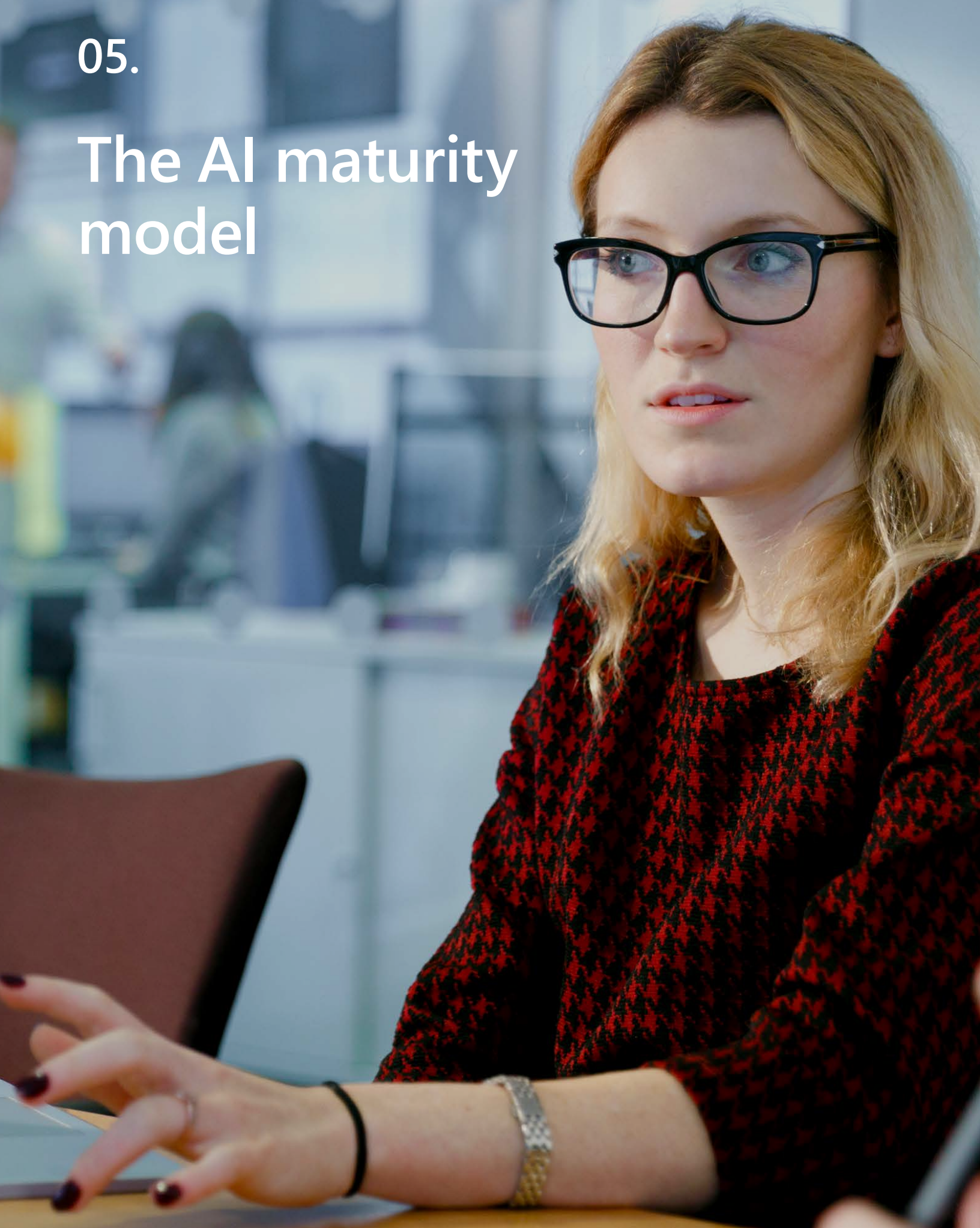
Microsoft has worked to define an operational model that helps organizations assess their own attributes that contribute to the adoption of AI technologies. The AI Maturity Model is designed to help organizations gather information related to the core characteristics required for teams and organizations to own AI and help guide adoption of the right AI technologies at the right time. Additionally, Microsoft has compiled prescriptive guidance associated with adopting the right AI technologies for an organization's current maturity level, while advising on how to increase maturity to embrace more advanced AI capabilities.

The following is a representation of the AI Maturity Model that describes the maturity levels and some characteristics associated with each.

AI Maturity Model

Mature

🕹 **Emerging data science and operational capability**

- Understands model lifecycle and managment
- Building a foundational data architecture

Aspirational

🔺 **Experimented and applied AI**

- High digitalization
- Desires new business models
- Achieved a data culture

Approaching

🗎 **Hopeful on AI and its promise**

- Digitalization under way
- Looking to increase or optimize processes
- Cautious about disruption

Foundational

💼 **Questioning what AI is and how to apply it**

- Wrong expectations or disappointment
- Low digitalization
- Basic analytical capabilities

↗ **Cultural Shift**   ⚖ **Ethical Shift**   🎖 **Ownership Shift**

The model is a maturity curve, where organizational maturity increases as you evaluate the levels going toward the left side of the diagram. Underpinning each level of maturity are core concepts associated with areas of focus that contribute directly to maturity.

Cultural shifts in understanding AI creation and operation, an ethical shift in questioning the impact of these systems, and an ownership shift of vigilant monitoring, evaluation, and adjustment to prevent decay are all important attributes to increase maturity.

Foundational

A foundational organization will spend time demystifying AI and the edges and boundaries of various associated technologies. Organizations at this stage seek to understand the definition of AI, and its applicability across a broad category of scenarios and capabilities. Similarly, foundational organizations seek to understand how others are utilizing AI in their industry to learn how to apply it.

Organizations at this level of maturity strive to acquire systems and processes to help make data-driven decisions. These organizations often rely on the talent, instincts, and experience of leaders to make decisions. Within foundational organizations, historical analytical systems are in place, but may not be consulted in favor of an experienced leader's recommendations.

Foundational organizations need to invest in successful projects that focus on fast, iterative experimentation. Understanding the nature of experimentation in the digital

experience development process requires significant cultural attributes that foundational organizations have yet to develop. Investments should also be made to understand AI and how it can further digital transformation. A transition to a data-driven culture, along with a concentration on empowerment of organization members and a growth mind-set, will be instrumental in AI adoption.

Foundational organizations can adopt AI. Organizations at this level of maturity should look to adopt AI technologies that are hosted by organizations, like Microsoft, to infuse AI into digital experiences. The adoption of configurable AI will abstract ownership and operational challenges and allow organizations to grow into a digital business.

Approaching

Approaching organizations continue to implement cultural changes that help empower employees and make data-driven decisions. These organizations are focused on adopting a data culture and continuing to utilize prioritized strategic initiatives to disrupt their industry by using AI to create new business models and streamline operational processes. Thanks to the digitization of assets and the infusion of AI to automate processes, these organizations are ready to learn about owning custom AI solutions.

Approaching organizations have demonstrated the ability to implement solutions using quick iterative sprints and value learning from those efforts. These organizations are poised to embrace rapid experimentation. Operationally, these organizations will invest more in understanding how to implement, monitor, and improve AI over time.

Investments should continue in accountability protocols for AI governance; monitoring, orchestrating, and improving AI over time; and infusing ethical viewpoints when deploying AI-based systems. Considering these aspects will help organizations gain experience when using AI to digitally transform.

Aspirational

Aspirational organizations understand that AI will be instrumental in helping them compete and transform. These organizations are often aware that others are using AI and are cautious about competitive disruption or industry disruption by other competitors. Aspirational organizations are often on a journey to digital transformation by improving processes, and strive to use data to inform decisions.

Organizations at this maturity level are focused on shifting culture to empower employees. Employee empowerment increases collaboration, generates ideas for optimization, and helps to create new business models. These organizations are becoming increasingly comfortable with taking risks and are striving to transition away from sequential fixed projects to more iterative projects.

Aspirational organizations can adopt configurable AI, which is AI hosted by technology companies like Microsoft. This abstracts away the operational complexity of maintaining the core AI, while allowing organizations to infuse AI into digital experiences. At the same time, experimentation with more advanced AI technologies, such as custom AI, is encouraged to help organizations learn about ownership, orchestration, and operational considerations. Aspirational organizations should invest in using advanced analytics (predictive and prescriptive) to drive decisions, shift culture toward experimentation, and even investigate custom AI to create new experiences.

Mature

Mature organizations have shifted their culture to include lifelong learning and a growth mind-set. Rapid, iterative experiments come naturally. Strategic initiatives are established as part of a fully embraced data culture and help translate insights into actions.

Mature organizations continue to successfully curate AI creation talent, and understand how to apply these resources to several AI initiatives simultaneously. Additionally, the organizations understand how to create digital experiences that are impactful over time. Mature organizations infuse ethical perspectives into their experience creation process, often asking "we know we CAN do things with AI, but SHOULD we?"

Organizations at this level of maturity should continue to evaluate tool chains for configurable and custom AI while maintaining operational vigilance when it comes to monitoring, retraining, and implementing AI-based systems. Maintaining AI talent, prioritizing new strategic initiatives, and continuing agile experimentation are required areas of focus for mature organizations.

06.

Human-AI
interaction

When organizations consider AI technologies to help them achieve digital transformation, it's important to understand that the technical components that represent AI are only a portion of the solution. There is a larger context associated with how humans will interact with the system. As organizations design digital experiences that are smart, fast, and helpful, they should center their design thinking around the human experience, and touchpoints with the solution are required. In many cases, an existing expansion on user experience to accommodate an inclusive, empathetic, fair, and unbiased approach is desirable. At the core of human-AI interaction is the creation of a digital experience that includes AI to make it smart, fast, and helpful.

07.

What is a
digital experience?
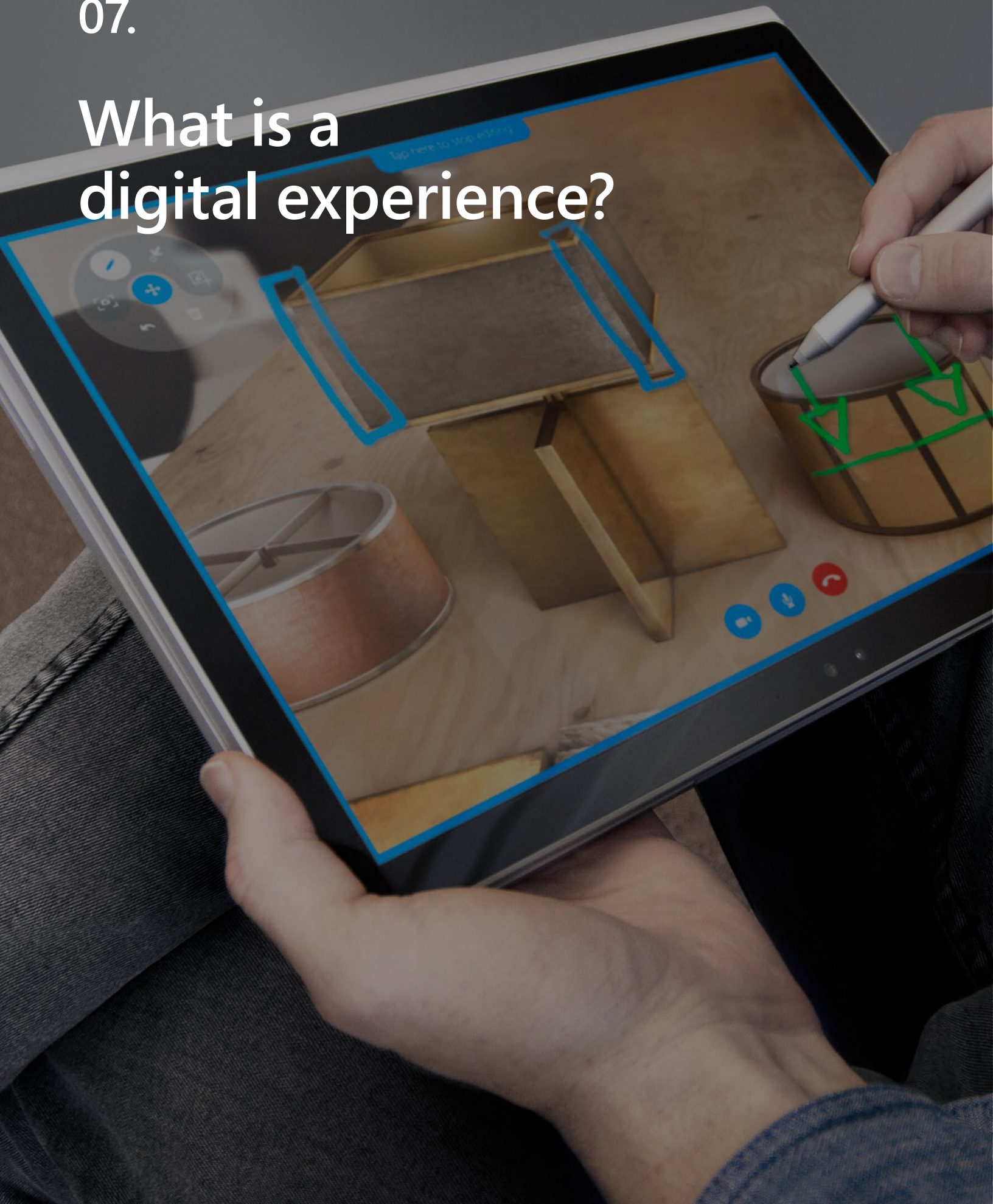
Many organizations that utilize technology to create helpful and transformative experiences focus on applications. These applications may be traditionally coded, deterministic solutions, or they may have AI infused into the user experience. However, historically, these are interfaces where humans interact with them in very traditional ways. Typically, humans interact with apps on a range of devices from PCs to phones, and either touch, type, or swipe to interact with the application.

A digital experience is a concept that transcends historical application user experiences.

A digital experience is an application that involves or extends beyond traditional interaction and experience modalities. It can provide transformative capabilities to help humans and contextually create an experience that crosses devices and even challenges traditional ways in which humans interact with applications. A well-designed digital experience can allow a user to begin an interaction using a smart speaker with voice, continue on their PC, and transition to their phone while in their car on the way to work. Additionally, a digital experience can accommodate inclusive and empathetic contexts and provide differently abled users with equal access to capabilities.

Digital Experiences

Beyond Apps

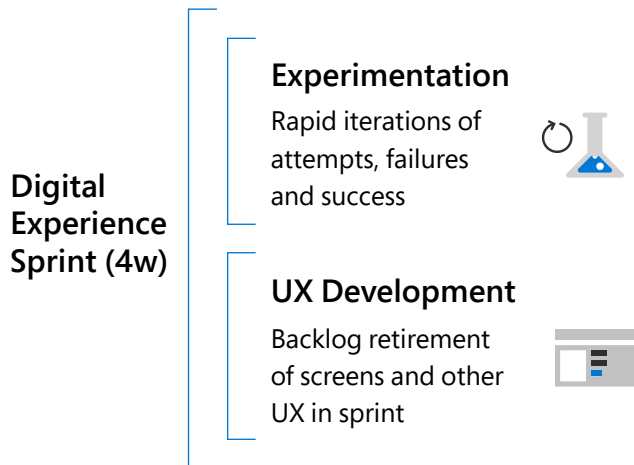| Mixed reality | Devices (phones, speakers, PCs) | Touch devices | Wearables | Gaming | Span environments |

Digital experiences can consist of a single user context across various interaction planes. From mixed reality to wearables, a user's journey through the devices that can host the digital experience may mean interacting with holograms, using an inclusive experience for the visually impaired on a phone, and having an application follow the user into their home via a smart speaker.

Organizations that seek to utilize artificial intelligence will begin with a design-thinking approach. They will utilize design thinking and inclusive design to create experiences that will rely on AI to help productivity, automate processes, and create new ways of doing business. Focusing tightly on just AI technologies will narrow the vision and inhibit the ubiquity, impact, and influence of applications. As organizations mature, integrating design thinking with frameworks like the Team Data Science Process helps to center the effort in the creation of cohesive and transformative digital experiences.

For more information on the TDSP, see the link here: https://azure.microsoft.com/en-us/documentation/learning-paths/data-science-process/

When considering the inclusion of AI into a digital experience development process, the focus should be on iterative experimentation processes that are housed within a sprint-based project frame.

Developing AI

Digital Experience Sprint (4w)

Experimentation

Rapid iterations of attempts, failures and success

UX Development

Backlog retirement of screens and other UX in sprint

Microsoft AI Stack

Edge

Models deployed to containers running on thin devices

App Models

Libraries used to host and run AI on devices or in apps (ML.NET, WinML)

Cognitive Services

Configurable AI accessible via an API call

AI Platform

AI scale power for configuring, training and creating models

Typical experience development processes are iterations of a four-week effort with two tracks. Following the design-led thinking effort and backlog prioritization as well as architecture development (typically sprint zero), the first sprint contains a user experience development effort. This sprint track addresses the prioritized backlog items in a more deterministic fashion, creating the user experience and human interaction elements.

Simultaneously, for custom AI, the data science process iterates to acquire data sets, evaluate and train algorithms for the best option, and host or deploy the models for integration into the digital experience. There may be multiple failures and iterations required to develop a
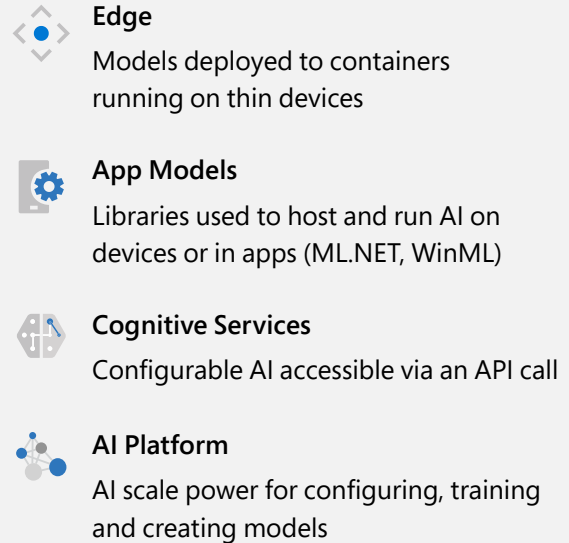
successful model inside of the sprint. AI creators may even train multiple models and select the best option for accuracy, transparency, and explainability. Alternatively, for configurable AI, such as Microsoft's Cognitive Services, configuration of the service and integration into the digital experience becomes a much more predictable and deterministic project motion.

Organizations that create AI for use in enriching digital experiences should understand the iterative process for addressing backlog items, as well as the experimentation process. It is important for product managers, stakeholders, and senior leadership to embrace this methodology through strategy, culture shift, and capability investment.

08.
Owning AI

Creating an AI-based system requires a level of organizational maturity to accommodate the development process.

This includes an adoption of the experiment-driven mind-set, an understanding of non-deterministic outcomes associated with AI development, and an effective management of small iterations. Depending on the type of AI being integrated into the digital experience, the experimentation process itself may have a more deterministic creation path (i.e., configurable AI versus custom). However, once modeling has taken place, AI creators must focus on explaining the model and attesting to its effectiveness and accuracy prior to deployment. Developments in transparent algorithms, transparency, and explainability frameworks help organizations acquire trust in the efficacy of the models.

Following deployment, organizations should have an operationalization plan for continued monitoring, retraining, and evaluation of the model. In addition to operational maturity, the organization must accommodate new practices, orchestration substrates, governance models, and systems of accountability. Mature organizations must maintain a level of vigilance to determine the operational effectiveness of the AI-based system, including routinely inspecting for and mitigating bias so that harms are minimized.

Recommendations for owning AI

In order to understand the organization's capability to create, own, and operate AI technologies, measuring maturity across strategy, culture, and capabilities is important.

The following sections outline the considerations organizations should think through for owning AI based on the assessed maturity level of each organization.

Organizational Structure

Strategy

Culture

Core Capabilities
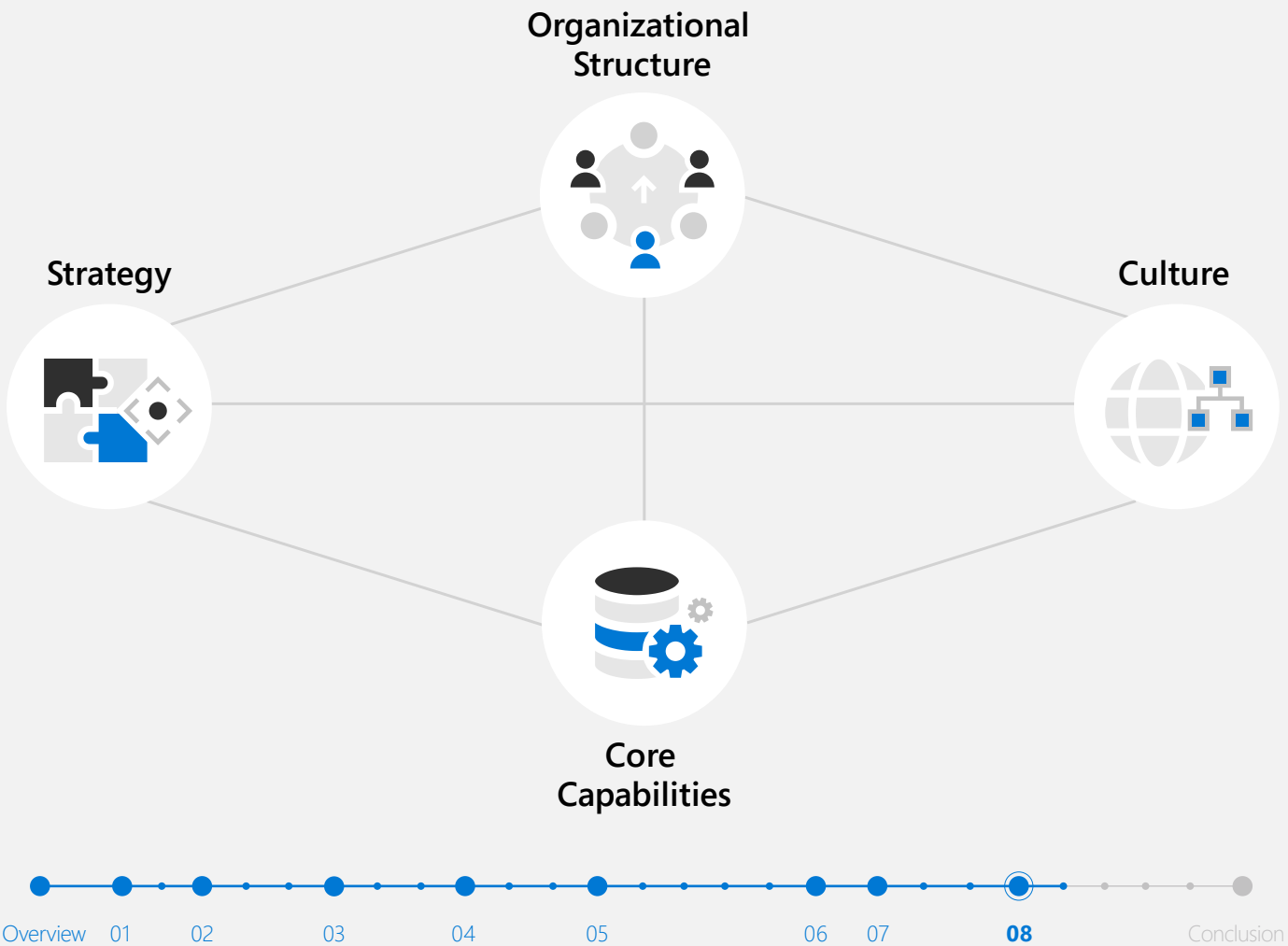
Strategy

Digital transformation

Digital transformation begins with the act of digitizing content and data to increase process automation. By utilizing AI to automate processes, organizations can develop disruptive and innovative ways of doing business.

Ethics in strategy

Accommodating ethical considerations as organizations formulate strategy helps to define how AI will be used in ways that safeguard fairness, mitigate bias and attempt to be increasingly inclusive. It often begins with understanding that although AI CAN do certain tasks, we must ask whether it SHOULD.

Adopting AI

AI should blend into the fabric of digital experiences. It should support the creation of applications that are smart, fast, and helpful. Organizational strategy should include a focus on infusing AI into digital experiences, instead of just on AI itself.

Culture

Experimentation mind-set

Organizations should strive to adopt an experimentation mindset. An experimentation mindset values growth, learning and achievement by experimenting, learning from failure and reapplying those lessons to future experiments. This is how AI is created and organizations must have a culture that supports this process through rapid iterative experimentation.

Data-driven culture

Organizations should aspire to attain a data-driven culture. Data-driven organizations understand how to shape strategy and tactics around data analytics. By combining human experience with historical, predictive, and prescriptive analytics, organizations can make strategic choices that bring about digital transformation.

Insights into action

Organizations should value conclusions and insights drawn from the analysis of data. Translating these insights into action helps organizations feel confident in their decisions. These insights can help guide strategy, refine tactics, and provide a foundation for enhanced decision-making. This data can also be curated for training AI.

Organization

Lifelong learners

Organizations should develop talent that is capable and fluent in data analytics, engineering, and data science when considering AI creation. This talent should be focused on lifelong learning. Lifelong learners quickly adapt to new technologies, tool chains, and capabilities, and can quickly apply them to transform their jobs and their team's outputs, as well as drive an organization's outcomes.

Boundless collaboration

Organizations should strive to foster collaboration between individuals and teams. Individuals and teams with a growth mind-set are focused on sharing achievements and failures for the benefit of others and the larger team or organization. Collaborators strive not to fear challenges or failures, but to embrace them as shareable learning opportunities to grow.

Planning for AI

Organizations looking to adopt AI should focus on the creation of smart, fast, and helpful digital experiences that enable humans to achieve more. This includes planning to integrate and infuse AI into everyday processes and tasks, as well as into customer-facing experiences. The creation of AI is important, but the integration of AI into organizational digital experiences is essential for digital transformation.

Capabilities

Data estate management

Experience in managing the organization's data estate is essential for the creation of relevant AI. AI should pull the data estate into cloud platforms where parallel experimentation and evaluation of the AI can take place. AI requires a lot of data, and being able to curate, shape, or engineer that data into the right volume and type to use in AI creation is a required capability.

Dark data challenges

Organizations that are beginning their digital transformation journey are often faced with converting physical assets into digital ones. Once assets are digital, they can be utilized in process automation that is driven by AI. However, this goes beyond scanning documents into images, for example. Data must be extracted and stored in a manner that allows for discovery and creation of data sets that can be used to train AI in the future. Without this, digitized assets become "dark data" and are unusable for process automation or AI training.

Iterations and experiments

AI creation and ownership require constant iteration through a data science process. This includes the initial creation, and then orchestration of training, evaluation, and redeployment of the AI. Organizations should strive to adopt rapid, iterative experimentation sprints to quickly create, modify, and update AI as it becomes more prevalent across organization digital experiences.

Conclusion

Organizations at all levels of maturity can own AI-based systems. However, considerations for ownership must be thought through to determine whether an organization can support more advanced AI technologies. AI and its associated fields of study and technologies are direct enablers for organizations to realize digital transformation. While digital transformation is a journey, it provides a path for organizations to innovate, establish new and more efficient ways of doing business, and create experiences that are smart, fast, and helpful.

Considering and assessing an organization's AI maturity provides a clear path to guide AI technology adoption efforts. Organizations that evaluate closer to Foundational or Approaching should look to adopt configuration-based AI first,

where the concepts of operationalization are done by organizations like Microsoft. When more custom AI capabilities are required, organizations should assess themselves across strategic, cultural, and capability boundaries to understand whether they are ready to own and operate a custom AI solution.

Microsoft works with customers to help prepare, host, and implement configurable and custom AI to help organizations digitally transform. Through a combination of AI services, AI platform capabilities, and smart digital experiences, Microsoft works to make AI infusion into digital experiences a rapid, iterative process to speed transformation. As we transition from every company being a software company, organizational leadership should realize that every company should now be an AI company.

→ **Explore how you can transform processes, engage customers, and modernize your apps with Microsoft AI.**