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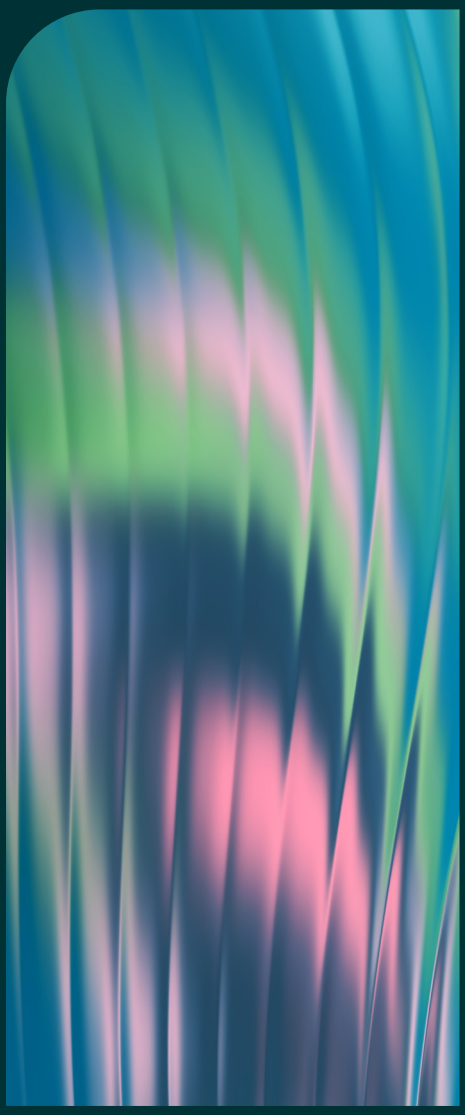
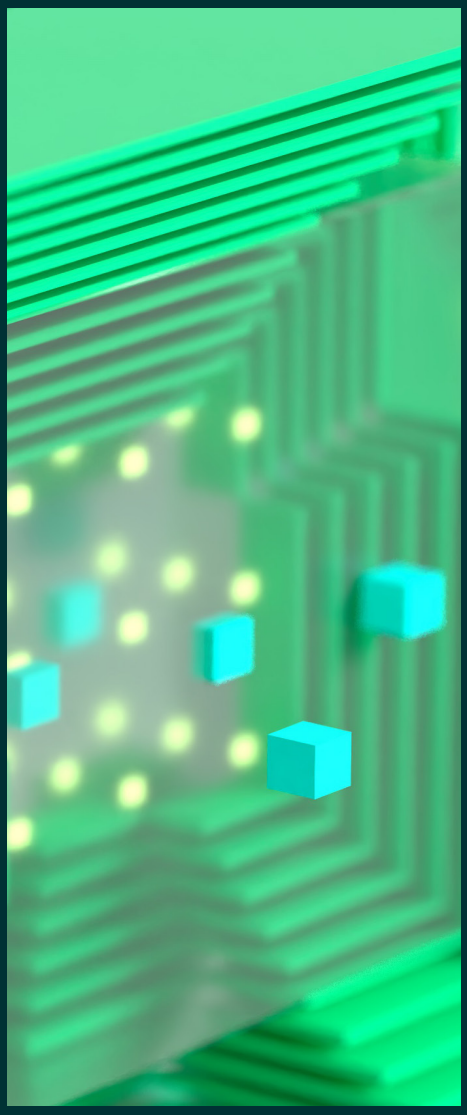
The AI-fueled organization

Striking a balance between human and machine intelligence





Democratizing access to innovation

Artificial intelligence (AI) is transforming how businesses operate and create value, and its impact is becoming increasingly evident. The introduction of online generative AI platforms has opened up a new world of possibilities and applications, such as DALL-E 2 and ChatGPT. They allow anyone with an internet connection to interact with AI in a human-centered, conversational manner without needing technical knowledge. This has widened access to AI, enabling a broader range of employees to use it and signaling continued growth and innovation in the field.

The days when AI was the exclusive domain of large corporations with deep pockets and extensive technology divisions are over. Even in its infancy, AI has helped companies increase efficiency through automation, boost service speed and reliability, improve customer experiences, enhance decisions and recommendations, make more accurate predictions and uncover opportunities to create new offerings.

Let's explore the latest advancements in AI and how you can leverage this revolutionary technology to spur innovation and achieve business results. We'll also discuss the essential role cloud infrastructure plays in unlocking the vast potential of AI.

The days when AI was the exclusive domain of large corporations with deep pockets and extensive technology divisions? They're gone forever.

Fueling innovation

The latest advancements in generative AI, intelligence augmentation and intelligent automation fuel innovation by streamlining processes and improving decision-making. With these tools, organizations can deliver more value to customers, transform operations, gain a competitive edge and drive growth and success. Let's take a closer look.

Generative AI

The advancement of foundation large language models, such as the GPT family, Bard and others, has sparked the development of applications such as DALL-E 2, ChatGPT and AutoGPT, which exhibit intelligent behavior and can assist humans in various tasks. Generative AI refers to the ability of AI models to generate new digital images, video, audio and human-like text or code. The use of generative AI in creative agencies and other fields is just beginning to scratch the surface of its potential, with agencies already using them to jump-start the creation of video scripts, website copy, social media posts, sound effects, music and more. Text-based generative AI systems, like ChatGPT, can produce human-like responses due to the massive amount of training data they use as input material.

Augmented intelligence

Augmented intelligence is the future of collaboration between humans and machines. An AI-augmented workforce is a human-centered approach that harnesses the power of technology to amplify human intelligence, skills and expertise using tools such as automation, machine learning and natural language processing. The goal is to create a symbiotic relationship between humans and machines that enhances decision-making, problem-solving and overall performance across domains and industries.

Intelligent automation

The shift from digital business to autonomous business is transforming how businesses operate, leveraging advanced technologies for autonomous decision-making, operations and processes. By combining the power of AI and automation, organizations can automate complex, end-to-end processes — from discovery, analysis and design to manufacturing, measurement monitoring and reassessment automation — with little or no human intervention.

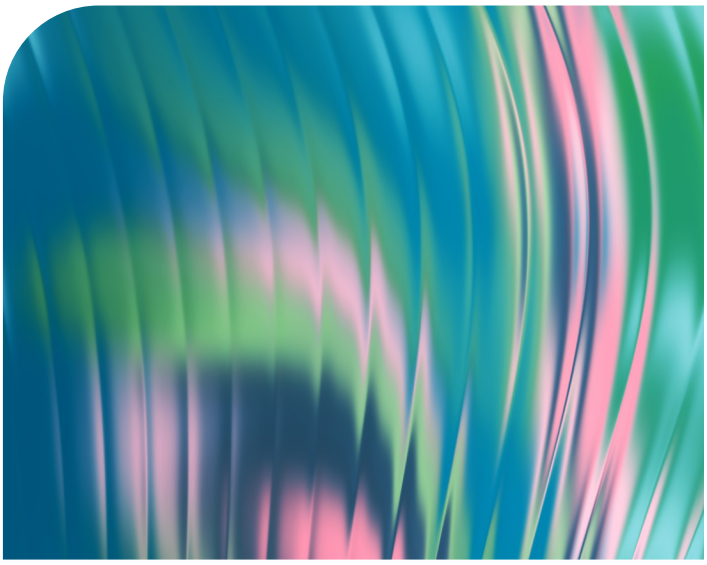
AI for everyone

Innovative enterprises and early adopters are seizing the immense potential of AI to push the boundaries of innovation. Startups and established corporations alike are developing prebuilt AI models and solutions for industry-specific and line-of-business use cases. These capabilities can be easily accessed as cloud services, which you can quickly and affordably integrate into existing systems and new products for fast time to value.

Here's just a handful of the current options across disciplines:

- **Amazon Bedrock:** Builds and scales generative AI applications with foundation models.
- **Amazon Rekognition:** Automates image recognition and video analysis with machine learning. It can analyze millions of files in seconds and augments human review with AI.
- **Azure OpenAI Service:** Provides access to OpenAI's machine learning models, including the GPT family of models.
- **GitHub Copilot X:** Considered the future of AI-powered software development, it learns from billions of lines of public code to suggest code snippets that can save developers time and improve their productivity.
- **Google Vertex AI:** As a unified data and AI platform and tooling for pre-trained and custom models, it easily infuses vision, video, translation and natural language.

  Machine learning into existing applications. It can also be used to build entirely new intelligent applications through pre-trained APIs for vision, video, natural language and more analysis capabilities, including labeling, face detection and OCR.
- **Hugging Face Hub:** Offers datasets and models for natural language processing, including language translation, sentiment analysis and domain-specific models, like BioGPT.
- **OpenAI platform:** Provides access to applications like ChatGPT and DALL-E as well as an API platform for developers.
- **NVIDIA Jarvis:** Enables developers to build and deploy AI-powered voice assistants, chatbots and recommendation systems.



With prebuilt AI solutions, you can quickly start your AI journey with small-scale implementations that showcase capabilities. From there, identify new use cases where AI can add incremental value to specific business strategies, processes or employee tasks. Here are some areas where AI might help:

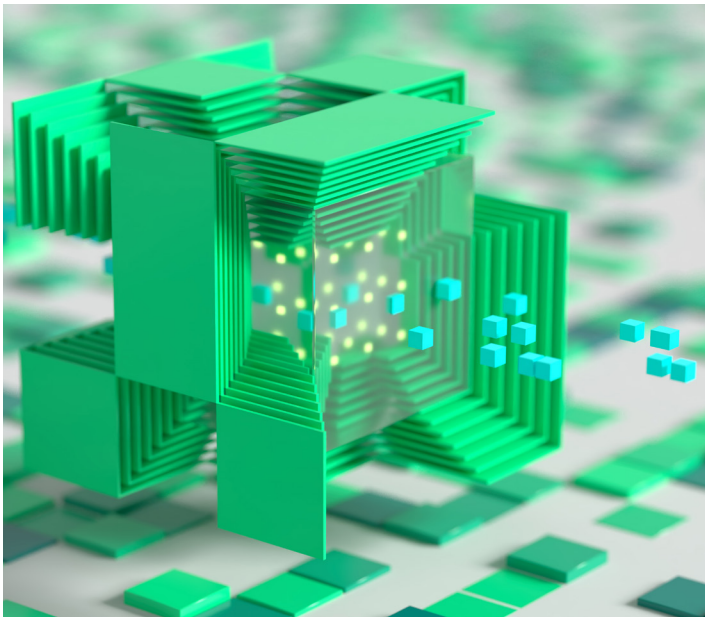
- Text analytics, speech, vision and machine language translation AI models can be integrated into small and enterprise systems to optimize data entry and capture and analyze unstructured data, like notes, documents and more — all without machine learning expertise.
- More sophisticated and industry-specific AI models can also be deployed to provide targeted and timely access to insights, recommendations, predictions, diagnoses and more through intelligent application interfaces, such as laptops, handhelds and mobile kiosks.

Human-centered AI is changing the way we work

Enterprises across all industries are beginning to embrace human-centered AI — an approach that integrates AI across systems and applications that employees at all levels use to do their work. This approach emphasizes the importance of understanding the human context in which AI is used so that it's employed to benefit people.

Looking ahead, AI will be designed with a stronger focus on human-centered principles, ensuring the technology is tailored to individual needs and preferences. For example, a generative AI application, like ChatGPT, could be personalized for each organization or even each employee, their role and their daily work tasks to maximize productivity and performance at an individual level.

This trend is emerging with personalized medicine — an area where human-centered AI combined with precision medicine is already making a big impact. It's needed, too, given the current shortages of medical practitioners and the increased demand for better outcomes at reduced costs.



AI will become even more personalized to individual needs and preferences.

Steps you can take now to start benefiting from AI

Start building a solid foundation for successful AI implementation by:

Identifying the business challenges where AI can create the most value. These may be areas where manual processes can be automated, decision-making can be improved or new products or services can be developed.

Prioritizing high-impact use cases. Figure out what you're trying to use AI to solve for. Clear, focused AI use cases lay the foundation for successful implementation and drive business value and innovation.

Assessing in-house talent and sourcing external expertise. You don't need a data science team to get started with AI. However, most companies find there's real value in leaning on experienced partners to help them on their journey and take advantage of prebuilt AI models.

Creating a cross-functional team. Assemble a team with diverse areas of expertise — including data, IT, business and legal — to help with the implementation, testing and adoption.

Next, invest in a cloud foundation, an intelligence layer and your AI strategy

At a minimum, that should include:

A scalable, elastic infrastructure that is secure and compliant. Put a well-architected cloud foundation in place that employs strong security measures to protect data privacy and confidentiality. It should also comply with industry and regulatory standards, like HIPAA, PCI and GDPR. Unisys research indicates that cloud-mature organizations are much further along in their AI maturity and more confident they understand the full ethical issues of AI.

Data, analytics, machine learning and AI services. Maximize cloud investment and accelerate AI development and deployment via cloud-based machine learning and AI services. These services include automated machine learning services, APIs and tools to streamline the process of building and launching AI models. To learn more, read "From data to intelligence: Building a value-driven AI strategy."

Intelligent applications, visualization tools and interfaces. Surface AI-powered predictions and insights through intelligent applications, visualization tools and intuitive interfaces to deliver exceptional, personalized customer experiences, and empower employees with AI-powered capabilities to make informed decisions in real time.

An AI strategy. To ensure the maximum value and success of an organization's AI transformation, the AI strategy should align closely with the overarching business strategy and objectives and function as an extension of the company's data and technology strategies.

With generative AI and prebuilt solutions democratizing access to technology and an AI-augmented workforce transforming the workplace, now is the time to take a proactive approach to AI.

Stay ahead of the AI curve with Unisys

AI is transforming the way businesses operate and create value. With the introduction of online generative AI platforms and prebuilt solutions, it's easier and more affordable than ever to drive innovation by integrating AI capabilities into your systems, workflows and products.

To learn more about how Unisys can help you stay ahead of the AI curve, contact us or visit us online.

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