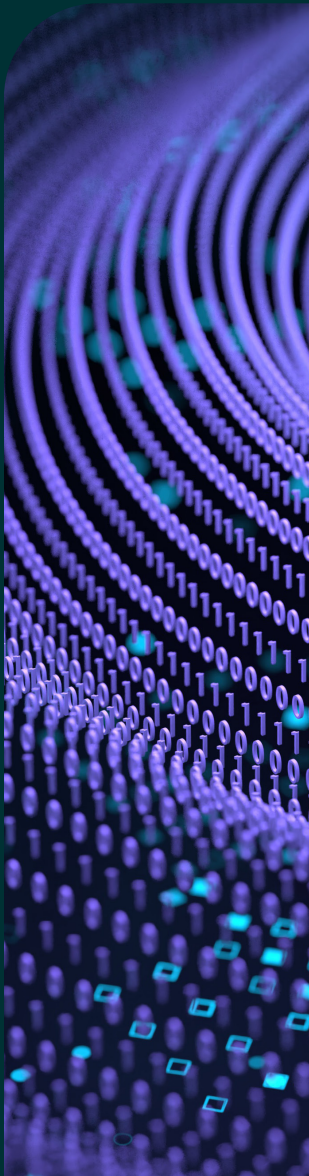


# From data to intelligence:

Becoming a data-driven organization in the age of AI



## Building a strong foundation

**D**ata is the fuel that powers the AI revolution, driving growth and innovation in today's fast-paced business landscape. With a symbiotic relationship, data and AI rely on each other to thrive. Throughout the AI lifecycle, high-quality data is essential for AI to function effectively and accurately, as the availability, quality and quantity of data serve as the critical foundation for AI-driven success.

Ensuring that the data used to train and test AI models represents real-world scenarios is just as important as using high-quality data. This means including a diverse range of examples and situations that are representative of the environment in which the AI system will operate. By incorporating real-world scenarios into the data used to train AI models, the system can be better equipped to handle unexpected situations and make accurate predictions in real-world settings.

The importance of data in the age of AI can't be overstated. According to AWS<sup>1</sup>, "Data is more than an operational asset, like factories, equipment, IP and real estate. When utilized correctly, data is an invaluable source of growth. The key is recognizing its inherent value, leveraging it intelligently and creating a culture that embraces the power of being data-driven."

The bottom line? Data is the foundation of AI. To make the most of it, you must establish a well-structured data strategy that aligns with your business strategy and objectives. That's the way to empower data-driven decision-making throughout your organization, enabling strategic insights and outcomes.

Let's explore how.

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<sup>1</sup> How do you become a data-driven organization?, Amazon Web Services web page, March 2023.





## Unlocking AI's potential with a business-centric approach

As AI becomes more prevalent, new business-centric organizational models are emerging, characterized by connected, intelligent and autonomous organizations. These models prioritize leveraging data and AI to enhance decision-making and performance with a foundation built on a data-driven culture; prioritizing data quality and governance; adapting business processes; and addressing ethical considerations related to data-centric AI. Successfully embracing AI in these ways can enable organizations to make faster, more informed decisions and deliver superior customer experiences.

This approach can help you quickly adapt when market trends change or unpredictable events occur, such as a global pandemic or an economic downturn. Utilizing pertinent industry, supply chain, economy and even competitive intelligence data in the moment can help you steer operations. And it can foster agility during difficult circumstances — relevant to each AI use case — from across your enterprise and beyond. To do so, apply these core principles:

### Foster a data-driven culture

To successfully harness the power of data, organizations need to instill a culture that values data and embeds it in all aspects of the business. This requires prioritizing the use of data throughout the organization and cultivating a data-driven mindset among all employees, not just the data team. By doing so, organizations can facilitate data-driven decision-making and continuous improvement.

Exponential data growth significantly increased global online presence beginning in 2020, and emerging data-heavy technologies will contribute to more AI analysis of data. Unfortunately, research reveals global data will double every two years, and 37% of data could benefit organizations if analyzed. However, only **1% of data is currently being analyzed**.

### Treat data as an asset and a product

Treating data as an asset and a product can unlock new opportunities, improve operational efficiency and drive innovation. Having a clear understanding of an organization's data assets and the value they can provide to customers can help companies monetize their data assets and create new revenue streams. Facilitating data sharing within the organization and across the ecosystem will empower data producers and consumers to collaborate on and toward data economy.

## Connect to data wherever it is

Data is often scattered across the enterprise, trapped in siloed systems and inaccessible to AI models. Acquiring a comprehensive understanding and command of data within your organization and beyond is crucial for utilizing internal, synthetic and external datasets to their fullest potential.

You'll need to think carefully about how to support various types of data, where to source it, how to store it and how to ensure its accuracy and integrity. In fact, by 2025, synthetic data will reduce the volume of real data needed for machine learning by 70%<sup>2</sup>.

<sup>2</sup> [https://blogs.gartner.com/andrew\\_white/2021/01/12/our-top-data-and-analytics-predicts-for-2021/](https://blogs.gartner.com/andrew_white/2021/01/12/our-top-data-and-analytics-predicts-for-2021/)



By prioritizing data and thinking of it as an asset and a product, you can unlock new opportunities, improve operational efficiency and drive innovation.

## Build a flexible architecture

To leverage the full potential of AI, it's essential to have a flexible, robust and scalable data architecture. This architecture can handle data in various formats and structures, making it easy to integrate new data sets and derive insights from them. Establishing a connected, distributed data layer relies on the efficient collection and management of data from diverse sources across on-premises data centers, edge and multi-cloud.

Real-time processing of data streams, along with the utilization of advanced algorithms, can help analyze large amounts of dispersed data and generate real-time, actionable insights. For example, by connecting to data wherever it is, a pharmaceutical company running decentralized clinical trials could use the Internet of Medical Things, including wearables, to capture patient data remotely and bring together unstructured researcher notes, synthetic data and real-world data to streamline clinical trials.

## Make data accessible, actionable and outcome driven

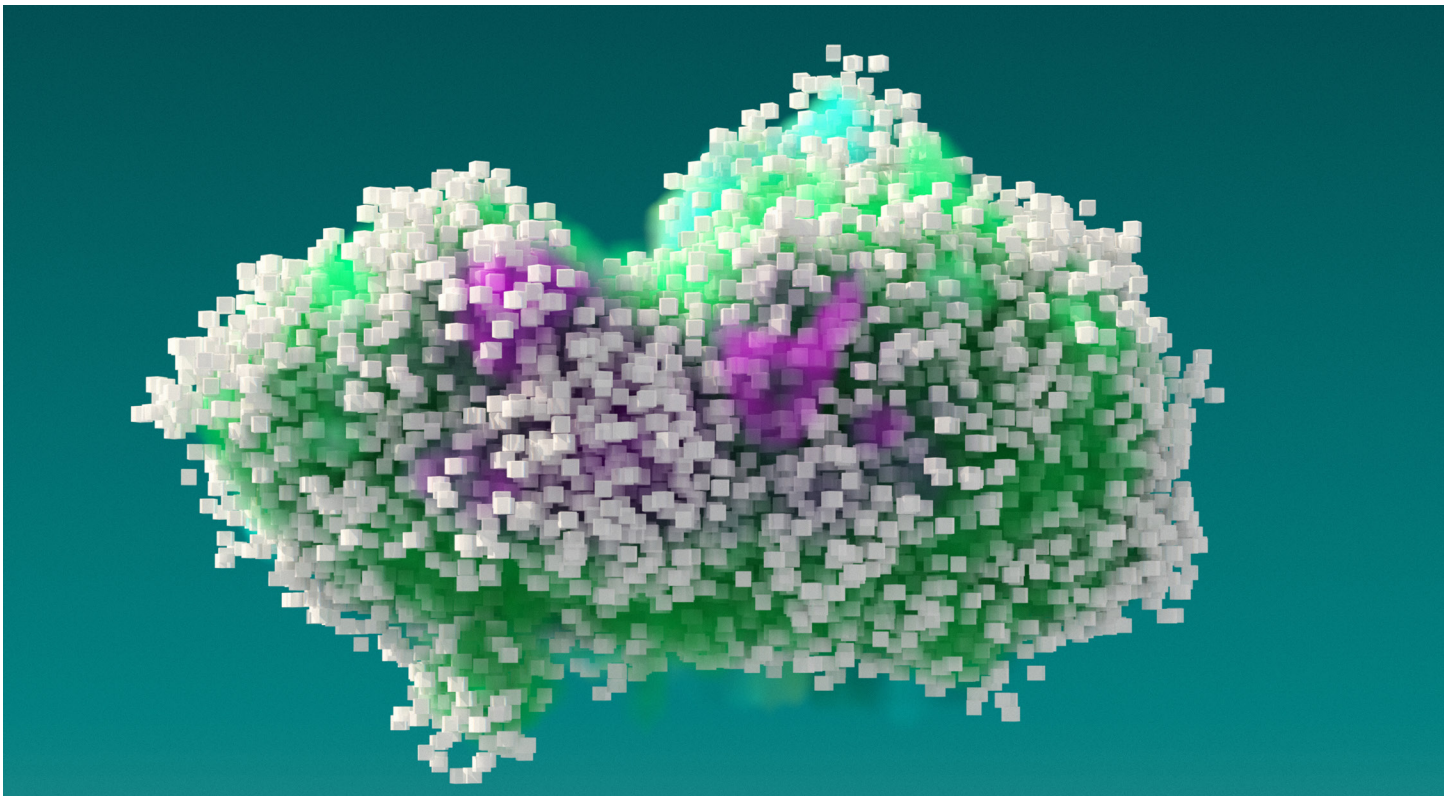
To enable swift and informed decisions, employees throughout your organization need access to high-quality data and insights that are accurate, relevant, timely and actionable.

Providing self-service access to a common data layer for reliable, consistent and high-quality information enables organizations to use their data actively, creating a culture of data-driven decision-making. AI can be integrated as a consumer of self-service data, enabling it to access and utilize pertinent data for each use case from across the enterprise and beyond.

End users can use generative interfaces and apps on mobile devices to easily interact with AI while insights can be shared with frontline teams to aid their decision-making.



Employees throughout your organization need access to high-quality data that is diverse, relevant and validated.



## Craft your AI strategy

Finally, you'll need a thoughtfully designed AI strategy. It should help identify strategic use cases, consider ethical and legal implications and create a roadmap for developing, deploying and scaling AI applications. And it needs to work in lockstep with your organization's business, data and technology strategies. That way, you'll ensure that AI initiatives support your company's objectives and contribute to its success. A well-designed AI strategy helps an organization identify new business opportunities and revenue streams.

It's also important to consider the organizational, leadership and cultural implications of implementing an AI strategy and to ensure that change management is in place to ensure successful transformation.

For many organizations, it makes sense to start by concentrating on simple but impactful use cases, gradually progressing toward more sophisticated use cases and applications of AI. Early successes can then be expanded to include emerging technologies — such as generative AI — allowing a more diverse set of employees to get involved. They can ask dynamic questions and get answers in a human-centered and conversational way without needing tech knowledge. Moving through these maturity levels can happen faster than you might think.

**Want to learn more?** Read "AI's inflection point: How to leverage generative AI, prebuilt models and intelligent automation for innovation and growth."

### As you develop your AI strategy, remember to:

#### Think big but start small

Start small with an AI project that is manageable and achievable. Iterate as you go, testing your AI models and refining them based on the results.

## Learn, iterate and scale

Monitor and evaluate the effectiveness of your AI models regularly and use the data to make informed decisions about further development. Remember, getting started with AI is a journey, not a destination. Developing effective AI models and integrating them into your business processes takes time, effort and resources. However, by taking a strategic approach and building on your successes, you can realize the benefits of AI and gain a competitive advantage in your industry.



To drive meaningful outcomes and maximize the value and impact of AI, ensure your strategy is in lockstep with established business, data and technology strategies. A cohesive and integrated approach helps ensure AI is an enabler in achieving your broader organizational objectives.



## Prioritize transparency

The decisions your AI models make should be understandable and explainable. Take a responsible and ethical approach to AI, ensuring that your AI applications comply with legal standards, such as privacy and data security regulations.

Want to learn more? Read [Responsible AI by design: Building a framework of trust | The Enterprisers Project](#).

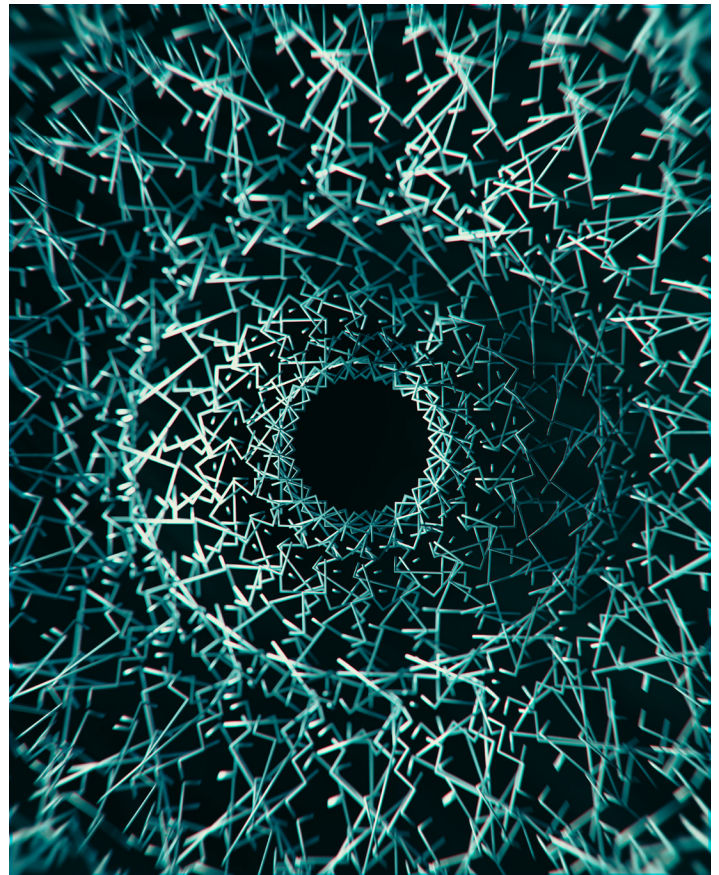
## Unlock the full potential of AI

AI is transforming the way businesses operate and create value. And for AI-powered, data-driven decision-making to work, you need a well-crafted AI strategy that's tightly aligned with your overall business objectives.

To see how Unisys can help, [contact us](#) or [visit us online](#).



Data is the lifeblood of AI, and a successful AI strategy requires a data-driven culture.



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