



Analyze patient data


Create better treatment guidelines

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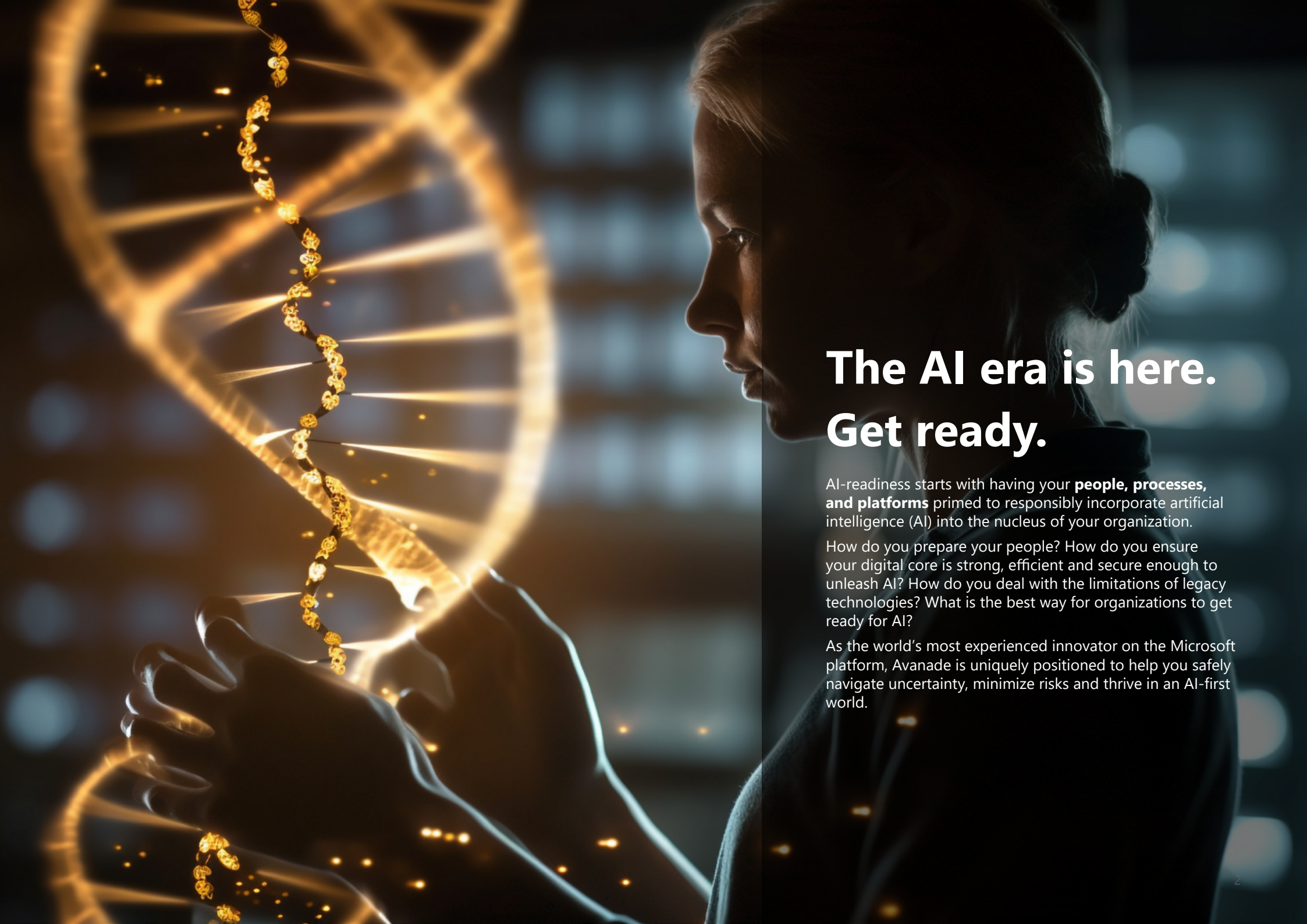
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Life Sciences: Are you AI-ready?

Prepare to uncover better data insights, faster
and accelerate new discoveries with AI



Improving patients' lives



The AI era is here. Get ready.

AI-readiness starts with having your **people, processes, and platforms** primed to responsibly incorporate artificial intelligence (AI) into the nucleus of your organization.

How do you prepare your people? How do you ensure your digital core is strong, efficient and secure enough to unleash AI? How do you deal with the limitations of legacy technologies? What is the best way for organizations to get ready for AI?

As the world's most experienced innovator on the Microsoft platform, Avanade is uniquely positioned to help you safely navigate uncertainty, minimize risks and thrive in an AI-first world.

The solution

It's critical that leaders enable their organizations and people to responsibly work and innovate with AI.

Establish these fundamentals now to accelerate business value from AI and adopt an [AI-first mindset](#).

AI Organizational readiness

The Avanade AI Organizational Readiness Framework provides a comprehensive assessment of your organization's business and IT areas. It offers detailed insights into AI readiness across people, processes, and technologies, enabling leaders to prioritize responsible actions for leveraging AI's benefits.

Find out more about [Avanade's generative AI strategy workshops](#)

Preparing your workforce for AI will require change management to get them comfortable and capable. Copilots are designed to help your employees and will not replace them.



Leaders need to consider more than just the technology implications of AI. To get ready for AI, organizations require a multidisciplinary approach spanning business and IT.

Take a multidisciplinary approach

So,
how do you get started?

Support your teams as they trial AI

Infuse trust across the enterprise with guidance



Minimize risks with well crafted specific guidance and policies so that your employees can understand where, when, and how to use generative AI safely and responsibly.

75% of business and IT professionals in Life Sciences believe AI will increase their organization's revenue growth by 2025, yet 68% say the organization does not have specific guidelines or policies in effect for responsible AI.

Findings from Avanade and McGuire Research 2023

Build a responsible AI framework and methodology

As leaders and organizations look to embrace AI, there are legal considerations that should be top of mind – like how to train models to respect intellectual property (IP) and attribute sources. **Avanade works with clients to use** an ethical framework and methodology to help organizations use AI responsibly, minimizing risks.

01

Assess impact

Determine the desired impact of the project.



Personal Impacts
Societal Impacts
Environmental Impacts

02

Apply values

Decide how to proceed based on organizational values.



Values adopted by the Organization

03

Establish controls

Use technology and processes to achieve and maintain desired outcomes.



Programmatic Controls

Make sure your cloud is AI ready

The imperative to embrace the cloud has never been more pressing for life science organizations. The traditional drug lifecycle of 10 or more years isn't feasible anymore. Now with the growing potential of AI in life sciences coupled with high market expectations for new drugs and treatments, a renewed sense of urgency has emerged.

But before diving headfirst into AI applications, the key challenge lies in ensuring that data is primed for AI and effectively managed and governed within a cloud environment.

To help you build a strong digital foundation, Avanade has **introduced a new cloud adoption insights platform called Avanade Cloud Impact**. This data-driven platform compares your planned or actual Azure consumption patterns with a set of rules derived from Microsoft best practices, Avanade's experience, industry data sources and your own service management tools.

To get started, Avanade provides a free, two-hour virtual workshop to help organizations define the best pathway forward.

We typically achieve savings of 20%-50% of cloud cost



Johns Hopkins and Answer ALS offer new hope to ALS patients

Find out how Avanade worked with Johns Hopkins and Answer ALS to update their cloud implementation to enable AI, leading to faster research results.

Business situation

A group of 1,000 ALS patients are participating in Answer ALS, a revolutionary medical research program founded and run by Johns Hopkins and the Robert Packard Center for ALS Research. Answer ALS is bringing together global research centers, leading technology companies, world-class researchers and ALS patients for one goal: to leverage artificial intelligence to help determine what causes ALS and identify potential treatments by spotting patterns in an enormous amount of patient data.

Solution

Once the Answer ALS consortium selected Azure as the backbone for the data research infrastructure, Azure expert Avanade was selected to lead phase one of the project.

We began with a design-led workshop that focused largely on deciding the functionality required and developing a roadmap. Using agile methodology, we built a powerful, secure data query engine that allows researchers to use tools they are already familiar with, one that is designed to scale as the project continues to build momentum.

Results

Participating researchers are now able to query a database of thousands of petabytes of new ALS-specific information. For quicker insights, queries can now return results within minutes or hours vs. weeks.

- Researchers hope the new insights will serve as the foundation for new clinical trials, which may lead to the development of successful treatment protocols.
- The project is already producing results. Sharing the Answer ALS data with a research group based in the Netherlands, scientists have identified a gene linked to ALS.

Prep data to build trusted AI solutions

To achieve your AI aspirations, you need to ensure you turn data into action and value. But you can't find the patterns and extract all the insights if your data is locked in disparate siloes and disconnected clouds.

To achieve digital transformation at scale, you need to unlock the value of all your data, finding every insight, efficiency and opportunity to put your data to work. To achieve your AI aspirations, organizations will need to harness even more of their data. But according to [Avanade research](#), 63% of business and IT leaders do not completely trust the data their company uses today.

You can't build value if your data is inaccessible, poorly organized, low-quality, siloed, or unsecure. The average organization loses millions every year due to poor data quality. Data breaches can cost far more, from fines to permanent loss of provider and patient trust.



Build the data platform best for your data estate and unleash AI

With modernized data on a unified platform, you can scale data science and applied intelligence across your organization. Avanade can help shape your data strategy and roadmap, and we can help you harness data modernization to deliver high-value innovation use cases.

Need help determining which approach is best for your organization?

Download our [data platform buyer's guide](#) to evaluate and prioritize the features most relevant to your data challenges.

Begin by exploring top AI use cases in life sciences

Clinical trials and supply chain efficiency top the list of priority use cases.

54%

of responding life science professionals on average ranked the use of decentralized clinical trials and enhanced supply chain efficiency and accuracy as a top priority for AI, according to an Avanade Global AI Survey.

68% of executives believe the benefits of generative AI outweigh the risks according to [Gartner](#) research.



In the life sciences industry, **clinical trials and supply chain efficiency** can be the difference in a patient getting life-saving pharmaceuticals or medical devices on time. The cost and time involved in clinical trials make it an ideal candidate for AI to streamline various aspects of the trial process, from patient recruitment to data analysis, significantly accelerating the development of new treatments.

Healthcare professionals and researchers can use **Microsoft Copilot** for Office to track the progress of clinical trials. Clinical trials are a critical part of the drug development process, and tracking their progress is important for healthcare professionals and researchers.

With Copilot, healthcare professionals can use Excel to track the progress of clinical trials and generate natural language summaries of the data.

Microsoft Copilot, or “Copilot,” allows users to interact with their crucial tools, from Microsoft Word to PowerPoint, using everyday language “prompts” or inputs. Its fundamental purpose is to act as a digital assistant.

When users type queries into the chatbot input field, the data is routed through the Microsoft Graph system for analysis and interpretation. Then, prompts are forwarded to the GPT language model for a rapid response.

Copilot introduces an entirely new way of working. The solution is embedded into all the Microsoft 365 productivity apps users leverage daily. You can access Copilot in Dynamics 365, Word, PowerPoint, and Microsoft Teams.

Prioritize use cases across the enterprise

Focus on those use cases of highest value.

Research and development

Drug development

Faster discovery and validation of promising targets; define testing protocol in clinical phase.

Clinical trial optimization

Generate synthetic patients for early-stage trials; predict likelihood of clinical trial success; automate finding eligible patients; find potential for irregular behaviors; detect propensity for developing diseases.

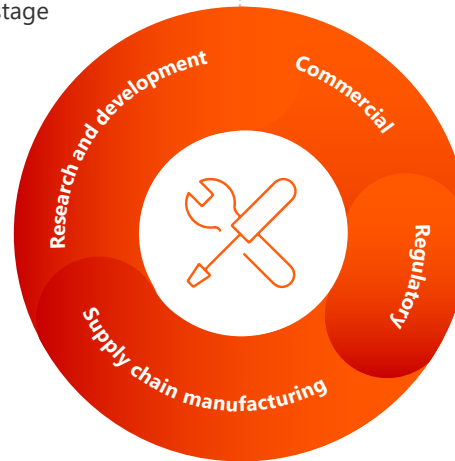
Supply chain manufacturing

GxP compliant documentation*

Completion of quality documentation with the correct attributes, sections and high levels of cross-functional integration.

Manufacturing batch predictions

Mine historical quality reporting to better understand, predict and eliminate issues in the manufacturing process.



Commercial

Next best action

Provide a front-end for sales representatives to receive natural-language advice on how to engage with healthcare providers based on their specialty and patient base.

Launch documents / assistance

Generate support documents within language and regional regulatory requirements; context of treatment notes.

Regulatory

Regulatory and legal drafting

Create first drafts of regulatory reports or legal documents, pulling data from multiple sources.

Safety assessments

By analyzing vast amounts of data, it enables pharmaceutical companies and regulatory agencies to conduct more thorough safety assessments and potential adverse drug reactions that may have gone unnoticed.

**GxP is a set of rules that are required for the safety and quality of pharmaceutical products.*

AI in Action

Informatici Senza Frontiere (ISF), a nonprofit organization, wanted to strengthen the Hospital Pharmacy module to ensure better access to and management of medications. The solution developed enables intelligent management of the pharmaceutical supply chain – from planning new purchases to distributing them – both within the hospital and at home.

The interoperability of the solution with Open Hospital's Clinical module and the Laboratory Examination Management module will provide a detailed, complete and easily accessible view of patients' data, status and clinical history.

Get immersed in AI

Learn | Explore | Build

Avanade will join your team on-site (or remotely) to go in-depth on the business value of AI, the latest tools from Microsoft including the latest OpenAI technologies, the technical architecture and use cases that can be realized today.

We will partner with you to assess the readiness of your employees, providers, patients and ecosystem partners, so you can prioritize actions that enable them to adapt and evolve with AI. We will also help you establish governance and operating models to sustainably scale and realize value from AI.



Choose the path that is right for you

1

Two hours learn and discuss

Generative AI introduction and Microsoft products and use case overview based on OpenAI. Identify questions and brainstorm use cases for your industry.

2

Two days hands-on workshop / design thinking

Workshop focusing on deeper dive to prioritize use cases, journeys to explore, and building trust considerations.

3

Two weeks proof of concept (PoC) / two months minimum viable product (MVP)

Directly build a PoC or MVP to prove the technology and value for one use case based on readiness and use case.

OR

Six weeks strategy assessment

Strategy assessment to help define data readiness, and multiple complex use cases while also reviewing use cases through responsible AI frameworks, defining a roadmap, and return on investment.

Why Avanade?

Unparalleled Microsoft, data and AI expertise

Avanade has partnered with Microsoft on AI for almost a decade, and hundreds of clients rely on us to help them responsibly innovate and work with AI to achieve things never possible before.

Our privileged access to the development of Microsoft's new Copilot solutions, combined with our long-standing experience of how to make the most of your existing Microsoft investments, enables us to bring unique capabilities to help you more quickly ready your people, processes, platforms and budgets for AI and to responsibly scale AI to unlock more value and growth and transform your business.



End-to-end services



Industry Expertise



Emerging Technology



Experience Services



Advisory Services



Solution Delivery



Managed Services

Industry

41 of the 100
top hospitals as ranked in the US by Thomson Reuters

Trusted by 90%
of Fortune 500 life sciences companies

All top 10
global pharmaceutical companies

21 out of 25
largest US Health Plans

3 out of the 6
largest biotech companies

Winner, Microsoft Healthcare
Partner of the Year (2020)

Data and AI

40K+
Data & AI professionals

20K+
Years of data management experience

4K
Data scientists

18x
Consecutively names Microsoft Partner of the Year 2022

2.2K
Certified data architects

6
4 Data Innovation Centers
+ 2 Data Studios



Do what matters

Imagine what you will do with AI

Avanade is a recognized leader in delivering Microsoft solutions to healthcare and life sciences organizations. For more than 20 years, we have worked with organizations worldwide developing and implementing solutions.

Contact Avanade [avanade.com/contacthealth](https://www.avanade.com/contacthealth)

[avanade.com/ai](https://www.avanade.com/ai)

Avanade is the leading provider of innovative digital, cloud and advisory services, industry solutions and design-led experiences across the Microsoft ecosystem. Every day, our 60,000 professionals in 26 countries make a genuine human impact for our clients, their employees and their customers. Avanade was founded in 2000 by Accenture LLP and Microsoft Corporation. Learn more at www.avanade.com

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