# What innovations will you discover with data and AI as your guiding light?

The EY-Microsoft alliance generates value for clients by illuminating the power of data and AI.

ey.com/microsoft

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The better the question. The better the answer. The better the world works.



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Harness the power of data, analytics and generative AI to drive exponential value.

One of the major challenges faced by organizations is harnessing information from siloed data sets to establish a single source of truth. With advances in automation, analytics and generative AI, organizations can now uncover valuable insights from data that was previously unavailable. Consequently, organizations are increasingly investing in these capabilities to optimize performance, enrich customer and employee experiences, speed time to market, and realize new sources of sustainable growth.

While businesses large and small want to take steps toward digital transformation and gain the most from data-enabled decisionmaking, many executives say progress has been stalled because they don't have a clear path forward.

At this stage, only 44% of large corporations say they're making good progress on digital transformation. In addition, many executives need help learning to use technology in an optimal way to uncover the value of their data.

"Many of the clients have a variety of data sources across business units, geographies and enterprise systems that are data-rich, but they struggle to develop insights that drive business outcomes, new actions and decisions," says Hugh E. Burgin, EY Americas Microsoft Data and AI Leader.

> Only 44% of large corporations say they're making good progress on digital transformation.

# Digital transformation is becoming an imperative. If you don't use data to transform your business, will it make you obsolete?

In the following guide, we'll explore how the EY-Microsoft alliance can help organizations use cloud-based platforms, artificial intelligence (AI), machine learning (ML), and other digital tools to unlock their data. We'll highlight how companies are applying those technologies to gain insights at scale to unveil new opportunities and drive business outcomes.

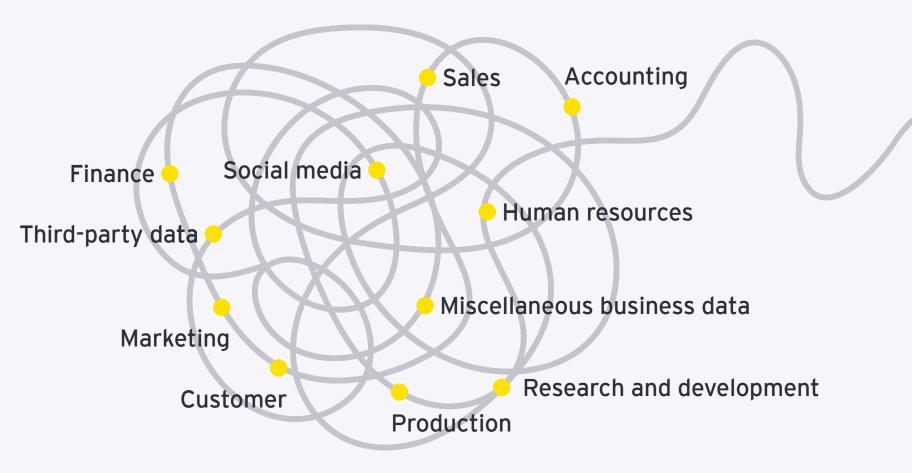
Source: 2020 global EY report - "Tech Horizon: Leadership perspectives on technology and transformation

# Traditional data structures do not address today's needs.

As organizations strive to use data more strategically, they realize data exists in many places and often encounter significant challenges that prevent them from fully realizing the potential of analytics.

#### Challenges include:

- Unifying the data structure
- Accessing relevant, accurate information in real time
- Analyzing information and acting on trusted insights
- Offering self-service options
- Benefiting from agility and innovation
- Managing an evolving technology landscape
- Aligning business and IT stakeholders



Source: U.S. Geological Survey estimates

# Companies face 15% to 25% operating budget loss due to poor data quality, redundant data and lost data.

Cloud scale analytics accelerate insights and drive better business outcomes by leveraging data. Organizations realize differential value when they unlock their data estate and treat data as a strategic asset.

# Using data, AI, ML, simulation, and automation helps organizations:

- Make informed decisions against changing conditions and demands.
- Solve core business problems by better informing business strategy.
- **Enable self-service for insights that matter.**
- Collaborate among C-level executives.
- Optimize operations and working capital.

To unlock the value of data, organizations need to enable an integrated, connected data experience across a distributed, complex data landscape. To achieve this goal it is important to use a data mesh architecture.

Due to complex and constantly changing data ecosystems, companies are using data mesh principles and modern architectural patterns to realize value from cloud-scale analytics. Data mesh is the foundation for modern architecture and data strategy.

As part of a data mesh architecture, enterprises can quickly solve specific new use cases by getting access to data virtually and more quickly, so that organizations can focus on business outcomes rather than data foundations.

Today's organizations benefit from the power of data mesh, and when combined with a modern data platform on Microsoft Azure, the results are significant and fast.

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If companies don't start to unlock their data, they're going to be hamstrung by their competition. It's a race to become more effective.

- Hugh E. Burgin, EY Americas Microsoft Data and AI Leader

# Build confidence, trust and new possibilities for innovation with generative AI.

As industries grapple with the rapid pace, capabilities and ethical consideration of generative AI, EY teams are poised to help organizations harness its vast potential. Experience in artificial intelligence, automation and machine learning is further strengthened by solid risk mitigation, compliance and data governance proficiency. In addition, with its extensive crossindustry knowledge and the use of an advanced suite of Microsoft capabilities, EY teams support organizations to secure an early lead in a constantly evolving technology landscape.

#### Accelerate business value through the power of Azure OpenAl

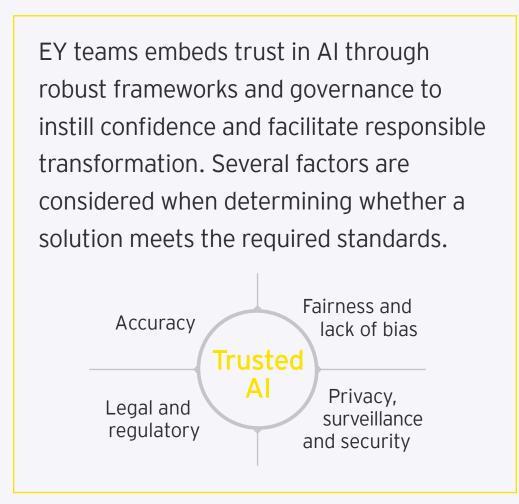
Microsoft's Azure OpenAl combines the benefits of generative Al with the security and enterprise-grade features of Azure, propelling both business and human creativity to new levels. Azure OpenAl has incredible potential to augment efficiency, personalization, research and development, and drive competitive advantage.

The EY Business Transformation with the Azure OpenAl solution suite helps organizations determine how Azure OpenAl aligns with their companies' goals and objectives, governance and responsible Al practices, and its impact on the business, use cases and target operating model. EY and Microsoft mitigate potential risks and collaborate with clients to put the right safeguards and controls in place to responsibly operationalize using generative Al.

Together, EY and Microsoft guide organizations on how to skill up on Azure OpenAI and seamlessly integrate it into their core technology and information systems. EY and Microsoft help organizations to leverage Azure OpenAI to define new business models, boost efficiency, increase productivity and enhance resilience.

### EY teams collaborates with clients to unleash the potential of Azure OpenAI and realize powerful business outcomes:

- Help accelerate financial transformation by simplifying the navigation of complex data structures, thereby speeding information understanding, synthesis and reporting.
- Revolutionize how people comprehend policies, processes and vast amounts of information, and support more relevant and insightful responses.
- Unlock new data sources, such as geospatial data, and integrate them with enterprise business data using a user-friendly natural language interface.
- Gain a competitive edge by optimizing online sales through comprehensive and enriched product data.



# Clear business imperatives drive data transformation success.

To realize the complete power of digitally enabled business transformation, companies must define the business imperative and work together, combining executive and technical teams, to achieve the objectives.

Strong C-suite sponsorship and engagement improve the outcome. Leadership buy-in facilitates close alignment with business goals, allows for greater agility, gives access to improved resources, and generates support from other key stakeholders, giving the initiative greater traction.

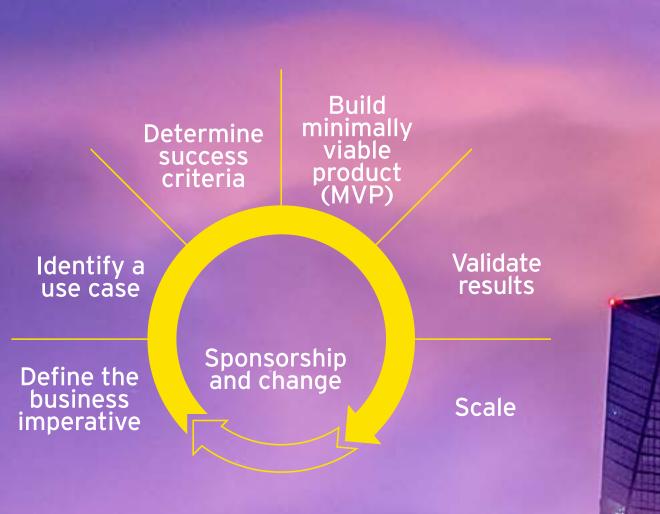
In today's business environment, success is easier to achieve on an individual project level and helps convince other internal stakeholders to get on board, thereby smoothing the way to organization-wide adoption.

# C-level sponsorship is vital for success

To get started using data and AI requires developing, testing and modeling scenarios based on data insights, not intuition. However, having the permission to adopt new ways of working requires C-level sponsorship and support.

#### Examples of the critical questions data and AI can address:

- A retailer wants to know how much poultry to order from each supplier throughout the week.
- A pharmacy wants to know the precise time to order and stock an expensive prescription drug that a customer needs every three months.
- A manufacturing company wants to track its greenhouse gas emissions and use data science to reduce its carbon footprint.
- An airline fleet operator wants to perform periodic maintenance and minimize downtime by using sensor data to predict and prevent faults.



# EY and Microsoft intelligent solutions build and accelerate trust in your data.

We develop and deploy data and AI solutions that inject intelligence, automation and confidence in key areas across the enterprise to dramatically improve operational and financial performance and accelerate time to value. Our alliance delivers EY business ingenuity, industry knowledge and market-recognized Microsoft AI capabilities to scale data and AI across all sectors. These solutions, powered by a variety of leading Microsoft technologies such as Microsoft Azure, help organizations extract value from their data to drive business outcomes:

# Enable data-centric insights and innovation

Develop a custom view of business data that unifies and modernizes data estates to maximize vour investments in Azure data services. Leverage a repeatable approach to align business and data strategy. Design and implement an architecture to better extract valuable insights from disparate data repositories. Link business imperatives to technical implementation to support desired business outcomes.

### Optimize demand forecasting and inventory

Unlock insights to drastically improve forecasting accuracy based on business and customer data. Understand inventory and working capital drivers specific to client domains to accurately simulate use cases. Before deploying a new strategy, test different approaches, identify the impact to inventory management and develop an industry leading approach to balancing new demand and supply.

# Speed response through automation of human tasks

Reproduce human-based tasks using intelligent automation to extract insights from business documents and virtual agents programmed with natural language conversation skills to interact with customers and address their needs using dialogue trees. The underlying Azure AI architecture integrates with back-end systems to reduce costs and increase consistency, while reducing review and processing time.

More than 60% of chief financial officers say demand has increased for forward-looking analyses, customer insights, live performance reporting and governance, risk and compliance.

Source: EY Global FAAS Corporate Reporting Survey

# Apply intelligent financial forecasting and scenario modeling

Use machine learning and generative AI for business planning across the enterprise. Quickly generate accurate forecasts and test recovery strategies for disruptions. Utilize generative AI to simulate changes in market and economic conditions, identifying potential opportunities and risks. Navigate uncertainty with confidence and agility.

## Create secure data enclaves for research applications

Enhance research capabilities and unlock business value by leveraging Microsoft Azure cloud services to improve computing capacity at scale and better protect data. Enrich researcher experiences with streamlined efficiency and secure access to a wide variety of data types, content and analytical tools.

EY teams combine business acumen, knowledge of Microsoft solutions and deep technical capabilities to unlock the power of data and drive operational value for clients.

# Forecast and plan more accurately

- > The client wanted to know when to buy power in utilities and natural gas.
- > We built a generative AI-powered tool to automatically create product detail pages across multiple retailers.
- > We built a model that predicted price fluctuations and modeled different scenarios based on these variations.
- We gave traders an interface to enable a data-driven approach that minimizes biases.

# Improve financial decisions

- The client wanted to transform their back office to create more efficient operations and better availability of trusted data sources, with standardized finance and control processes.
- We built a cross-organization operating model that includes data visualizations with real-time insights.
- We helped the finance department provide strategic, data-driven insights to the rest of the organization to improve financial decisions.

# **Boost employee** and customer insights

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The client wanted to provide users with a self-service platform to gather insights.

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- > We helped create a cloud-based platform and assisted in implementing a standardized, automated tracking and reporting model across the organization.
- > We leveraged large language models on call logs to improve the quality and consistency of insights to boost contact center agent performance.
- across business units.

# Helped implement smarter production processes

> The client wanted to fix scheduling issues in its plant that were causing delays in manufacturing due to manual calculations and processes.

> We built and helped in implementing a cloud-based platform to support dynamic scheduling.

We developed transformed customer care using AI, automation, speech recognition, process mining, document analysis, and intelligence virtual agents.

> We helped anticipate unplanned changes in the schedule and improve production output.

# Enhance patient outcomes

- > The client wanted to understand the socioeconomic needs impacting the health of their patient population to help deliver equitable and personalized care.
- > We applied predictive analytics to develop and test a way to proactively identify patients before they reach high-utilization status and provide intervention.
- > We helped reduce the cost of overall care while offering an exceptional, personalized health care experience.

We reduced manual and costly processes to streamline data delivery and insights

Data mesh stretches across silos and connects threads of information to questions business leaders ask. Organizations struggle to capitalize on the vast amount of data they generate and collect. Activating data mesh principles to manage data across the enterprise while scaling AI and ML will unlock the value of data for business transformation. Data mesh democratizes data while further enabling the trust that the business needs for self-service.

#### Data mesh principles include:

- Data as a product
- Domain-oriented data ownership
- Data governance federated and monitored centrally
- Self-serve data platform

Accounting Sales Social media Finance Human resources Third-party data Miscellaneous business data Marketing Customer Research and development Production

Today's organizations benefit from the power of data mesh core principles, and when combined with a modern data platform on Microsoft Azure, the results are significant and fast.

Combining data governance, architecture, AI and ML, data mesh unlocks cloud-scale analytics for enterprises. As part of this approach, a modern data mesh architecture will help address new use cases at speed.

EY teams leverage Microsoft technology capabilities and a repeatable approach to help organizations align business and data strategy as well as design and implement a data mesh architecture.

Organizations that use this concept innovate and scale solutions more effectively while boosting user and customer experiences. Stakeholders achieve the data insights and answers to support their decisions, accelerating time to value.

> Businesses that use a data mesh approach can experience an

80%

faster time to market for new initiatives.

# EY and Microsoft work together to unlock the power of your data and apply it at scale for transformational business outcomes.

The EY-Microsoft alliance distinctively positions EY teams to help companies guickly develop and implement an unequalled data-driven strategy across the enterprise and across sectors.

# Advantages of working with EY teams

- Proven digital transformation success, having supported over 4,000 clients and executed over 16,000 projects
- Dedicated Microsoft Services Group and more than 25,000 data and AI professionals work in 15 data and AI labs across the globe, 25 virtual delivery centers, and 7 neurodiversity labs
- 60+ published solutions in the Microsoft Marketplace and Appsource
- 2021 and 2022 Microsoft Data and AI Partner of the Year Awards, including Global Advisory Partner of the year 4 years in a row
- Strong industry and technical experience and deep business capabilities

# Advantages of working together

- Joint development of optimized solutions for diverse industry sectors
- Collaborative, team-based approach for supporting clients
- Codevelopment of distinctive intellectual property and processes to harness the value of emerging technologies to address business trends
- Innovative frameworks to help clients maximize return on investment

# it is about bringing multiple companies

# To unlock the magic and unlock the potential, together to solve and work on these problems.

# Advantages of working with Microsoft

- Has a reputation as a global technological innovator, built over decades
- ► A comprehensive set of capabilities across databases, analytics and governance with prebuilt integrations to accelerate insights
- Enables richer data experiences for business users with the Microsoft Cloud and Azure Intelligent Data Platform
- Recognized leader in data and analytics by Forrester, Gartner and IDC

- Lyn Bird, Vice President, Cross Industry Enterprise, Microsoft

EY teams have the right credentials to help optimize and scale the Azure Data Platform and AI technologies to support you to become more data-driven.

#### **Our dedicated Microsoft Services Group**

Our innovative technology consulting and solutions are infused with Microsoft's powerful knowledge and technologies. The Microsoft Data and AI Consulting service is dedicated to Microsoft cloud services and other elements of the Microsoft portfolio.

#### EY industry recognition

- A Leader in the IDC MarketScape: Worldwide Artificial Intelligence Services 2023<sup>1</sup>
- A Horizon 3 Leader in HFS Data Modernization Services report, 2023<sup>2</sup>
- A Leader in Forrester Wave: AI Service Providers, Q4 2022<sup>3</sup>
- A Leader in the Gartner Magic Quadrant for Data and Analytics Services Providers, 2022<sup>4</sup>

#### EY Microsoft awards

- 2023, 2022, 2021 and 2020 Global Advisory Partner of the Year
- 2023 US Security Compliance Partner of the Year
- 2023 Global Cloud Native App Development Partner of the Year
- > 2022 Global AI Partner of the Year
- 2022 Global Security Partner of the Year
- > 2020 Global Financial Services Partner of the Year
- 2020 Global Energy Partner of the Year

<sup>1</sup>IDC MarketScape: Worldwide Artificial Intelligence Services 2023 Vendor Assessment, May 2023, #US49647023e <sup>2</sup>HFS Horizons Report: Choosing the best provider for Data Modernization Services, 2023, May 2023 <sup>3</sup>The Forrester Wave: AI Service Providers, Q4 2022, November 2022

<sup>4</sup> Gartner Magic Quadrant for Data and Analytics Service Providers, February 2022, G00746165

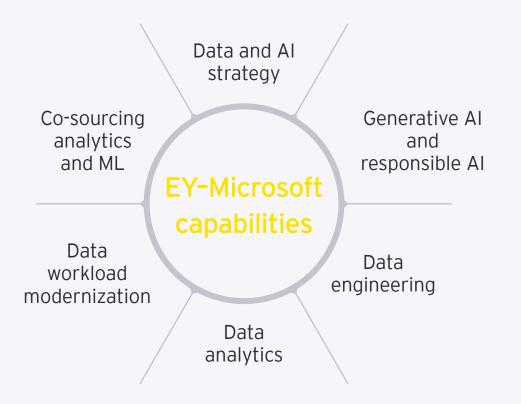
# EY advanced specializations in data and AI

- Advanced specialization Analytics on Microsoft Azure
- Advanced specialization AI and machine learning in Microsoft Azure
- Advanced specialization Low code application development

# EY and Microsoft technical certifications

EY professionals have demonstrated successful implementations, capabilities and technical certifications to meet the rigorous requirements to attain these competencies:

- Gold Cloud Platform
- Gold Data Analytics
- Gold Data Platform
- Gold DevOps
- Gold Security



# Key contacts



Hugh Burgin

EY Americas Microsoft Data and AI Leader



**Chris Paradise** 

**EY Americas Microsoft** Go-to-Market Leader



Luke Pritchard

**EY Americas Microsoft** Data and AI Managing Director



With the EY-Microsoft alliance, we're helping our joint customers apply EY's in-depth business and sector expertise along with the power of Microsoft Data and AI technologies to uncover insights and drive business outcomes.

# Harman Cheema

Microsoft Corporation Data and AI Alliance Director

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- Nate Harris, General Manager, Global Leader, Data and AI, Microsoft

# EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

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#### **EY and Microsoft**

The EY and Microsoft alliance combines deep EY insights and experience in disruptive industry trends, new business models and evolving processes with scalable, enterprise cloud platform and digital technologies from Microsoft. EY and Microsoft can help accelerate digital transformation with advanced solutions that support enterprise strategy, transform customer and workforce experiences, create new, data-driven business models, build intelligent, automated operations and bring confidence that these innovative solutions are secure, compliant and trusted. For more information, visit ey.com/microsoft