# Scaling data science to create new business value

Four questions to uncover the value of AI at scale



### Why enable AI at scale

- Many organizations clearly recognize the importance of technologies such as the cloud and AI. Yet few have used AI at an enterprise level to achieve significant growth.
- Now with businesses facing economic uncertainty, shifting buying behaviors and continued talent shortages, the potential of AI at scale is no longer a goal. It is an essential business priority.
- Typically, companies that are successful at scaling AI outpace the competition, improve operational efficiencies and design an exceptional customer-centric approach.

#### 3 out of 4 companies at risk

Most C-suite executives believe if they don't <u>scale</u> <u>artificial intelligence</u> in the next 5 years, they risk going out of business entirely.



An <u>Avanade Al Maturity survey</u> found that 83% of respondents who are using artificial intelligence (Al) today agree that Al will give them a competitive edge in the future and a return on investment is expected of two to five times depending on the level of adoption.



## Rethink your AI journey

#### Four key questions to consider:

- 1. Do you have a data strategy aligned to a business priority and use case?
- 2. Is your data in the cloud?
- 3. How accessible is the data to your value builders?
- 4. How quickly can you go from innovation to value at scale?





Question #1: Do you have a data strategy aligned to a business priority and use case?

- Business leaders need an end-to-end data strategy tied to their topline business value drivers to achieve maximum growth wne return on investment.
- We combine design thinking, applied experience and real-world Microsoft expertise to find and prioritize opportunities.
- Then we co-create a value focused plan that can be quickly and efficiently implemented.



## Question #2: Is your data in the cloud?

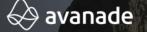
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- Digital-native companies and traditional competitors are increasing business agility by unlocking the value of the cloud.
- With Avanade, clients can take advantage of everything Microsoft Azure has to offer, accelerating their transition to the cloud without disruption.

200+ Azure services are available increasing your pace of innovation

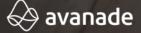
### Question #3: How accessible is your data to your value builders?

- Simplifying how data and AI works is essential if businesses are going to embed data and AI into business processes and customer experiences.
- Azure Databricks and the broader Azure ecosystem offer enterprises the ability to scale data science and empower data engineers to work more efficiently while business users drive value throughout the organization.



### Question #4: How quickly can you go from innovation to value at scale?

- Effectively scaling impactful innovations is more than having data available.
- An organization needs an end to end process that supports constant innovation, rapid development and a willingness to enhance legacy processes.
- Data scientists and data engineers can benefit from Azure Synapse Analytics with the ability to connect data and insights from large amounts of data and then effectively scale across a business process within one tool.



## Child/eldercare company ramps up quickly to handle huge demand

#### Challenge

This childcare and eldercare provider has a large global presence, with 32K+ employees, 1K+ care centers and many corporate clients who offer care services as an extended benefit to employees.

The client portal and call center couldn't keep up with a huge surge of demand related to COVID-19—from existing users as well as from new employers hoping to sign up.

#### **Solution**

Avanade quickly responded with a threepronged approach: stabilize the current solution with performance-tuning, create a new website to offload new employee registrations and benefits drawdown, and build out a virtual assistant to offload call center support.

#### Results

#### Improved performance

Reinforced the current complex solution (350K+ lines of code across 79 projects) with instrumenting and tuning

#### Support for new signups

Onboarded new customers on a separate website to minimize impact to experience for all customers

#### Better CX

Resolved customer issues more quickly with a new FAQ and chatbot that will be continuously improved





### Rethinking the possible

#### Challenge

As costs to maintain stock levels and transport products rose, <u>thyssenkrupp Materials Services</u>, wanted to think outside the box. The company, which is a materials distributor located in Essen, Germany with 30 warehouses nationwide, turned its attention to the possibilities offered by Al in the cloud.

#### **Solution**

thyssenkrupp turned to **Avanade** to help build a cloud-based platform using **Microsoft Azure** cloud native services and **Microsoft Power BI** for visualization that could automatically analyze data and run simulations based on operational hypotheses. The power of the platform lies in its ability to run simulations – based on inputted network configurations – that process large amounts of data and intelligently analyzes results.

These complex simulations are efficiently done using **Azure Databricks'** scale and flexibility to help calculate the impact on transportation costs and inventory levels.

#### Results

By understanding the impact of changes on the supply chain network upfront, thyssenkrupp has improved performance, scalability, and reliability to increase efficiency, decrease cost, and reduce CO<sub>2</sub> emissions.



## Data platform improves customer insight and application process retention

#### Challenge

The client had a problem with customers abandoning the credit card application process before completion because they treated every customer the same. The client needed to generate more insights into their customers and offer a more personal experience to achieve their goal of increasing conversions of credit card applications.

#### **Solution**

The client partnered with **Avanade** to create a data platform using **Microsoft Azure** cloud native services that brought together historical and customer data into a centrally governed location using **Azure Databricks** and **Delta**. To improve insight into their customers, the client's data scientists leveraged Azure Databricks and **Azure Machine Learning** service to create recommendation models that offered their customers different credit cards based on the insights gathered on the customers.

#### **Results**

The solution helped the client more effectively segment their customers and improve the customer experience of applying for a credit card. As a result, the client was able to make better recommendations to their clients and improve the number of clients that completed the credit card application process.





## Global pharma company operationalizes analytics and data science challenge

#### Challenge

Moving from an on-premise analytics system to Azure, the client wanted to expand and operationalize their data science capabilities to accelerate and improve insights into their clinical trials.

#### Solution

Avanade built a data platform leveraging Microsoft Azure cloud native platform that modernized how the analytics team fulfilled clinical trial inquiries from the business focusing on speed and consistency.



Additionally the client's data science team used the Azure solution to build the following capabilities into their data preparation:

- Automation of majority of their data preparation
- Experimentation, validation, and operationalization as standard phases of their models
- Promotion of reuse of data transformation scripts, training algorithms, and model validation approaches

Azure Databricks was uniquely positioned to act as both the big data transformation engine to prepare the data for both use cases and the data scientists' experimentation and training environment.

#### **Results**

The solution allows the clients' analytics group to answer the business' critical questions about its clinical trials faster and more repeatably. The reduction in repeat work and improvement of data science capabilities allows the team to reduce costs and uncover new revenue opportunities through their new models.



## Why Avanade

Created by Accenture and Microsoft, Avanade helps clients harness **Microsoft Azure cloud computing services** to drive business results from initial set-up, through design, deployment, and ongoing management. We bring together the world's largest community of experts on Microsoft-based solutions.

- 4,500+ global data engineering, integration specialists, and data science and AI engineers
- 18,500 + Microsoft Certified Professionals
- 90+ Microsoft partner awards
- 19 Microsoft Gold competencies
- 38,000 skilled and diverse professionals globally



Microsoft Partner

## Get started today

#### Schedule your Data Value Workshop

Let Avanade and Microsoft help you ignite engagement around Al at scale to ensure your Azure investments yields desired business results.

#### Participate in a Virtual Azure Data Studio Session

The 2-4-hour virtual Azure Data & AI Studio event accelerates the enablement of end-to-end data transformation journeys on Azure, ensuring you maximize the business value of your data and investment in Azure.

#### Learn more about these workshops:

Contact us



