



Do what matters

AI @ Scale with Avanade's MLOps Framework

Last Revised October 2022

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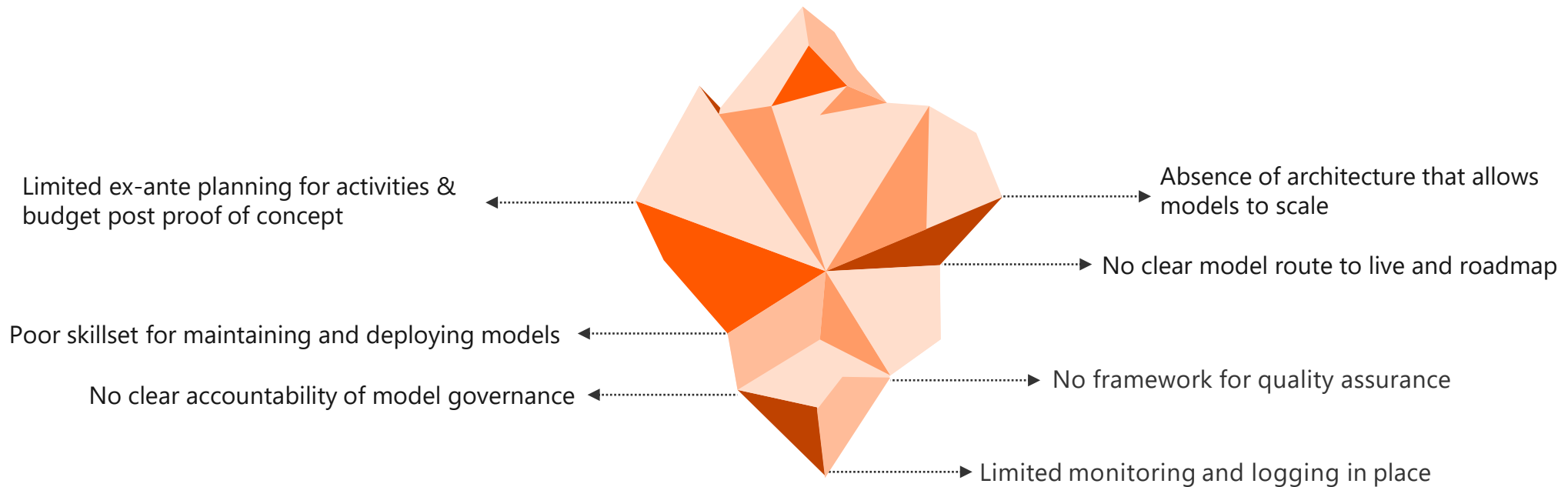
Offering: ML Ops Framework

Why Avanade?

Get Started

MORE THAN 50% OF DATA SCIENCE PROJECTS DON'T MAKE IT TO PRODUCTION¹

- **60%** time of data science projects is spent on data wrangling²
- **10%** time is spent on developing algorithm powering the solution²



REFERENCES | ¹ Top Strategic Technology Trends for 2021, Gartner [\(Link\)](#) | ² Based on Accenture Canada Data Science & ML Engineering experience

Industry Pain Points



Out-Dated ML models

Lack of model maintenance processes. Even if model decay is identified, organizations cannot regularly update models in productions because of resource intensive ML cycles.



Platform Collaboration

Shortage of collaboration among Azure resources. Complementing Azure stack capabilities allows ML lifecycle enhancements.



Reproducibility and Scalability

Need of re-usable & modifiable ML + Ops pipelines. Exigency for growth on demand for speed and volume of model executions.



Effort and Time

Extensive effort and time resources from different personas: data engineers, data scientist & DevOps engineers navigating manual pipelines that leads to slower deployments with increased quality and consistency.



Governance

Urge for continuous monitoring, version control & role collaboration. Businesses incur in costly audit processes in order to ensure compliance.



Value Realization

Many businesses have not realized the benefits of AI because models have not been productionized.

Machine Learning Operations (MLOps)

Accelerate end-to-end management of ML models.

Avanade's MLOps Framework is an Azure and Databricks based accelerator that allows users to train, deploy and monitor ML projects from development to productive environments to **uncover critical data insights and deliver faster time to market.**

Outcomes:

- ✓ Faster Insight discovery and time to market
- ✓ Lower cost of data analysis
- ✓ Host hundreds of models in central location
- ✓ Consistency and governance

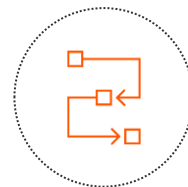
Our Point of View on MLOps

As a process at large, we see MLOps as more than an opportunity, but rather an **enterprise-lifestyle** change in how you manage and control your ML lifecycle today.



Swift Innovation

Enhanced reusable pipelines and automated configurations with a minimum requirement of human intervention.



Have flexibility and scalability

Built in cloud to scale to hundreds of ML models that can be deployed in different deployment environments



Trust your own data insights

Your machine learning operations will be monitored, consistent, and trustworthy. Above all you will have full control of it.

Avanade's MLOps Framework

Accelerating AI @ Scale with Avanade's MLOps Framework across both pure Azure plays as well as hybrid Databricks & Azure.

Business Need

Businesses face challenges scaling and ensuring they realize the value from their AI / data science projects. Key challenges include:

- IT/Analytics teams **spending more time on data wrangling** than model development.
- Poor skillsets for maintaining and deploying models **leading to out-dated ML models**
- No clear accountability of **model governance** or **ability to collaborate across the platform**
- Absence of architecture that allows **reproducibility and scalability**

Value Proposition

Avanade's MLOps Framework accelerates the end-to-end management of ML models at scale to uncover critical data and business insights and deliver faster time to market. Key value proposition includes:

- Highly configurable and customizable framework to align with current architecture
- Automated end-to-end ML lifecycle that optimizes client's total cost for ML
- Multiple models can be trained, packaged, compared and deployed leading to faster insight discovery
- Built in cloud for solutions to scale to any size

Approach

Our standardized MLOps delivery approach has been delivered, refined and enhanced based on many large global enterprise clients MLOps deployments. The approach typically includes.

Discovery & Demonstration showcasing MLOps framework..

MLOps Value Assessment to identify requirements, understand value proposition for stakeholders and define high level roadmap.

MLOps MVP deploying an MLOps MVP in 12 weeks

MLOps as a Service providing ongoing feature enhancements, framework improvements, and additional data science use cases



Offering: Avanade MLOps Framework

What we will deliver	Typical outcomes	Typical delivery timeframe
<p>An MLOps framework that supports the end-to-end management of ML models at scale to uncover critical data and business insights and deliver faster time to market.</p> <p>Covers both pure Azure stack and hybrid of Azure & Databricks.</p>	<p>Automated end-to-end Machine Learning life-cycle that optimizes client's total cost for ML.</p> <p>Multiple models can be trained, packaged, compared and deployed leading to faster insight discovery.</p> <p>Adapts to business and project requirements by allowing the use of different ML deployment environments.</p> <p>Built in cloud for solutions to scale to any size.</p>	<p>12 Week MVP with ability to provide ongoing Managed Services / MLOPs as a Service support</p>

Avanade is the global market leader in **building innovative Microsoft solutions**

As a joint venture, formed in 2000 by Accenture and Microsoft, Avanade brings the best in Microsoft capabilities. With unique industry insights, unrivaled expertise and breadth of services, our 60,000 people **do what matters** for our clients and their customers every day.



60,000

Skilled and diverse professionals – **29%** of whom are women



60,000+

Microsoft certifications, more than any other partner



10,000

Projects with **4,000+** global clients since inception



18

Gold Partner Competencies

Highest level of Microsoft partnership across all 18 competencies



82

Locations across **26** countries



17x

Winner of Microsoft Global SI Partner of the Year

We're recognized as the **number 1 Microsoft partner**

By Microsoft

Winner of the 2022 Microsoft Global SI Partner of the Year for the 17th time

- Dynamics 365 Customer Insights & Marketing Partner of the Year
- Dynamics 365 Customer Service & Field Service Partner of the Year
- Manufacturing & Supply Chain Partner of the Year
- Country Partner of the Year: Austria, Chile, Denmark, Poland, Singapore, Spain, Sweden

Zero trust champion – Microsoft Security Excellence Awards 2022

Microsoft Global Partner for Microsoft Security Services for Enterprise

By the ecosystem

Delivering technology solutions that drive innovation, better workplaces, flexibility and security



- 2022 Databricks Global Partner of the Year
- 2022 Databricks EMEA Partner of the Year



Partnering Excellence Sitecore Partner Award, 2022

- Named Sitecore's Global Partner of the Year, 2021
- Sitecore Experience Award Winner 2021

By the market

Recognized as the global market leader for implementing Microsoft Services



- 2021 IDC MarketScape: Named to the Leaders Category in Worldwide Microsoft Implementation Services
- 2021 IDC MarketScape: Named Leader for Asia Pacific Microsoft Dynamics 365 Implementation Services
- 2020 Leader IDC MarketScape: Worldwide Digital Workspace Services



Named Leader in Nov 2021 Forrester Wave: Microsoft Business Applications Services Evaluation





Named Leaders in Everest Group's PEAK Matrix for Microsoft Dynamics 365 Services

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A unique 360° relationship developed over decades to help clients achieve more with innovation


20+
Years of partnership


32,775
Projects delivered


5K+
Clients served

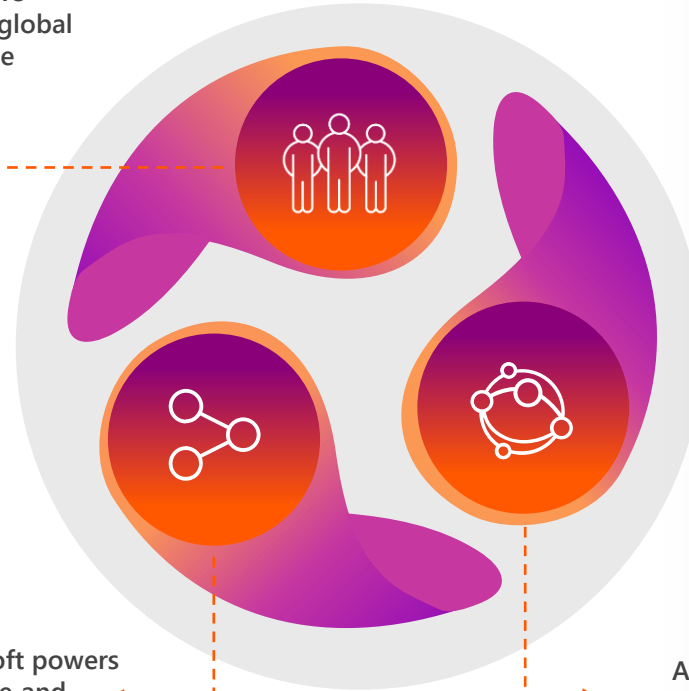

65K+
Microsoft-skilled resources


20+
Industries served


17x
Microsoft Global SI Partner of the Year

Avanade, Accenture, and Microsoft Combined

Together, we power the global marketplace



Microsoft powers Avanade and Accenture

Avanade and Accenture power Microsoft

As the #1 Microsoft strategic partner


we unlock the value of cloud and drive transformative business outcomes at speed and scale for our clients

Avanade + Accenture + Microsoft: Why us

- 01** We are “doubling down” on our success as unique partnership in the marketplace, bringing together more than 65,000+ professionals from Avanade and Accenture
- 02** Commitment from the top: our CEOs meet on a regular basis to align on most pressing client priorities
- 03** We jointly develop cutting-edge go-to-market offerings that are born in the cloud
- 04** Clients have direct access to Accenture’s industry and solution teams as well as Microsoft engineering

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Let's get started

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