



Microsoft

SAS FANS
2020-09-17
Peter & Peter

sas.com/microsoft



SAS and Microsoft Strategic Partnership

SAS and Microsoft have formed an extensive technology and go-to-market strategic partnership:

- Microsoft Azure is the preferred cloud provider for SAS Cloud
- SAS and Microsoft will co-develop integrations across Microsoft's entire cloud portfolio, including Azure, Dynamics 365, Microsoft 365, and Power Platform
- SAS solutions will appear in the Azure Marketplace





Why this Partnership?

- Cloud adoption accelerating
- Public cloud providers bring reach, scale, agility to SAS and our customers
- Enriching the cloud ecosystem with SAS technology
- Analytics and AI in the cloud can shape a new operating system for digital transformation



Why Microsoft?

Several important factors:

- Cultural alignment
- Congruence of vision
- Completeness of vision
- Complementary technology
- Commercial opportunity

SAS Cloud



Software as a Service



CI 360



SAS Machine Learning



Managed Application Services



Hosted Managed Services



Remote Managed Services



Consulting Services



SAS Results



Advisory Services

Key Priorities



Today

- Manage SAS workloads on Azure through hosted or remote managed services
- Migrate SAS 9 or SAS Viya 3.5 workloads to Azure using Containers or Quick Starts
- Platform integration with Azure services



Coming Soon

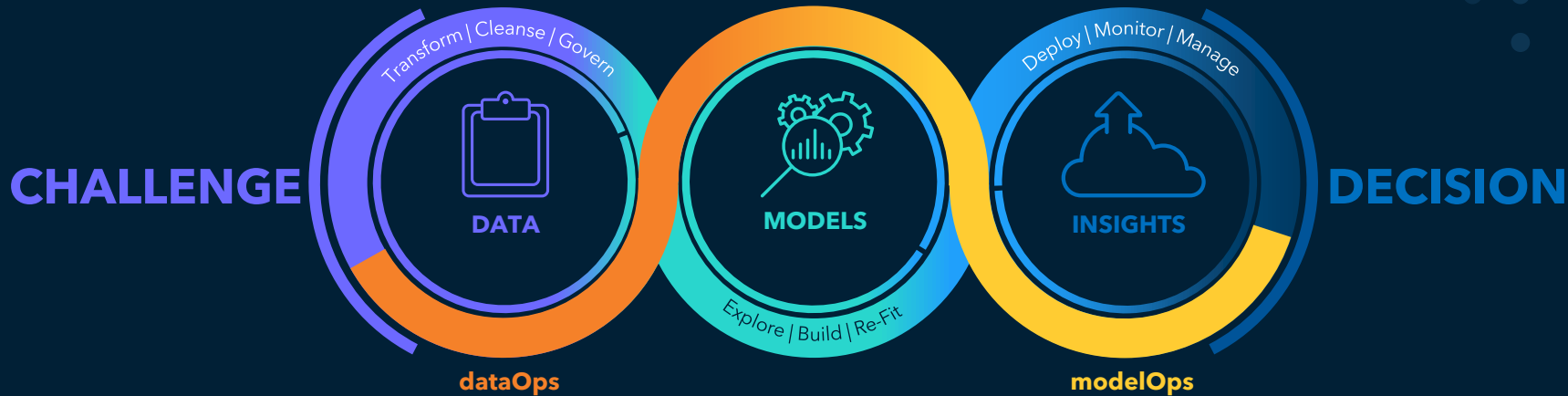
- The next release of SAS Viya, which uses cloud-native services and optimizations, will be listed on the Microsoft Azure Marketplace



Future

- Launch SAS solutions and industry offerings running on top of Viya on Azure
- Deeper product integrations
- New market-ready solutions and services across multiple industry verticals

Combined Power of SAS and Microsoft



Access, integrate and enrich data from multiple sources with **SAS & Microsoft Synapse.**

Build analytics pipelines using **SAS, ML and open source** languages with built-in automation & explanation.

Democratize and embed insights across the **entire Microsoft Dynamics and Power Platforms.**



Azure

Microsoft Azure, commonly referred to as Azure, is a cloud computing service created by Microsoft for building, testing, deploying, and managing applications and services through Microsoft-managed data centers. It provides software as a service (SaaS), platform as a service (PaaS) and infrastructure as a service (IaaS) and supports many different programming languages, tools, and frameworks, including both Microsoft-specific and third-party software and systems.

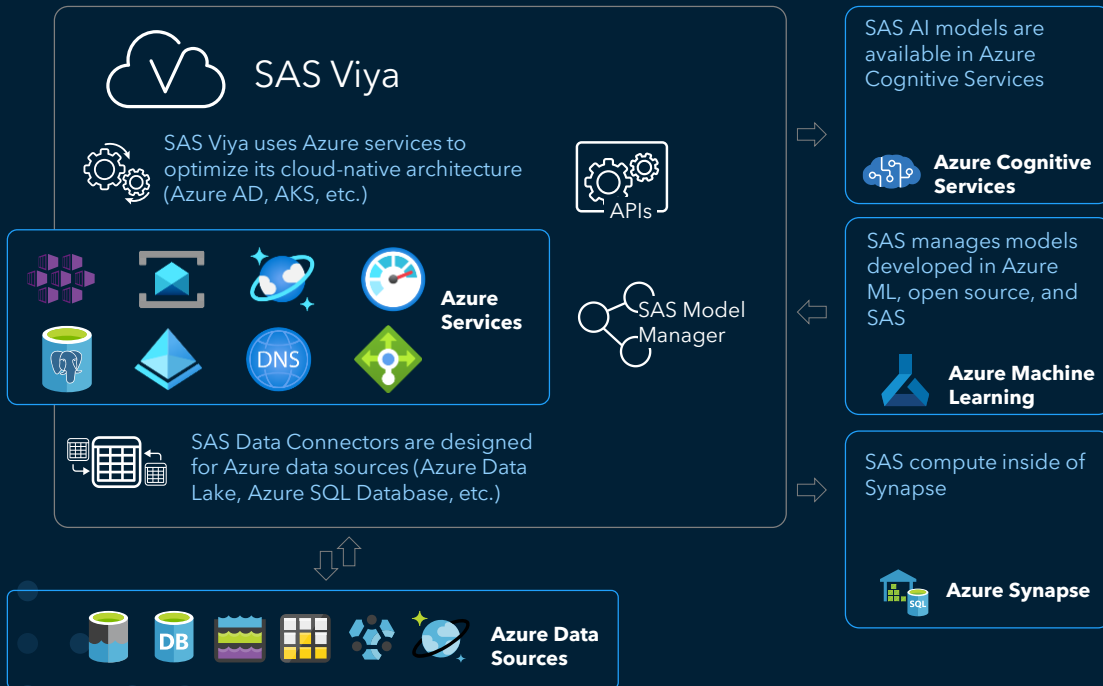
Power Platform

The 'Power Platform' is a collective term for three Microsoft products: Power BI, PowerApps and Power Automate (previously known as Flow). They provide the means to help people easily manipulate, surface, automate and analyse data and can be used with Office 365 and Dynamics 365 (as well as other third-party apps and other Microsoft services). The Power Platform is possible thanks to the Common Data Service (or CDS), which is essentially the underlying data platform that provides a unified and simplified data schema so that applications and services can inter-operate.

Dynamics 365

Microsoft Dynamics 365 is a product line of enterprise resource planning (ERP) and customer relationship management (CRM) applications announced by Microsoft in July 2016 and released on November 1, 2016. There are editions available: a Business Edition which includes a Financials application, based on the project code-named 'Madeira', and an Enterprise Edition which comprises several CRM applications (field service, sales, project service automation, and customer service)

Technology Integration Vision*

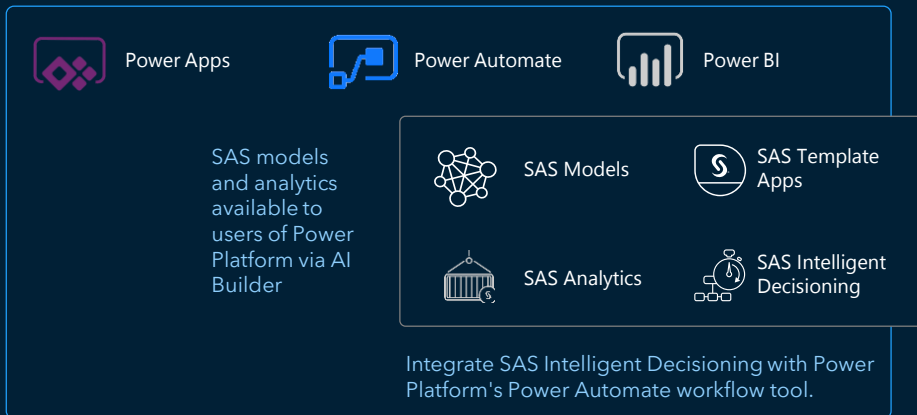


Benefits

- **Cloud-native** integration optimized resources
- Easily **access all data**
- **Develop advanced models** with any language
- **Manage and govern** all models across all clouds
- **Accelerate** AI model development and management

* consult the co-development roadmap for integration timelines

Technology Integration Vision*

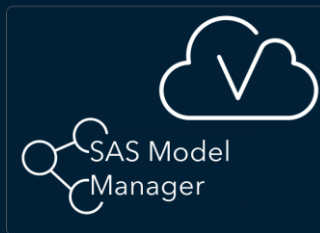
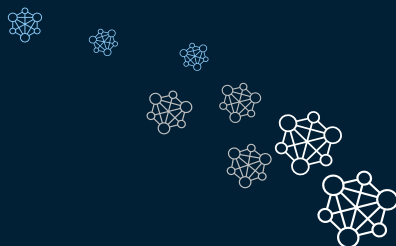


SAS analytics and data enrichment available as services to Power BI.

Build SAS solutions around Power BI Template Apps

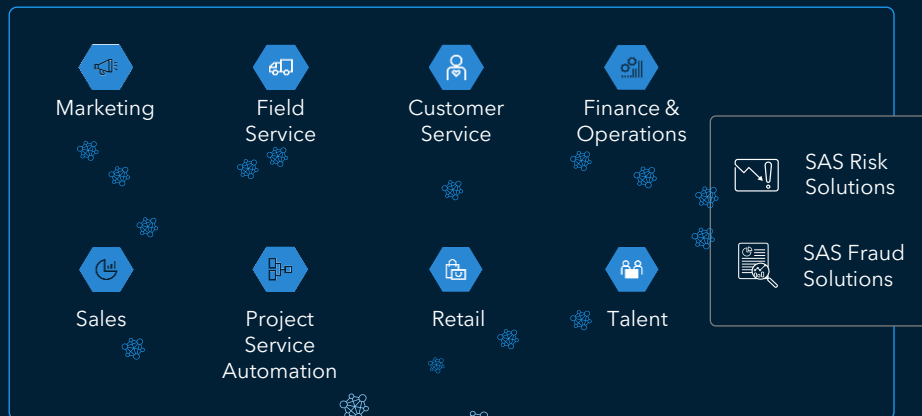
Benefits

- **Embed SAS models into Power Apps** for analytics behind the scenes
- **Embed SAS Intelligent Decisioning** into business workflows
- Make AI-driven decisions with **SAS AI** and analytics **behind Power BI visualizations**
- **Everyone** of every skill level using analytics to **make decisions**



* consult the co-development roadmap for integration timelines

Technology Integration Vision*



SAS Industry Solutions **embedded** into relevant decision points

Models built by SAS are **embedded into decisions** across the Microsoft Dynamics 365 Portfolio using data from the Common Data Model.



Benefits

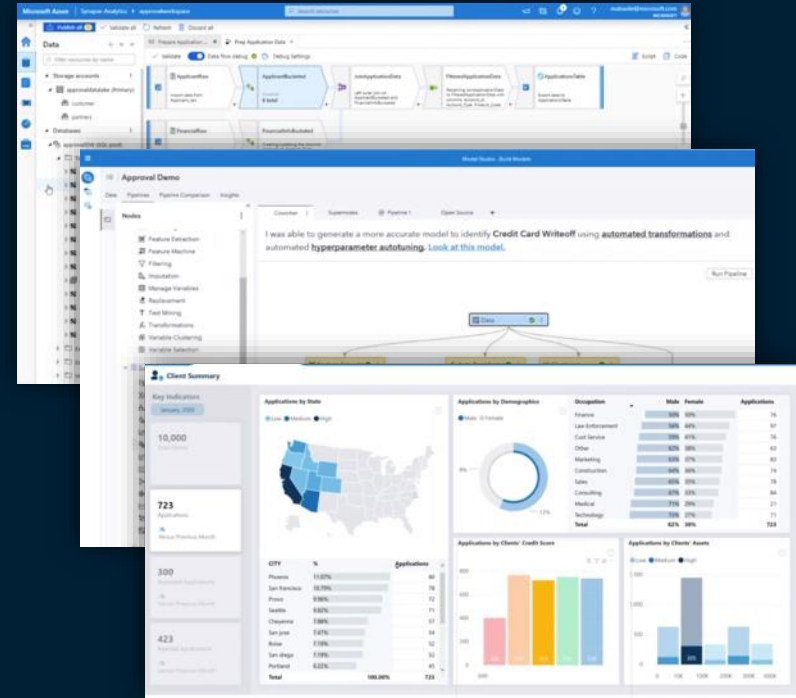
- SAS and Microsoft **co-engineer** new solutions
- Seamlessly move intelligence **from development to production** systems
- **Continuously monitor** and update models
- Implement **high-value use cases** quickly

* consult the co-development roadmap for integration timelines

DEMO: Watch These Technologies in Action

Business Scenario: Automation of Loan Approval Using Analytics

- **Data Ingestion and Enrichment** – Using Azure Synapse, data are loaded from sources and enriched
- **Model Build** – Models are built and compared using Model Studio (included in SAS Viya)
- **Model Governance** – Model gets registered to SAS Model Manager, where comparisons with other models can be made
- **Model Deploy** – Model is exported or published to Synapse as ONNX file
- **Model Scoring** – Scoring is done in Synapse using SQL Server PREDICT function
- **Visualization** – Reporting and visualizations are done via Power BI to complete the narrative



[Link to Demo Video \(5 min\)](#)

Released

- Viya 3.5 on Azure VMs
- SAS Viya 3.5 Quickstart for Azure
- SAS for Containers on AKS (SAS 9 and SAS Viya SMP programming-only)

Soon

4Q2020

- Viya 4 on Azure AKS *2020.1*
- Synapse SQL connectivity
- MAS Connector for Power Automate (for Decisioning) *2020.1.1*

Next

1Q2021

- SAS Analytics via Power Apps AI Builder (Forecasting, Sentiment)
- Launch Viya from Azure Portal
- Azure Jupyter & SAS Studio auto-connect to CAS
- Synapse Spark connectivity
- SAS models in Azure ML registry

Future

2Q-4Q2021

- More SAS analytics and models in Power Apps AI Builder
- SAS Predictive Maintenance models in Dynamics 365
- Power BI access to SAS Analytics
- SAS Retail Demand Planning models in Dynamics 365 Retail module
- SAS Pipeline in Synapse Studio
- Power BI Template App (Forecasting)
- SAS runtime for Power Automate
- SAS Excel add-in for Office 365
- Azure tools access SAS capabilities

1Q2022

- Azure ML Designer has SAS nodes
- SAS/CAS engines in Synapse



Microsoft

Questions?

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