executive brief

Data Modernization and Intelligent Analytics with Microsoft Azure

Global systems integrator Avanade brings 20 years of Microsoft-focused enterprise expertise to help organizations get maximum value from their data with Azure Synapse and other cloud services.

Organizations of all types—business, educational, and governmental—have heard for years about the myriad ways in which they can exploit digital data. But many IT and business executives continue to struggle with extracting the value submerged within the oceans of data now available to them.

This inability to turn data into useful insights is not all that surprising, given a modern data landscape that is far more complex than just a few years ago. The number and type of data sources have exploded, as has the volume of data they produce.

At the same time, the tools, technologies, and services available for managing and analyzing this data have multiplied in number and grown much more sophisticated and capable. No wonder that many organizations have found it difficult to keep pace.

Embarking on a Data Modernization Journey

To fully capitalize on today's data resources, organizations need to embark on a data modernization journey. Data modernization is best thought of as an all-encompassing strategy that, from a technical perspective, addresses everything from front-end data selection, cleaning, and transformation to eventual data analysis. Ideally, the strategy also addresses how data is used, and by whom. Data modernization should facilitate the democratization of data usage, analysis, and user experiences throughout the entire organization.

Data modernization initiatives rely heavily on cloud-based infrastructure and services. Public clouds offer the any-where/anytime access data-centric applications and users require, as well as virtually unlimited scalability and performance. Cloud services also provide easy and affordable access to cutting-edge analytics solutions—solutions that are increasingly enhanced with artificial intelligence (AI) and machine learning technologies to aid in the processing and analysis of massive data sets.

To meet organizations' data modernization needs, Microsoft has assembled a broad portfolio of integrated data management, warehousing, and intelligent analytics services within its Azure cloud offering. Avanade, a

global systems integrator, partners with Microsoft to help organizations get the most business value from Azure's extensive data capabilities.

Building a Data-Driven Business

As organizations develop strategies to unlock more value from data, they need to give more of their employees the ability to access and use the insights and knowledge unearthed. Too often, business analysts and other potential beneficiaries must rely on a small cadre of data scientists and data engineers to field and execute their requests. These one-off requests may not scale adequately or, without direct input from business users, may not effectively enhance business processes.

Cloud-based services are helping to overcome this analytics bottleneck. No-code and visually based services are allowing non-experts to become citizen data scientists and engineers, efficiently finding the information they need on their own.

The Avanade-Microsoft Partnership

Avanade, which was founded by Microsoft and Accenture (then Andersen Consulting) in 2000, delivers enterprise-grade Microsoft technology deployments. Avanade has more than 36,000 professionals skilled on Microsoft's platforms, technologies, and cloud services.

Much of Avanade's activity in recent years has involved leveraging Microsoft's fast-evolving Azure cloud platform. Avanade's team includes thousands of data scientists and data engineers who have helped client organizations implement more than 1,000 data-focused projects. Avanade is a 14-time winner of Microsoft's Partner of the Year and has won more than 90 individual Microsoft partner awards.

Even as it brings its technical expertise to the table, Avanade's first objective is to ensure that each data-focused initiative aligns with and supports the client's core business needs and objectives.

The cloud's open-ended scalability also comes into play in broadening the universe of analytics consumers. The ability to scale data solutions from small-scale implementations to company-wide deployments is critical to the success of data initiatives.

One Avanade client, for example, had developed about 50 niche data applications that leveraged AI and machine learning, but was struggling to scale these one-off innovation projects. "We helped them get to enterprise scale so they could get the full value out of the applications," says Luke Pritchard, global offering leader for data and AI at Avanade.

Establishing a Modern Data Framework

Before an organization can truly benefit from analytics investments, it should first identify the most valuable data from among the many sources available. Avanade often helps organizations through this process, and uses Azure Data Factory to orchestrate the end-to-end integration and collection of data from multiple sources, and then to prepare the data so it can be accessed and deployed to deliver the desired user experiences.

Organizations also need modern tools for rapidly sifting through and analyzing myriad data forms. In today's environment, traditional relational databases and other structured data sources are generally dwarfed by unstructured data sources ranging from documents to videos to audio recordings. Azure Cognitive Search uses natural language processing and pattern-recognition technologies to find and index desired data hidden in these unstructured sources.

No matter its source or format, the vast volume of data available long ago surpassed human analysts' ability to process it. That's where tools such as Azure Databricks and Azure Machine Learning come into play, bringing automated intelligence to the task of filtering and analyzing data in near real-time at scale.

A new offering, Azure Synapse Analytics, merges enterprise data warehousing and big data analytics and serves as a hub for bringing all of Azure's data modernization capabilities together.

Avanade's thousands of Microsoft technology and business professionals can help organizations leverage Azure Synapse Analytics and all other Azure services to get the maximum value from their digital data resources.

Learn more about modernizing your data platform with Avanade.

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