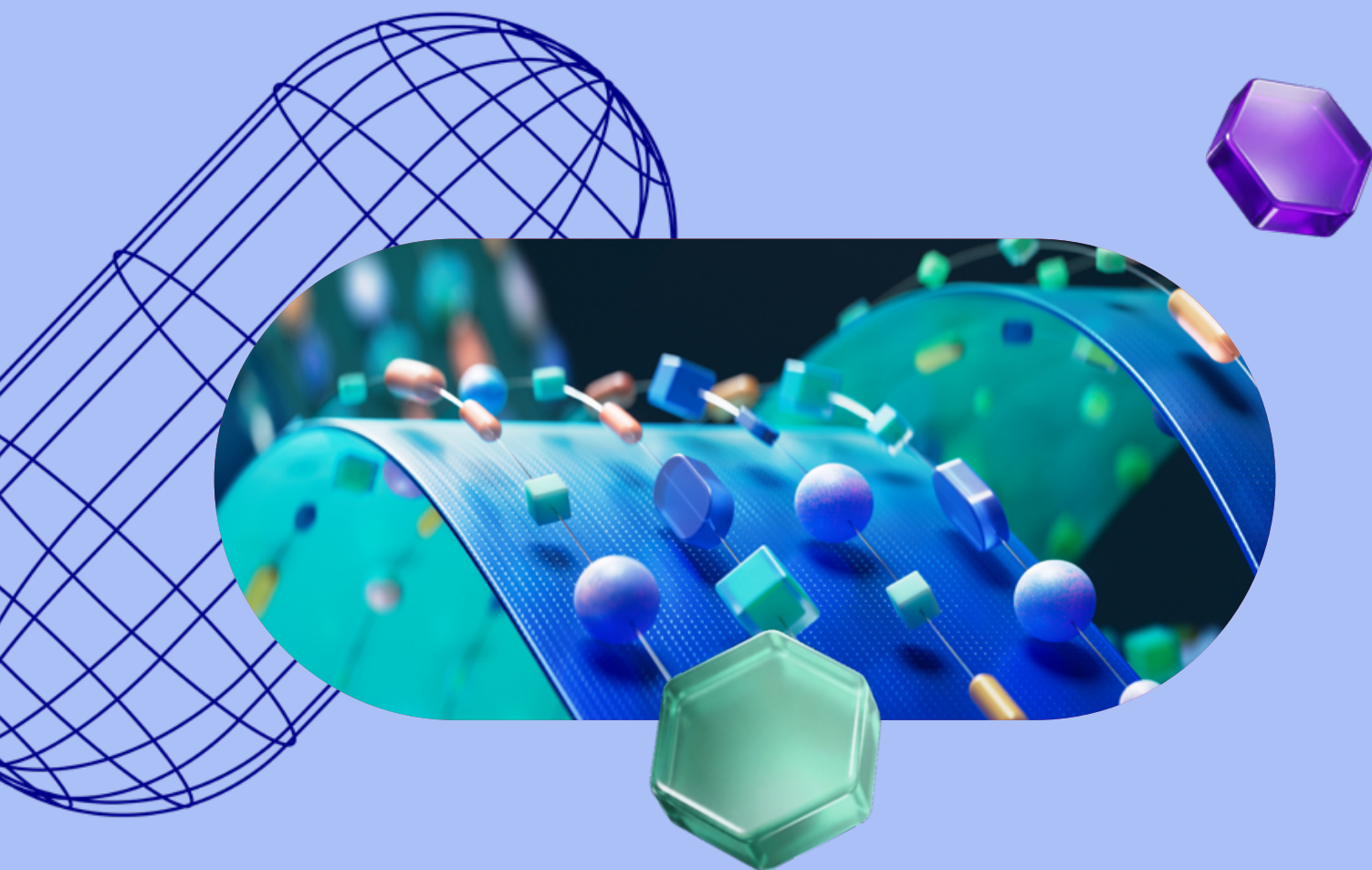




Modern Analytics: Gain an AI Advantage with Unified, Trustworthy Data

Build a complete data and AI platform with Microsoft



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Data opportunities in the era of AI

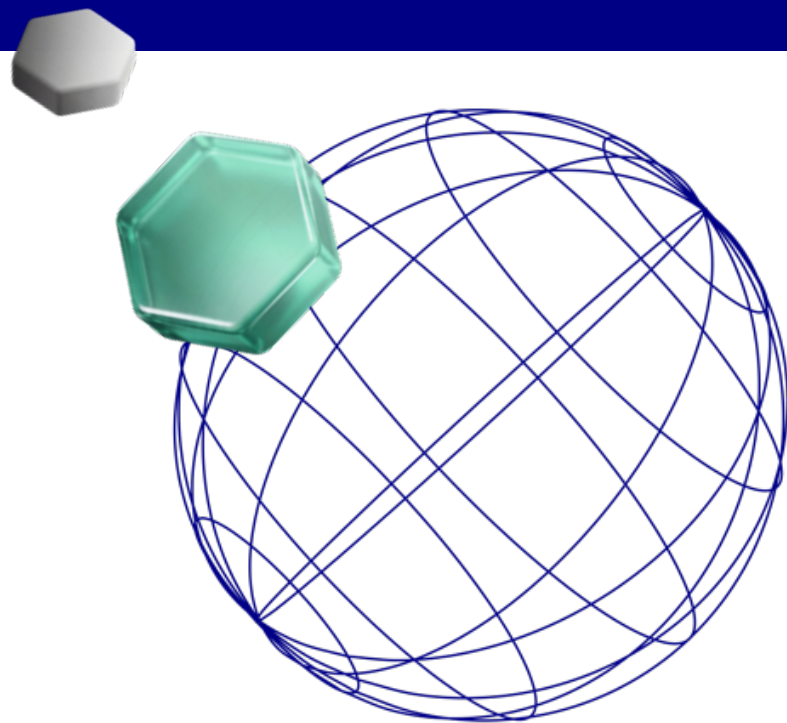
Most organisations aren't losing the AI race because they lack ambition – they're losing it because their AI and data estate are disconnected. Data engineers are rebuilding pipelines for every new AI project. AI models are grounded in real-time, governed and integrated data. And promising pilots stall before they ever reach production.

68%

of leaders agree that unifying their data platform for analytics and AI is crucial for their enterprise data strategy.¹

83%

of senior business leaders said their organisation's AI adoption would be faster if they had stronger data infrastructure in place.²



AI solutions require a continuous flow of well-managed data that adapts as your organisation grows. By unifying your estate, you can give decision-makers trusted data and create the foundation for real-time contextual intelligence which helps people and AI systems deliver sharper insights, increased efficiencies, personalised experiences and more informed actions.

This guide is for data and IT leaders building or modernising their data estate to support AI at scale. Whether you're evaluating a platform consolidation or accelerating an existing roadmap, here's how Microsoft Fabric and Microsoft Foundry can help.

Building a foundation for AI

64%

of organisations still struggle to change the way they operate, lagging behind on building a robust data foundation to support AI.³

Putting AI to work depends on having data that's accurate, well-structured and accessible to the people who need it – when they need it. But common blockers get in the way, such as disconnected systems, overlapping tools and lack of governance.

Data sprawl and integration barriers. The challenge is the fragmentation across systems and formats. Fragmented tooling adds to the complexity, slowing decisions and stalling AI initiatives. Unified data turns this sprawl into a single, trusted, cohesive data ecosystem so that you can power stronger AI experiences.

Governance and compliance gaps. Regulations and risk management are becoming more complex, and governance tools rules don't always apply across systems. Establishing clear access controls and ensuring full data transparency can give you confidence in meeting today's and tomorrow's requirements.

Resource and scalability constraints. Preparing, integrating and analysing data takes time. Building a foundation of clean, reliable data frees up your teams and makes it easier to scale AI initiatives.

Gaps in insights and decision-making. Having data isn't the same as having answers. By making data easier to find and analyse, you empower your people to act quickly and uncover new opportunities.

AI strengthened with contextual information. Break down silos with a unified semantic foundation: Align data, models, systems and workflows around a shared structure of entities, relationships, properties, rules and actions, creating one cohesive view of the business, adding semantic meaning and managing complexity as new data and use cases appear.

Microsoft & Digital Sovereignty

Microsoft Sovereign Cloud: The most comprehensive set of sovereign solutions across AI, productivity, security and cloud platform.

Our approach is simple – digital sovereignty is foundational to our cloud and services, delivered through a well-governed combination of technical, contractual and operational controls and because every workload and every organisation has different levels of sensitivity and criticality, sovereignty requirements are adaptable to the needs of each customer.

The Microsoft Sovereign Cloud brings together AI, productivity, security and cloud workloads to span public, hybrid and disconnected environments so customers can apply the right level of control, capability and compliance based on the sensitivity and criticality of each workload rather than relying on a single deployment model.

Learn more at [Discover Microsoft Sovereign Cloud | Microsoft](#) →

IWG gains real-time insights and drives innovation

IWG, a global leader in flexible workspace solutions, helps over eight million people worldwide work the hybrid way. However, existing systems didn't provide real-time insights, hindering the company's ability to make quick data-driven decisions about marketing and sales. IWG built a solution based on Fabric Real-Time Intelligence. Today, real-time insights enable IWG to update marketing campaigns on the fly and drive continuous innovation.

Read the full story →

"Using real-time dashboards, we're able to see registrations that are actually fraudulent attempts. We can create alerts in Real-Time Intelligence that identify the percentage of real traffic and bad traffic. We didn't have a solution for this before."⁴

Dionisis Stoubos

Global Director of Architecture, Data and Platform Engineering, IWG



Creating a unified, AI-ready data foundation

Organisations are ready to move to AI solutions, but they don't have the data foundational to make that leap. Poorly laid foundations can amplify underlying issues rather than powering transformation. A modern architecture enables data to flow seamlessly across your organisation. OneLake is the unified, SaaS-based data lake in Fabric that provides a single logical view of your organisation's entire data estate across multicloud, on-premises, operational, analytical and AI data. Your teams get powerful, real-time analytics based on trustworthy data, so they can act on information the moment it's created.

Unifies your entire data estate

OneLake eliminates data silos by storing Fabric-native data in Delta Parquet format and using shortcuts to reference external data without duplication – reducing risky data movement and simplifying governance. You can:

Unify data in near real time using shortcuts, mirroring and more than 180 built-in connectors – including Oracle, Azure Cosmos DB, Azure SQL Database, MongoDB, Snowflake and Azure Databricks.

Process massive volumes of data efficiently with industry-leading performance. Scale up and down on demand, with no limits on data size.

Help fuel AI initiatives with curated data from OneLake. Native integrations help fuel AI initiatives with curated data from OneLake and turn that unified data into contextual intelligence by connecting it to business definitions, relationships and real-time signals that improve AI relevance and trustworthiness.

Open at every level

OneLake gives you flexibility to integrate with other tools and platforms. This openness helps you build scalable, future-proof analytics solutions without duplicating data.

Connect to your existing stack through APIs, SDKs and integrations with Azure services like Azure Synapse Analytics, Azure Databricks and Microsoft 365.

Reduce the risk of supplier lock-in at the data layer by using open formats, such as Delta Parquet and Iceberg. Simply load data into OneLake once and reuse it in Fabric or in external tools, like Snowflake.

Define domains and subdomains to better organise, manage and govern your data mesh.

Built-in governance

Industry-leading security and governance ensure data quality and that only the right people have access.

Ensure data discoverability across your systems to support responsible and managed data access.

Manage permissions centrally with OneLake security, enforced consistently across all Fabric engines.

Govern effectively with integrated data management tools and governance insights, plus seamless integration with Microsoft Purview for enterprise compliance.

Explore, organise, manage and secure data from across your Fabric estate from a single place with the OneLake catalogue.

Designed for everyone – not just data engineers

Developers can accelerate AI-ready applications by unifying data from BigQuery, IBM Netezza, MongoDB, Oracle ServiceNow and Palantir Foundry Datasets, and use Foundry to build, ground and manage AI apps and agents on top of that trusted foundation.

Data scientists can build and train machine learning models directly on curated lakehouse data using familiar tools like Spark and Python.

Developers can accelerate AI-ready applications by unifying data from Azure Databases, Fabric Databases, Snowflake, Azure Databricks, Google BigQuery, IBM Netezza, MongoDB, Oracle, Palantir Foundry Datasets and ServiceNow.

Analysts and business users can visualise data in Power BI through native OneLake integrations.

IT and data governance leaders can centrally manage access, enforce policies and track lineage across all domains using OneLake's built-in catalogue and security integration.



Fabric powers 75% efficiency gains and AI transformation for Eton Solutions

Using Microsoft Fabric as a data foundation, Eton Solutions' AtlasFive platform provides a single source of truth that turns records into action, unlocking AI queries and analysis from formerly static data and transforming how its customers work. For Eton's customers, time spent on manual processing is cut 75%, while AI-driven analysis and reporting allows them to provide rich new services. For Eton, heightened agility and global scale are driving new market opportunities.

Read the full story →

"With Fabric, we eliminate 70% to 80% of the underlying data plumbing. With a unified source of truth, AI becomes exponentially more powerful, fundamentally changing how our customers operate."⁵

Murali Nadarajah
Global Head of R&D & AI, Eton Solutions



Powering your AI transformation with Microsoft Fabric and Foundry

With Fabric, you can access and manage data across multi-cloud and on-premises environments from one trusted foundation, ensuring analytics and AI solutions are built on consistent, governed data. With Fabric IQ, unified data can be enriched with business context, shared meaning and operational signals that make it more useful for both people and AI systems. And with Foundry, organisations can use that trusted, contextual foundation to deploy and manage AI apps and agents, moving from insights in dashboards to intelligent action in production environments, achieving their frontier ambitions.

Proven Fabric ROI. Bigger AI Possibilities⁶

379%

return on investment

25%

increase in data
engineer productivity

USD 3.6M

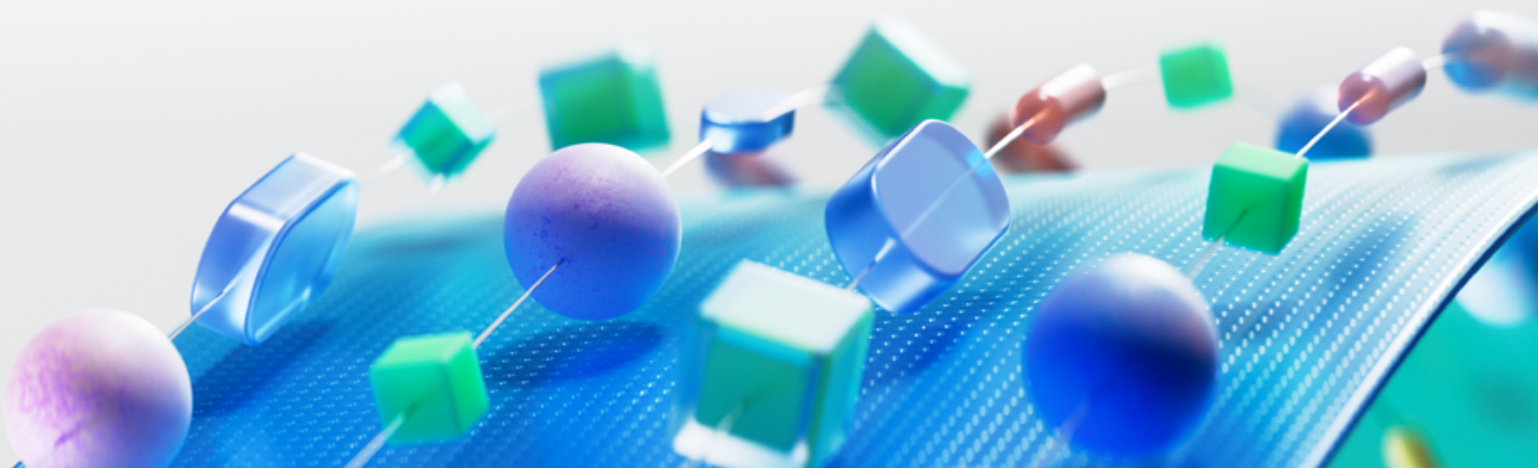
in increased profits
due to better insights

8%

reduction in attrition
among Fabric users

USD 779K

saved by consolidating technologies
and eliminating outdated infrastructure



AI-powered data platform

Give your teams all the AI-powered tools they need for data projects in an optimised SaaS environment.

Accelerate time to value with a SaaS experience that requires minimal set-up, is automatically optimised and integrated and has a single pool of capacity to power your most demanding workloads.

Unite operational and analytical data in a complete data platform with SaaS databases and powerful analytics services. Fabric provides the data platform layer, while Foundry extends that value by helping teams build and manage AI apps and agents on top of the same trusted foundation.

Empower data engineers, data scientists, analysts and business users with autonomous, AI-powered tools that help them get more done in less time.

Open and AI-ready data lake

Access your entire multicloud data estate from a single data lake and help ensure your data is ready to power AI innovation.

Unify your multicloud and on-premises data with OneLake, enabling a single source to power multiple analytics engines while helping to reduce duplication and data movement. This unified estate also becomes the basis for contextual intelligence, helping AI systems work with more complete business information.

Ingest structured and unstructured data of any format into OneLake's open Delta Parquet format and even access third-party tools via native connectors.

Help ensure everyone has access to the right data with a central data lake that spans your entire organisation. Easily find the information you need with intuitive data management and discovery tools.

AI-enabled business users

Empower teams to better understand data with AI-enhanced experiences and visuals embedded in the apps they use every day.

Help analysts save time and get up-to-date insights with tools like Copilot in Microsoft Fabric and Direct Lake, allowing for faster insights and decision-making.

Empower business users to quickly find answers and understand the most critical insights from reports and models by simply asking Copilot and Fabric data agents.

Foster a data-driven culture by seamlessly and securely embedding data into Microsoft 365 tools, including Teams, Excel, PowerPoint and Outlook, via a native integration with Copilot Studio.



Lumen unifies data, gains near real-time insights and saves 10,000 hours

Lumen's existing systems created data silos, duplication and inconsistent metrics that slowed marketing and sales teams. They were able to unify their data and workflows across OneLake, Spark notebooks, Direct Lake and Power BI, with Fabric unified ingestion, storage and analytics in one governed platform – cutting 10,000 hours of manual effort. Lead targeting has improved, infrastructure costs are lower and real-time analytics power smarter decisions.

Read the full story →

"In Fabric, we just open a notebook and start working. We don't need a separate environment: it's all integrated."⁷

Chad Hollingsworth
Cloud Architect, Lumen



Developing powerful, insight-driven apps at scale

For developers and architects, the bottleneck in building AI-powered applications is rarely the AI itself – it's the integration of work underneath. That's why cloud professionals report completing AI application development tasks up to 71% faster and 83% more confidently with SQL database in Fabric: the surrounding architecture stops getting in the way.⁸

Mirroring is a good example of the shift. Instead of standing up extract, transform and load (ETL) pipelines to move operational data into an analytics environment, your teams get a near real-time copy in Fabric without touching the source system.

The outcome is the same in both directions. If you're building new applications, you can provision Azure Databases and deliver AI apps and agents faster with built-in capabilities for generative AI and LLM workloads. Azure offers fully managed services for SQL, NoSQL, PostgreSQL and MySQL, providing the foundation for any size business-critical workload your organisation uses to achieve AI transformation and business innovation.

Build AI-ready applications without starting from scratch

Within the Fabric environment, you can instantly provision new AI-optimised Cosmos DB NoSQL databases or Azure SQL-based transactional databases. These options are part of the Fabric Databases workload, a custom environment that gives you a single place to access, organise and use trustworthy data that's automatically mirrored in OneLake and ready to go with zero ETL.

A unified platform accelerates development. You can discover and use trusted data, build pipelines and enforce governance policies without stitching together multiple tools. Tight integration with Azure services, and Foundry helps teams move faster from governed data to production-ready AI apps and agents without heavy custom code.

Deliver AI apps and agents faster, with built-in capabilities for generative AI and LLM workloads

Azure offers fully managed services for SQL, NoSQL, PostgreSQL and MySQL, providing the foundation for any size business-critical workload your organisation uses to achieve AI transformation and business innovation. Mirror your databases for easy access to all of your data in OneLake.

With Azure Databases, companies get up to 5× faster performance, intelligent threat detection and up to 58% lower total cost of ownership. New apps, AI agents and data-driven solutions benefit from GitHub Copilot-assisted development, zero-touch recovery, single-digit millisecond latency, advanced vector search capabilities and integrations with the most loved developer tools, analytics platforms and AI technologies.

With Azure Databases, your data becomes a strategic asset, helping turn your AI ambitions into real business results close to seamlessly with OneLake.

Fabric Databases are ideal when you need:

Faster starts. You can instantly provision databases with built-in serverless scaling, high availability and disaster recovery – going from idea to a live database in seconds without managing infrastructure. Backups and resilience are handled automatically and because these databases are natively integrated into the Fabric platform, they connect seamlessly to analytics, governance and security services.

A modern developer experience. You can work with familiar tools like Visual Studio Code, SQL Server Management Studio and GitHub. In Fabric, you can expose data through GraphQL APIs for flexible app integration, and use Copilot to generate and optimise SQL queries, explain code and assist with schema changes – all while integrating with CI/CD workflows for faster, more reliable development. Teams can also extend this foundation into Foundry to orchestrate models, agents and AI workflows using the same trusted data layer.

AI-ready databases. Fabric SQL and NoSQL databases support vector storage and similarity search, enabling patterns like retrieval-augmented generation (RAG) when combined with other services like Azure AI services. You can generate embeddings, query vectors with T-SQL and integrate with Azure OpenAI for intelligent applications – all without heavy ETL or leaving the Fabric environment.

Keep your workloads, mirror your data with Azure Databases

For teams that aren't starting fresh, the architectural goal is usually different: extend what already works rather than migrate it. If you're running workloads on Azure SQL Database, Azure Cosmos DB or Azure Database for PostgreSQL, mirroring creates a near real-time copy in Fabric so you can analyse operational data without putting load on source

systems. Once that data is in OneLake, it unifies with other structured, semi-structured and unstructured sources without duplication, and becomes a stronger foundation for the AI apps and agents your teams build in Foundry.

This pattern fits when you want to:

Build a single, governed data foundation for advanced analytics, real-time contextual intelligence and AI-driven applications and agents across your organisation.

Extend the value of your existing investments without a migration project.

Make your operational data available for analytics and AI workloads within Fabric.

Mirrored operational data can then be combined with analytics and business context in Fabric, creating a stronger foundation for AI apps and agents built in Foundry.

Azure Databases are ideal when you want to:

Build a single, governed data foundation for advanced analytics, real-time contextual intelligence and AI-driven applications and agents across your organisation.

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AP Pension revolutionises its data governance and analytics

AP Pension, a customer-owned company in Denmark, had decades worth of line-of-business to data from disparate sources and connections. As part of the company's cloud journey, it used Fabric to reduce data silos and technical debt. Bringing this data together with Fabric gives actuarial teams, advanced users and citizen developers enhanced analytics capabilities. Now they're co-creating and prototyping products in a secure, collaborative environment, accelerating the development of innovative solutions tailored to the firm's needs.

Read the full story →

"The architecture of Microsoft Fabric was more than an upgrade for us. Its ability to bring compute to data, rather than the other way around, means we can process information more rapidly and with greater precision. We were finally able to see the future of data-driven decision making."⁹

Jacob Rønnow Jensen
Head of Data Platform, AP Pension



Accelerating productivity with Copilot in Fabric

Copilot in Microsoft Fabric brings AI-powered assistance directly into everyday analytics workflows. It helps users generate and optimise SQL queries, build data pipelines, create data analysis expressions (DAX) and explain code – all in natural language. By reducing complexity, Copilot makes advanced analytics accessible to everyone, from experienced data professionals to team members who have never written a query.

Here's how Copilot can empower your organisation:

Familiar and intuitive. Built into every Fabric workload, Copilot helps your teams create data pipelines, build models, write queries and generate insights using natural language. Copilot integration with Power BI, Teams, Excel and other Microsoft 365 apps means teams have access AI-powered assistance where they work, accelerating analytics and decision-making without switching tools.

Insights into action. Teams can move from questions to decisions quickly, using Copilot to generate queries, create and edit Power BI reports and even assist with predictive analytics. Fabric data agents can further automate workflows and orchestrate tasks, reducing manual effort and complexity.

Built into Microsoft 365. Help foster a data-driven culture by embedding insights into Teams, Excel, PowerPoint and Outlook through Power BI and Copilot. For advanced customisation, you can extend these experiences using Copilot Studio.



BMTax processes five million tax documents per minute with Microsoft Fabric

In just six months, BMTax worked with Microsoft partner Qualiserve to consolidate 45 TB of data in Microsoft Fabric. The consulting firm also created an internal chatbot with Azure OpenAI in Foundry Models to help employees interact with data.

The platform, called Intelligence Tax Hub, transformed BMTax into a data-driven organisation. It processes five million tax documents per minute, boosts efficiency by 15–25% with automation and offers a new foundation for AI business solutions.

Read the full story →

“Intelligence Tax Hub is not just an internal platform, but an important business asset. We want to create a line of services based on data, automation and applied technologies that support clients in Brazil who work with highly complex tax systems.”¹⁰

Paulo Silvestre de Oliveira Junior
Director of Innovation and Strategic Development,
BMTax



Next steps

With Fabric, you can transform your data into your AI advantage. With workloads and tools for every user, Fabric empowers your entire team to make the most of your data.

[Start your 60-day free trial](#) →

Explore More

Discover how to build, optimise and govern AI apps with Microsoft Foundry.

[Get started](#) →

Get expert guidance and funding across the cloud and AI journey.

[Azure Accelerate](#) →

¹ [EY research: Artificial intelligence investments set to remain strong in 2025, but senior leaders recognize emerging risks](#). Ernst & Young. 2025

² [CIO Vision 2025: Bridging the gap between BI and AI](#). Databricks. 2025

³ [New Accenture Research Finds that Companies with AI-Led Processes Outperform Peers](#). Accenture. 2024.

⁴ [IWG gains real-time insights and boosts fraud detection with Microsoft Fabric](#). Microsoft. 2025.

⁵ [Fabric powers 75% efficiency gains and AI transformation for Eton Solutions](#). Microsoft. 2026.

⁶ [Total Economic Impact study: Microsoft Fabric delivers 379% ROI over three years](#). Forrester Research Inc. 2024.

⁷ [Lumen unifies data, gains near real-time insights, saves 10,000 hours with Fabric](#). Microsoft. 2025.

⁸ [Build AI apps faster and easier with SQL database in Fabric – now Public Preview!](#) Microsoft. 2024.

⁹ [AP Pension revolutionizes its data governance and analytics with Microsoft Fabric](#). Microsoft. 2024.

¹⁰ [BMTax processes 5 million tax documents per minute with Microsoft Fabric](#). Microsoft. 2026