Microsoft

Securing Business Data

A guide to protecting and simplifying your data strategy

Contents

Introduction: The need for secure data governance in a data-driven world

For small and medium businesses, data is a strategic asset for making smart business decisions. But as volume grows and regulatory requirements increase, security, governance and reporting become more complex. Fortunately, the same data that adds complexity can also help companies address these issues, through critical insights and smarter reporting.

The challenges intensify when data is distributed across on-premises systems, Software-as-a-Service (SaaS) platforms or even multiple clouds. This often leads to silos that make it harder to secure information, ensure compliance and manage data effectively. For lean teams with limited resources, stitching together these systems can require significant time and effort.

68% of SMBs feel underprepared against modern threats compared to their peers[1]

56% of SMBs anticipate new security risks stemming from AI[1]

Ensuring effective data security and governance is about more than just managing risk – it's a business advantage that can help give growing businesses a competitive edge, enabling faster decisions, smoother operations and stronger compliance.

This eBook walks through how Microsoft Fabric and Microsoft Purview can help you centralise data securely, identify trends and automate routine analysis so your teams can access actionable insights in real-time, while also reducing the manual workload.

Microsoft Fabric

Unify data engineering, analytics and Business Intelligence in a single platform to help teams deliver insights faster with fewer resources.

→ Reduces the need for multiple solutions

→ Lowers infrastructure overhead

→ Minimises manual data movement
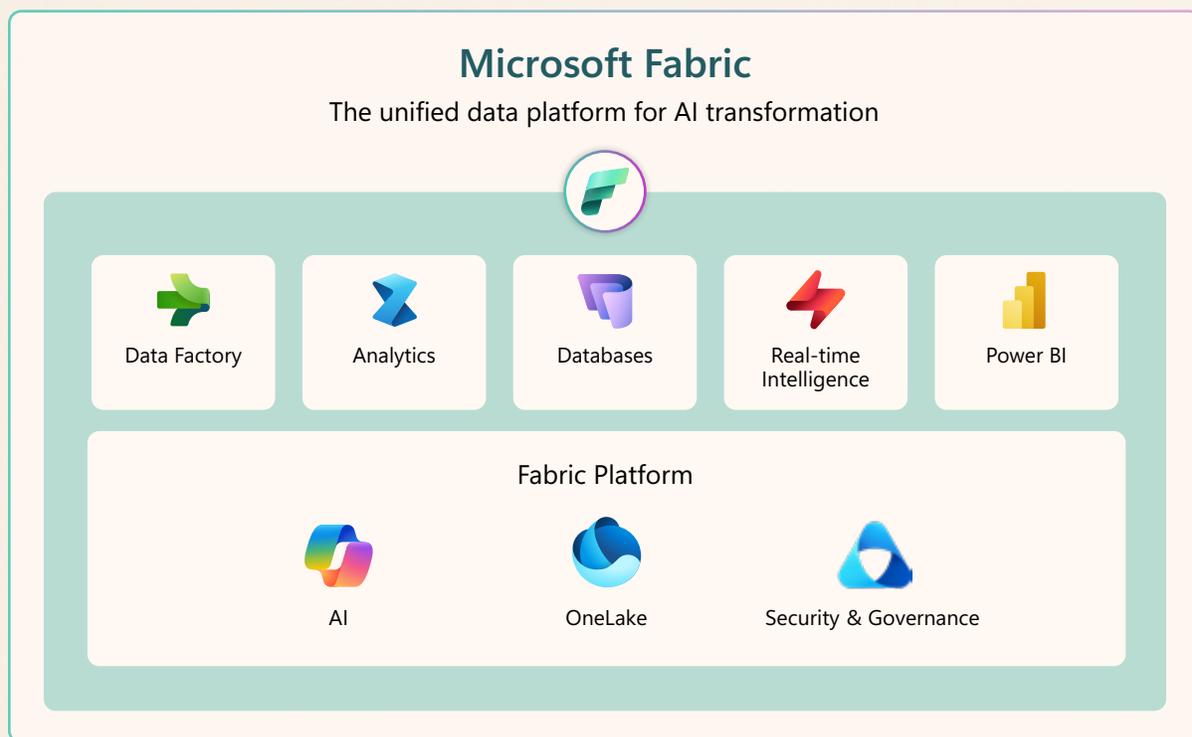
Microsoft Purview

Govern and protect your data with integrated discovery and compliance tools that centralise visibility and give teams more control over sensitive data.

→ Reduces the need for multiple solutions

→ Lowers infrastructure overhead

→ Minimises manual data movement

[1]Techaisle Reports 2025 SMB & Midmarket Security Adoption Trends

Microsoft Fabric: A modern data analytics solution

Microsoft Fabric is an all-in-one SaaS platform with AI-powered services designed to handle any data project. Its pre-integrated, optimised environment helps teams of any size – including smaller, leaner teams – work efficiently and collaboratively.

All Fabric workloads connect seamlessly out of the box without the complex infrastructure or configuration typically required by other data platforms, allowing teams to focus on results. You can ingest structured and unstructured data in any format into OneLake, Fabric's data lake and easily access third-party tools from leading software providers. Figure 1 shows how Fabric brings these components together in a single, unified platform.

Microsoft Fabric
The unified data platform for AI transformation

| Data Factory | Analytics | Databases | Real-time Intelligence | Power BI |

Fabric Platform

| AI | OneLake | Security & Governance |

With distinct yet interconnected workloads, the Fabric platform is meticulously designed for varied personas and tasks, simplifying what was once a complex data estate. And, more importantly, services are available as you need them – just choose what you need and reconfigure when necessary.

→ **Data Factory:** Begin by integrating various data sources seamlessly

→ **Copilot in Fabric:** Accelerate productivity and creativity with natural-language prompts in notebooks, pipelines and reports

→ **OneLake:** Explore, organise, manage and secure data from across your Fabric estate from a single space

→ **Analytics (Data Engineering):** Process and prepare data for advanced analysis

→ **Analytics (Data Warehouse):** Store vast volumes of structured data ready for queries

→ **Analytics (Data Science):** Dive deeper into data with machine learning and AI-driven insights

→ **Databases:** Streamline AI app development with autonomous SaaS databases

→ **Real-Time Intelligence:** Receive immediate insights from live data streams

→ **Power BI:** Visualise data and uncover hidden trends and patterns

→ **Industry solutions:** Access industry connectors, models and pre-built AI and analytics templates

→ **Partner workloads:** Add custom workloads from leading software developers built in Fabric

Additionally, the Fabric platform consolidates costs and capacity usage across data services, enabling the delivery of a predictable pricing structure and a single bill.

Let's take a closer look at the characteristics of the Fabric ecosystem.

→ **AI-powered data platform:** Fabric can give your teams the AI-powered experience needed for any data project in a pre-integrated and optimised SaaS environment and extend Fabric further with native, industry-specific workloads.

→ **Open and AI-ready data lake:** Fabric can help you access your entire multi-cloud data estate from a single data lake, work from the exact copy of data across analytics engines and ensure your data is ready to power AI innovation.

→ **AI-enabled business users:** Fabric can empower everyone to better understand your data with AI-enhanced Q&A experiences and visuals embedded in the Microsoft 365 apps they use daily.

→ **Mission-critical foundation:** You can confidently deploy and manage Fabric with category-leading performance, instant scalability, shared resilience and built-in security, governance and compliance.
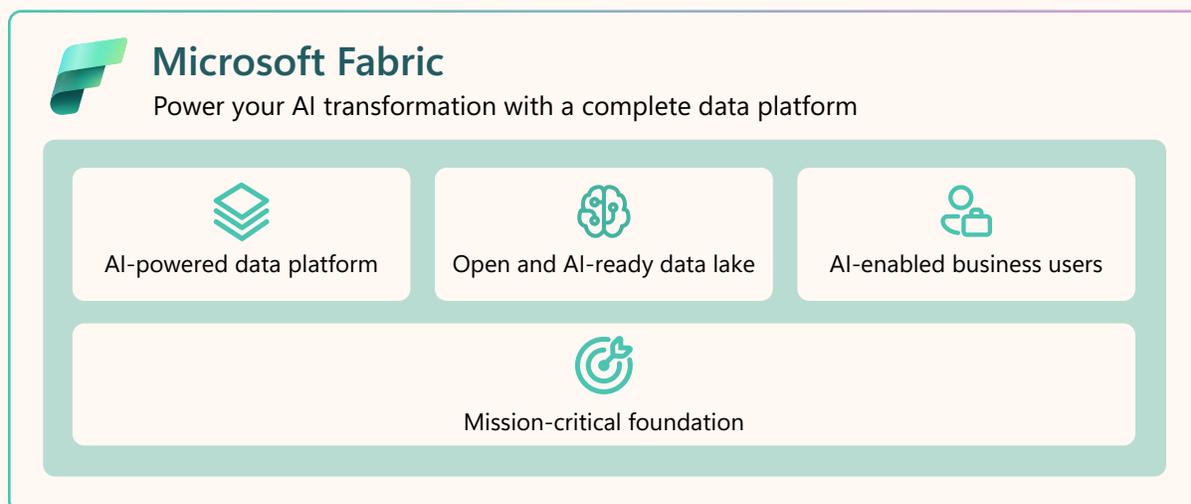

Figure 2: Data analytics for the era of AI

Microsoft Purview: A suite of cloud security solutions

Microsoft Purview is a suite of data governance, risk and compliance solutions that integrates with Microsoft Fabric. It brings together security, governance and compliance tools for the AI era, helping you protect data across your digital environment while supporting regulatory requirements. This unified approach reduces complexity and risk, enabling your team to stay secure, compliant and productive. Figure 3 provides a high-level overview of Microsoft Purview, and the data sources it integrates.

Microsoft Purview covers three main areas to help organisations secure and govern their data effectively.

1. **Data Security:** Products include Information Protection, Data Loss Prevention, Insider Risk Management, Adaptive Protection

2. **Data Governance:** Unified Catalogue (Curation, Discovery, Governed Access) and Data Management (Data Quality, MDM and Health Controls)

3. **Data Compliance:** Compliance Manager, eDiscovery and Audit, Communication Compliance, Data Lifecycle Management, Records Management
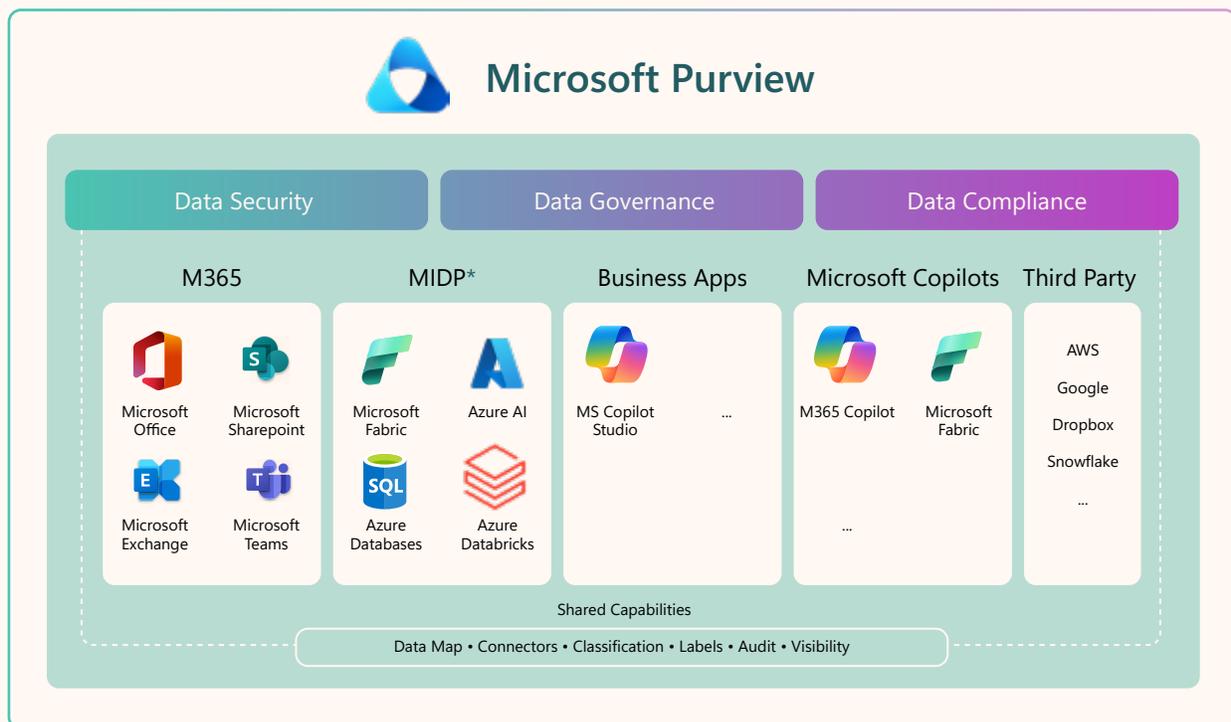

Figure 3: The core building blocks of Microsoft Purview   * Microsoft Intelligent Data Platform

With Microsoft Purview, you get a modern approach to data protection built on an integrated set of industry-leading capabilities, including AI-powered data classification, data mapping and extensive audit logging. This integration helps you reduce complexity, simplify management and mitigate risk, making your team more efficient and enabling security to be a shared responsibility. You can stay up to date with regulatory requirements, adopt AI responsibly and keep your most important asset – your data – safe.

How Microsoft Fabric and Microsoft Purview work together to secure your data estate seamlessly

As you prepare for modern challenges and opportunities (like security, compliance or AI-readiness), you need a modern, efficient data platform that combines strong security and governance. This helps you protect your data and use it confidently for innovation while staying compliant with regulations. Supporting impactful AI projects, whether small experiments or company-wide solutions, requires a well-organised data environment.

Act on your trusted data with advanced security and governance

Microsoft Fabric

Reshape how you access, manage and act on data and insights by connecting every data source and analytics service together in Fabric

Microsoft Purview

Seamlessly secure and confidently activate your data estate with security, governance and compliance solutions

Manage and use your Fabric data for data workloads and projects | Integrated security and governance | Enterprise and advanced oversight
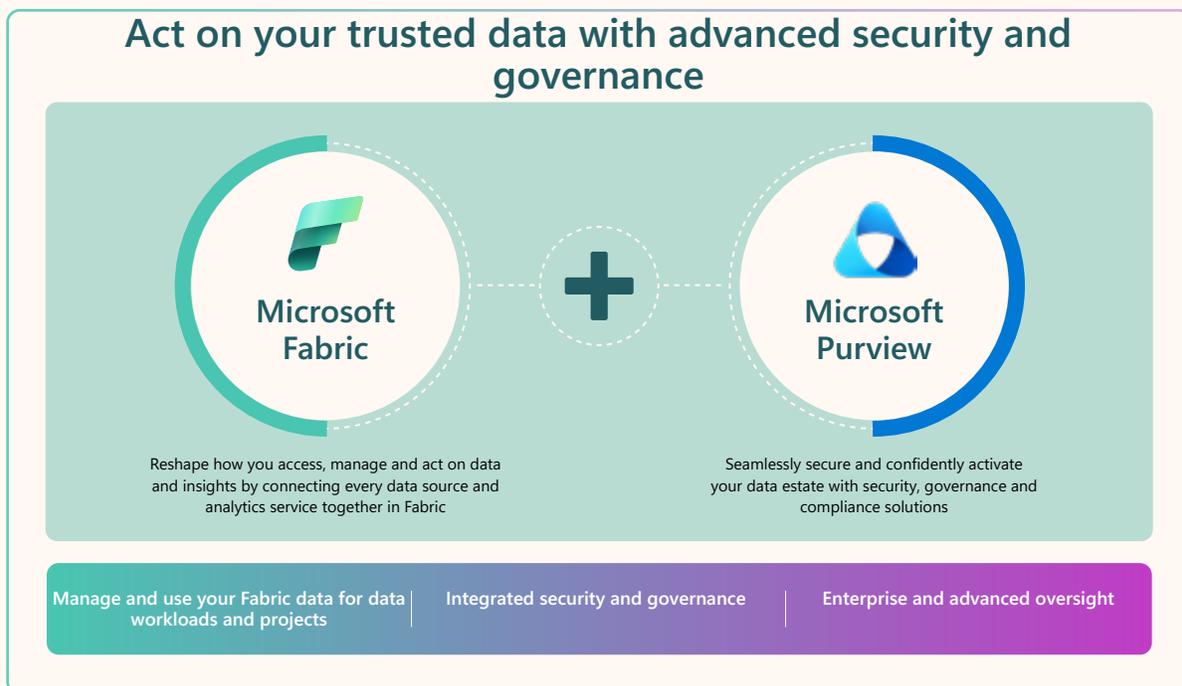
Figure 4: Unified analytics and governance with Microsoft Fabric and Microsoft Purview

Microsoft Fabric and Microsoft Purview work together to provide a unified platform that helps you meet your immediate data needs and build a foundation for AI as your business grows. It supports your journey from your first pilot projects to solutions designed to scale with your company. Fabric provides core data security capabilities, while Microsoft Purview adds advanced, integrated protection to ensure consistent data security across your environment. Together, they offer a modern, well-organised data platform that enables teams to act on data faster without requiring extensive manual effort.

"Fabric ties into our security stance and our other Microsoft products, so we know patients' data is being handled with care and the utmost respect."

Clark Osborne,
VP of Technology, ARcare

Read the customer story →

Here is a closer look at what Fabric and Purview can do for your teams:

Protect and prevent data loss

→ Fabric's SaaS platform has built-in and **advanced network security tools** to protect your Fabric tenant and enable connection to even the most sensitive data.

→ **Manage access in Fabric** by defining RLS and CLS security and managing roles at every layer of Fabric, including domains, workspaces and items and enforce it uniformly across all Fabric engines so users only access the data they need.

→ **Information protection in Microsoft Purview** provides advanced security through sensitivity labels, enabling you to consistently classify and label sensitive data across your digital estate. Users can classify and label Fabric Lakehouses, which provide an inherent downstream of sensitivity labels to Reports, semantic models and SQL Analytics, ensuring the consistent and scalable security of Fabric items within your data estate.

→ **Data Loss Prevention (DLP) in Microsoft Purview** prevents data oversharing in Fabric by implementing predefined policies. It ensures that sensitive data (PII, credit card numbers, etc.) does not end up in unauthorised locations. Data owners can see policy violations, alerts are sent to data owners and security admins and violations can be investigated. DLP ensures that data is secure and not forgotten, preventing it from being irresponsibly scattered throughout the organisation.

Discover and mitigate hidden risks to data

→ **Insider Risk Management (IRM) in Microsoft Purview** detects potential insider risks and risky user behaviour, such as data leaks or policy violations within Fabric. User risks are assessed with a score, which allows security professionals to act on malicious user activity to safeguard an organisation's data.

→ I**RM integration with Defender XDR:** Risky user behaviour telemetry can be sent to Defender XDR, allowing SOC teams to distinguish internal incidents from external cyberattacks better and refine their response strategies for enhanced organisation-wide threat detection.

Simplify Compliance

→ Remain compliant with required **global compliance standards** such as FedRAMP, SOX, GDPR, EUDB, HIPAA, ISO certifications and more.

→ Control where your data is stored and meet **data residency requirements** with over 54 data centres worldwide

→ Seamlessly support security, forensic and internal investigations with automatically logged user activities from Fabric in **Microsoft Purview Audit** and APIs

Each of these integrations is crucial to securing one's data estate seamlessly for data usage and AI innovation. Without proper security, organisations risk exposure gaps.

Build your data confidence with Fabric OneLake

Successful innovation relies on having total confidence in your data quality. By centralising all analytics data in a single, unified, logical lake, OneLake empowers teams to trust their data and act with clarity and speed.

Learn more about data quality with OneLake →

Growing teams driving big results with Fabric and Purview

See how growing businesses are using Microsoft Fabric and Purview to get more from their data while improving efficiency and security. These stories highlight how teams of any size can streamline operations, unlock insights and scale AI and analytics projects confidently.

Avocados From Mexico: Centralising data for faster, smarter decisions

Avocados From Mexico (AFM), a non-profit marketing organisation promoting Mexican avocados in the U.S., struggled with fragmented data and manual reporting processes that slowed insights and decision-making. Working with Microsoft partner Lantern, AFM implemented Microsoft Fabric to centralise data from 42 sources into a single, secure and governed platform. Employees can now access accurate, up-to-date data for reporting and analytics, reducing dependence on outside agencies and freeing teams to focus on higher-value work.

With Fabric, AFM has automated processes, improved visibility and enhanced governance – all within an accessible and affordable platform for a smaller organisation.

Outcomes:

→ Weekly reporting time reduced by 95%

→ Research and analytics productivity doubled

→ Marketing teams gain faster, more reliable insights

→ Increased data accessibility, security and governance

→ Foundation laid to reduce manual processes from 90% to 10% by 2027

"With the cost structure that Microsoft offers, we have access to best-in-class tools that are **not normally reachable for a small-to-medium-sized organisation**."

Miguel Molina,
Chief Financial Officer at AFM

Read the full story →

Verne: Streamlining Data for Smarter Urban Mobility

Verne, an innovator in autonomous urban mobility, faced a complex data landscape comprising over 30 different sources, resulting in slow and resource-intensive reporting. By implementing Microsoft Fabric with guidance from the FastTrack team, Verne centralised its data, automated reporting and expanded access to Power BI dashboards across departments. This integration has helped teams quickly identify trends, make faster decisions and reduce manual effort.

Outcomes:

→ Reporting time reduced by 20% already, with potential to reach 50%

→ Faster, data-driven decision-making across departments

→ Centralised data from 10+ sources, with 30+ planned for full integration

→ Streamlined insights for customer engagement, vehicle performance and operations

→ Scalable, future-ready infrastructure supporting growth with a smaller team

→ Enhanced ability to benchmark performance and track trends over time

"Thanks to Microsoft Fabric, we can produce streamlined and accurate results efficiently, **without needing a much larger team.**"

Adam Holder,
Head of Analytics, Verne

Read the full story →

Next steps

Now that you have a fuller understanding of how Microsoft Fabric and Microsoft Purview can support your data strategy, you can see how they help teams centralise information, reduce manual work and streamline reporting. And these solutions work while keeping costs manageable and maintaining strong security and governance. Together, they provide a unified platform for data management, compliance and analytics, enabling more efficient and confident decision-making.

Want to dive deeper into how these solutions can help you work more efficiently and securely with your data? Chat with an expert or explore one of our guided learning resources.

⊙→ **Find a trusted Microsoft partner**

⊙→ **Fuel transformation with Microsoft experts and investments using Azure Accelerate**

⊙→ **Learn more about Azure solutions**