



Reimagining data governance for a modern enterprise

Achieve unified data governance with Azure Purview and Wipro

Executive Summary

Across all industries, companies are looking to tap into their data assets and drive intelligent decision making across the organization. At the same time, these companies are also rushing down the digital transformation path and modernizing their IT infrastructure.

This is putting an increasing pressure on the information management stakeholders, who are now having to deal with more volumes of data, more data-driven business priorities, more compliance requirements and a more complex IT environment than ever before.

According to IDC, 175 ZB zettabytes of data will be generated annually by 2025, 300% more than what was generated in 2021. If the current trends are anything to go by, this data would span the edge, multiple clouds, and the data center, and would have to be managed across both operating and analytical systems. Meanwhile, data privacy and compliance would become even more demanding due to growing security concerns.

Most organizations just don't have the right infrastructure to ensure better discovery, trust, and protection of this data. Their existing data governance systems are either system-specific, or use case specific, or limited in lineage capabilities, or are not scalable.

This book shares how building your data governance foundation on Azure Purview, a unified data governance service from Microsoft, helps you reimagine data governance and enables your data consumers to easily find valuable, trustworthy data across your on-premises, multicloud, and software as a service (SaaS) data sources.



Table of Contents

01	Trusted data is key to digital transformation	Page 04
02	Time to act on data governance	Page 05
03	Reimagine data governance with Azure Purview	Page 06
	1. Automate data discovery 2. Trace lineage of data assets across the data estate 3. Make data easily discoverable with Purview Data Catalog 4. Get a bird's eye-view of sensitive data	
04	Customer spotlight: Delivering timely and reliable insights, while staying compliant	Page 11
	1. Heathrow Airport 2. illimity	



Trusted data is key to digital transformation

Across industries, organizations are experiencing an era of rapid change and the greatest structural transformation in our economy in a generation. Every organization today, large or small, from manufacturing and retail to education and healthcare, is accelerating its digital initiatives. At the heart of this transformation lies data and the ability to generate analytical and predictive insights from it.

But in order for this data to fuel digital transformation, organizations need to ensure that the right people are able to easily find and use this data, while staying on the right side of regulation.

So, essentially organizations must solve two problems at the same time. First, the data must be timely, because digital transformation is all about accelerating time-to-market – whether that's delivering personalized experiences to customers to providing real-time insights to businesses. Second, while speed is critical, it is not enough. Each stakeholder should be able to trust the data, be it data producers, data consumers, or compliance officers.

Data is expected to grow by 400% from 44 ZB in 2020 to 175 ZB in 2025. ¹

45% of enterprise data could be described as 'dark data', i.e. data unused for analytics initiatives. ²

According to Forrester, only 40% of CIOs are delivering results against the speed required. ³

Speed and trust often compete with each other and it has always been common for organizations to focus on one or the other.

Today, more than ever, it has become critical for organizations to overcome these traditional data challenges.

Sources:

1. IDC Whitepaper, sponsored by Seagate, The Digitization of the World: From Edge to Core, 2018
2. Voice of the Enterprise: Data & Analytics, Data Platforms, 451 Research, S&P Global Market Intelligence, 2021
3. Predictions 2019: Transformation Goes Pragmatic, Forrester, 2019

Time to act on data governance

Until now, data management and data governance have been highly manual tasks across siloed tools. As organizations set out to enhance discoverability of data to the right users, while ensuring its responsible use, they will need to fundamentally reimagine data governance for the modern IT ecosystem.

Data privacy and protection is becoming more complex

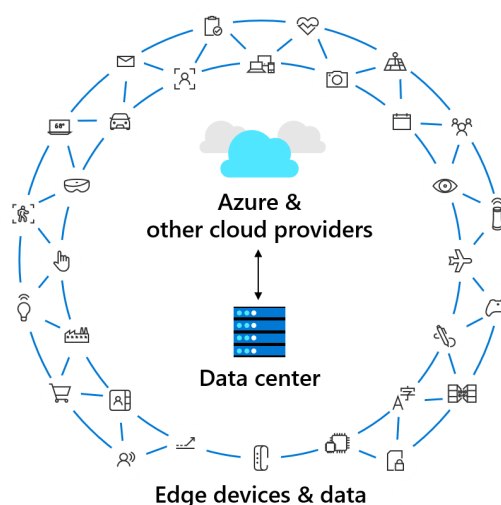
Data privacy as well as the growing number of data breaches has made data protection a top boardroom priority. Further, there is a need to remain compliant with growing and stricter regulatory legislations such as European Union General Data Protection Regulation (GDPR) or the California Consumer Privacy Act (CCPA) or Canada's Personal Information Protection and Electronic Documents Act.

The number of data users are increasing

According to 451 Research by S&P Global Market Intelligence, organizations enabling departmental/LOB decision-makers to access data marketplaces will increase from 21% to 27% in 2 Years. This puts even more pressure on IT and data teams to ensure broader data discoverability, while maintaining compliance.

The data environment is becoming more complex

For most companies, the acceleration of digital transformation is resulting in increasingly complex IT operating environments. Today, most companies have created an operating environment that spans the edge, multiple clouds and the data center. The result is that companies are now dealing with a hybrid environment with data in multiple different data stores that are scattered across all of this landscape.



The distributed data estate

Source:

1. Voice of the Enterprise: Data & Analytics, Data Platforms, 451 Research, S&P Global Market Intelligence, 2021

Reimagine data governance with Azure Purview

Azure Purview is a unified data governance solution that gives you a holistic, up-to-date map of all your on-premises, multicloud, and software as a service (SaaS) data and helps you establish governance at every step of the data lifecycle. This enables you to spend more time on unlocking the value from your data rather than spending time on integrating and managing infrastructure.

Data Map

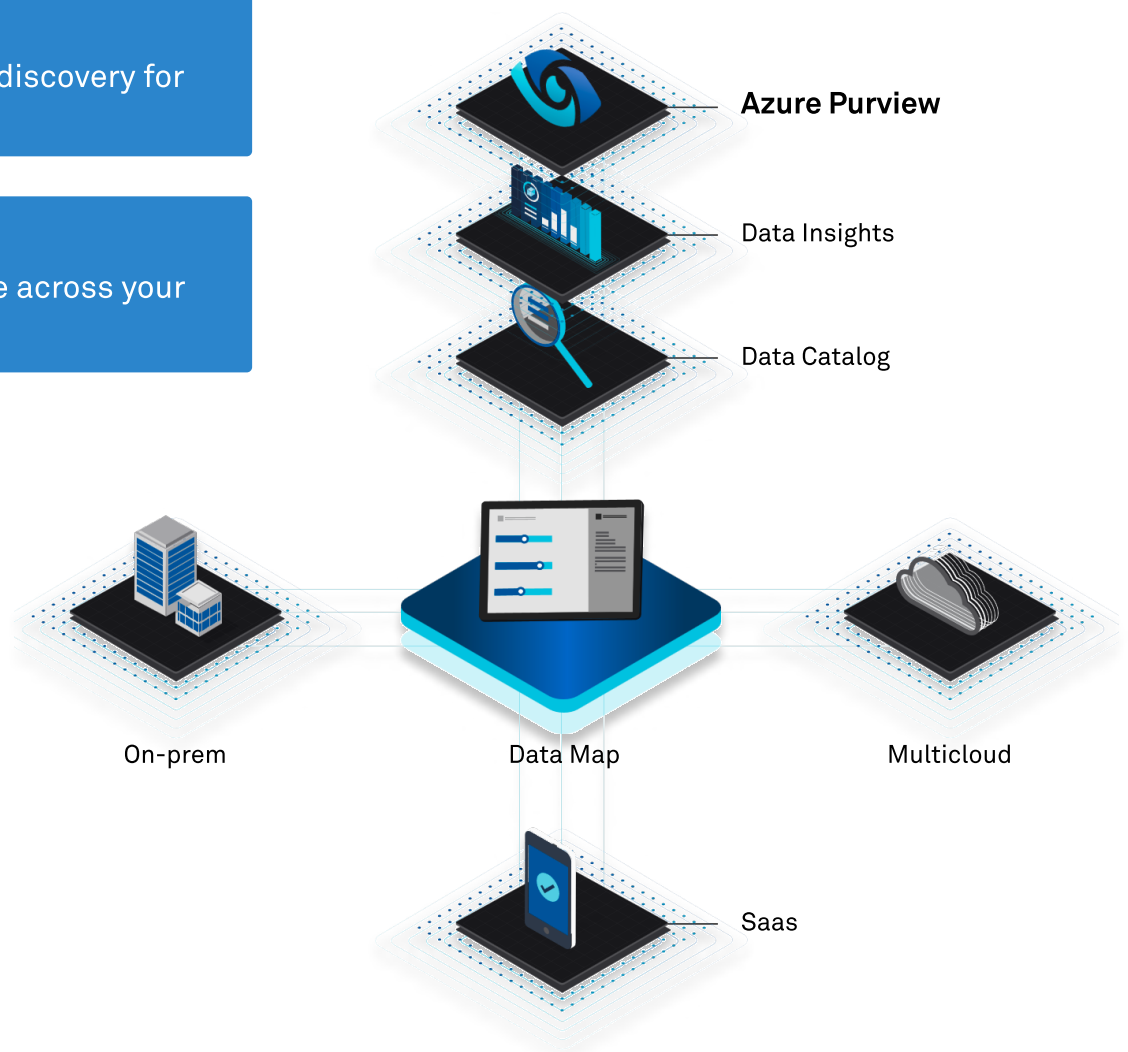
Automate and manage metadata at scale

Data Catalog

Enable effortless discovery for data consumers

Data Insights

Assess data usage across your organization



01 Automate data discovery

Out of the box support for 35 data sources and growing...¹



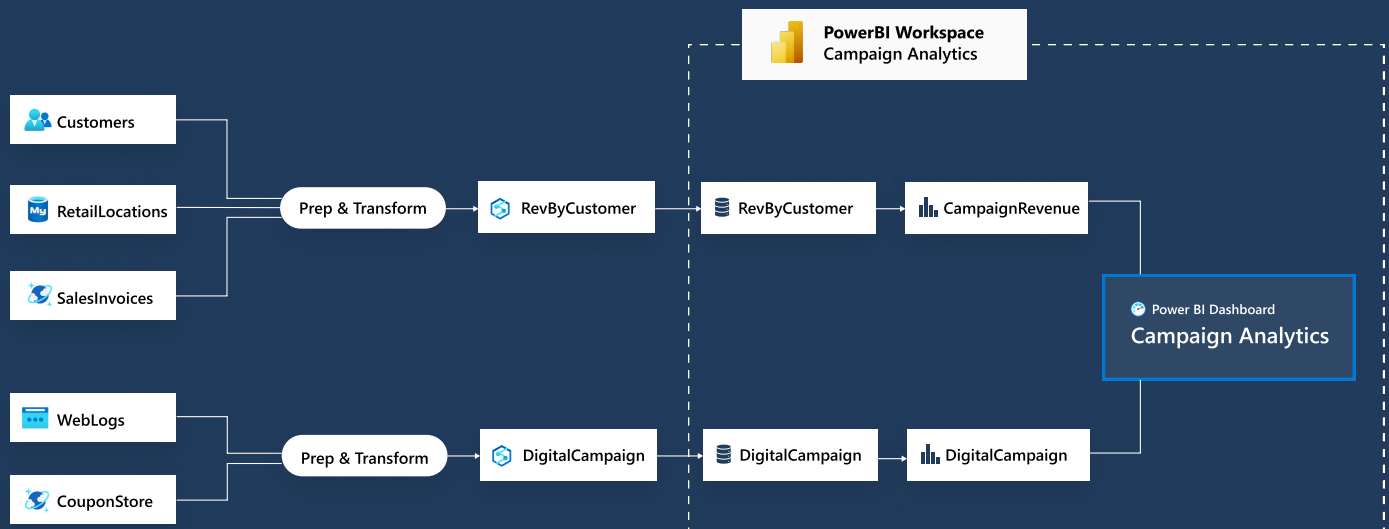
The platform automates today's highly manual data discovery processes by providing data scanning, and classification as a fully managed service. This enables you to scan petabyte-sized data estates across on-premises and multi-cloud data sources, to build a data map, that captures key pieces of information such as technical metadata, semantic metadata, and business metadata.

As of today, Purview supports native support for 35 data sources covering on-premises, cloud and SaaS sources, with others in Preview. For data classifications, you can either build your own or leverage 200+ existing classifications to automate the detection of sensitive information types such as government IDs, names, location data and more.

Source:

1. <https://docs.microsoft.com/en-us/azure/purview/azure-purview-connector-overview>

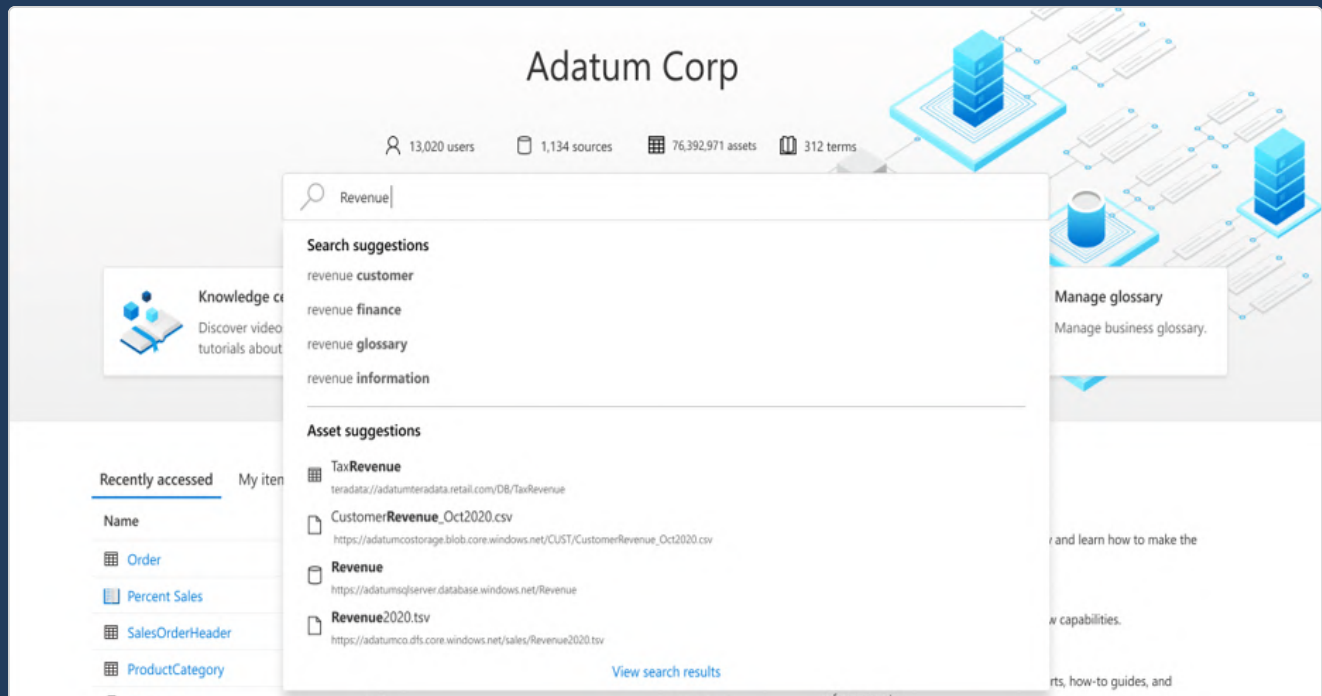
02 Trace lineage of data assets across the data estate



Your data estate may include systems doing data extraction, transformation (ETL/ELT systems), analytics, and visualization systems. Each of the systems captures rich static and operational metadata that describes the state and quality of the data within the systems boundary. For your entire data teams, be it data analyst, data engineer, data scientist or data officer, clearly understanding data lineages can provide critical insights into your data and simplify regulatory compliance.

Purview automates extraction of the movement, transformation, and operational metadata from each data system at the lowest grain possible. Parallely, many of Microsoft data products, such as Azure Data Factory, Power BI and Synapse pipelines also automatically report data lineage to the data map.

03 Make data easily discoverable with Purview Data Catalog

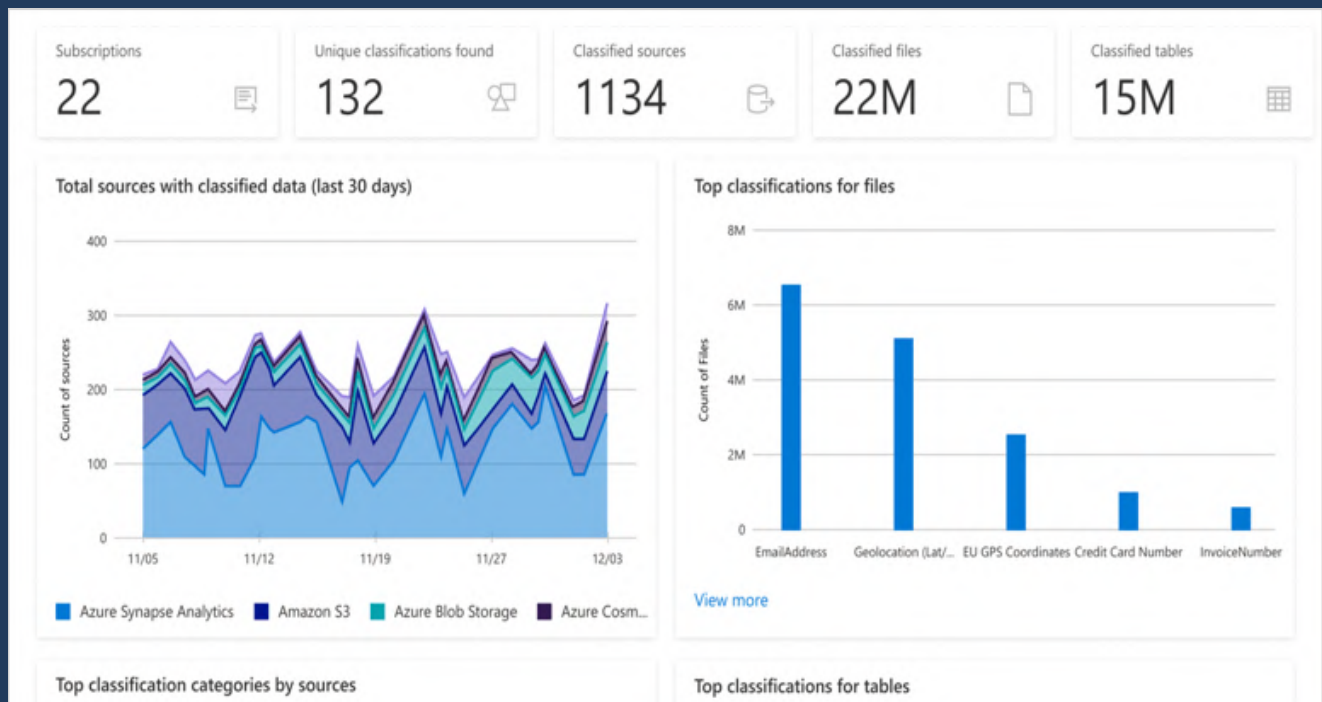


Azure Purview Data Catalog with Semantic Search

Most data consumers don't know how their data estate is structured. Purview provides a browser experience with powerful data search capabilities, empowering all data consumers to easily find trusted data.

Azure Purview also provides an enterprise-grade integrated business glossary. This allows your subject matter experts to provide the business context associated with their data assets and empowers business users to easily discover data assets using the language and terms that are most familiar to them.

04 Get a bird's eye-view of sensitive data



Azure Purview Data Insights

Purview Data Insights provides a holistic understanding of your data estate, along with the ability to drill down so you can pinpoint issues and maximize the compliant use of data.

This application aims to provide specific insights to the data source administrators, business users, data stewards, data officer and, security administrators.

Asset insights: Distribution of your data estate by source type, by classification and by file size, as some of the dimensions.

Scan insights: Overall health of the scans - how many succeeded, how many failed, how many canceled.

Glossary insights: Distribution of glossary terms by status: how many glossary terms are attached to assets and those not yet attached.

Classification insights: Classifications found during a scan, location of classified data, and a drill-down to the classified files themselves.

Sensitivity labeling insights: Details about the sensitivity labels found during a scan, as well as a drill-down to the labeled files themselves.

Case study: **Boosting operational efficiency and improving decisions for Heathrow Airport**



Situation

London's Heathrow Airport is one of the busiest in Europe by passenger traffic. For them, it takes thousands of support staff to deliver services, everything from runway maintenance and air traffic control to housecleaning. All this creates high volumes of data.

To innovate in response to its capacity and sustainability challenges, London Heathrow Airport needed a way to aggregate and handle these large volumes of data from multiple sources.

Solution

Using multiple data services in Microsoft Azure, including Azure Purview, the airport was able to gain unique new insights into how each operational function works.

Impact

By understanding in detail how each airport operation affects another, Heathrow Airport can now make operational changes on the fly to free up capacity, boosting the number of passengers it can handle and the experience that they receive.

“We used to have a lot of data about things we generally already understood. But now that we’ve adopted Azure Purview, we have insight into the unknown, meaning we can aggregate multiple data sources in a more user-friendly way to discover where we can create efficiencies and make better predictions.”

- Dave Draffin, Azure Cloud & Data Architect, Heathrow Airport

Case study:

Optimizing data governance and streamlining compliance for illimity



Situation

Illimity is Italy's first cloud-native bank and as a fully digital bank, it was facing multiple data management challenges. First, its ecosystem for tracking data internally and externally was inherently complex and the bank wanted to optimize its understanding of data. Second, it had an explosion of data and needed an easier way to manage its data compliance and keep up with all the regulations in the European Union (EU).

Solution Impact

Through Azure Purview, illimity experienced improved velocity by automating data lineage and data discovery. Purview's data automation capabilities also enabled the bank to simplify compliance and anonymize customer data.

"We chose Azure Purview to help us achieve a higher level of business monitoring and react quickly. With it, we can accelerate how we process data and then make informed decisions as soon as possible."

- Filipe Teixeira, Chief Information Officer, illimity

Take the first step to better discover, understand, and trust your data with Enterprise Data Governance Envisioning Workshop

Leverage our proprietary framework to review your business drivers, data needs, and current state of data governance and get a roadmap to streamlining your governance processes with Microsoft Azure Purview.

Enterprises Data Governance Envisioning Workshop Process



Discover: Identify the key stakeholders in the ecosystem and understand your as-is data landscape.



Envision: Identify key business challenges and articulate top use cases in your organization.



Brief: Provide an overview of how technology can help you streamline data governance.



Review: Socialize insights with your leadership and share a custom implementation roadmap.



Wipro Limited
Doddakannelli
Sarjapur Road
Bengaluru – 560 035
India

Tel: +91 (80) 2844 0011
Fax: +91 (80) 2844 0256
wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services,

strong commitment to sustainability and good corporate citizenship, we have over 220,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information,
please write to us at **info@wipro.com**