



South32

South32 links people, tech, and trust in data with Microsoft Purview Unified Catalog



Executive summary

South32 adopted Microsoft Purview Unified Catalog to make data more trusted, accessible, and reusable, helping teams work more consistently across the business.

It adopted Microsoft Purview to unify data governance, improve discoverability, and make trusted data available across teams, supporting critical workflows like risk and safety analytics, operational planning, and dashboard creation in tools like Power BI.

The company improved trust in data across the business, made access faster and more consistent, and helped shift the culture so governance is now built into how people plan, build, and collaborate on new data projects.

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Ash Smith, Manager, Data Platform, South32



As a globally diversified mining and metals company based in Australia, South32 operates across three continents with hundreds of teams. But its challenge wasn't just operational scale—it was data. Critical information lived across departments and formats, with no clear map of what existed or how to use it. This slowed decisions, caused duplication, and made it hard to govern data at scale. South32 needed a consistent way to understand and use information across teams. Its goal: to build a data foundation people could trust.

A unified platform, a new approach

To tackle the issue, South32 adopted Microsoft Purview Unified Catalog as the foundation for redefining how data is governed across the organization. The decision wasn't taken lightly. "We spent a lot of time evaluating our options," says Ash Smith, Manager, Data Platform at South32. "This was something we knew we couldn't reverse easily so we had to get it right."

South32 partnered with Fujitsu to advance its data governance program, using Fujitsu's subject matter expertise to shape and execute on its data governance strategy. This collaboration enabled the successful definition of DG policies and the enterprise-wide rollout of our data catalogue in Purview—bringing together people, processes, and technology to drive business value and address customer pain points.

Microsoft Purview Unified Catalog connects Azure Databricks, Microsoft SQL Server, and Microsoft Power BI, giving business users a centralized, accessible view of trusted data. Teams can find what they need, identify ownership, and build on it without duplicating effort. Another key factor is data lineage. South32 implemented internal customizations to get it up and running within Purview, enabling a clear view into data flow across systems. Teams can trace data from origin to output, see how it flows, and understand its context. South32 also extended Purview's capabilities to pull metadata and lineage from Azure Databricks tables. These features were not natively supported at the time, which highlights the team's commitment to building a comprehensive, enterprise-wide view of data. This clarity helps standardize metrics, build trust, and give users confidence to reuse data.

That shift was especially noticeable in risk and safety and asset management, where teams depend on consistent metrics. "Each mine site used to do things a little differently," explains Hari Krishna Cheeti, Data Governance Lead at South32. "Now we have a standard way of defining and documenting critical metrics in Purview, which means we're all speaking the same language." That consistency is laying the groundwork for a Common Data Environment, aligning data, ownership, and business context across departments.

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Hari Krishna Cheeti, Data Governance Lead, South32



The marketing team saw similar improvements. “When I onboard dashboards into Purview, it’s simple,” says Amelia Choon, Planning and Improvement Specialist at South32. “I can see the related data sources, document them, flag sensitivity, and assign ownership without writing pages of documentation. If someone needs access, I just share the link.” Choon notes that connecting Purview to Power BI helps her team reuse datasets. The team is also exploring Microsoft Information Protection and Data Loss Prevention to better protect sensitive data as access expands.

Purview’s familiar interface has been key to adoption across the business. The result is what Smith calls a “pragmatic, incremental” approach to data culture. “We’re not looking for magic solutions. With Purview, we’re listening to the business and delivering value in steady, visible ways,” he explains.

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Amelia Choon, Planning and Improvement Specialist, South32

Results, recognition, and trust

Over the past three years, South32 has onboarded 15 critical data domains into Purview and cataloged 30 to 50 high-priority data products across the business. These include safety analytics, G360 tracking, and fleet downtime metrics, now accessible through a trusted source. The team is applying data quality rules and ownership standards to ensure consistency and improve trust in analytics.

The shift is not just operational, it’s cultural. “There used to be so much duplication,” Smith says. “Now, with Purview as our central catalog, there’s a trusted source, and people know where to go.” Governance is now considered from day one.

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Industry:

Mining

Location:

Australia

Organization size:

10,000+ employees

Customer

South32

Products

Microsoft Purview Data Governance, Azure Databricks, SQL Server, Microsoft Purview Information Protection, Microsoft Purview Data Loss Prevention, Power BI



30 to 50

high-priority data
products cataloged



15

critical data domains have
been onboarded

Cheeti calls South32's federated governance model a turning point. "Data governance is a hard sell in mining. But once people saw what Purview could do and how it fit into how they work, we got their buy-in," he says. "This isn't just about tools. It's about quality, discoverability, and giving the right people the right context."

Smith agrees: "If someone at South32 wants to build something new—whether it's a dashboard or an advanced solution—the first thing they do is talk to our team. Because they trust the platform. And they trust that it's built to last."

Looking ahead, the team is exploring how future Purview capabilities like natural language querying could further streamline data discovery, bringing even more business users into the fold. South32 continues to expand its use of Purview, with plans to explore features like business-friendly data quality rules and enhanced protection for sensitive information.

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