

March 2023

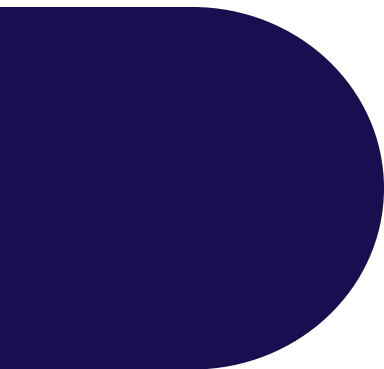


VENZO

Data Archiving – PoC Planning Workshop

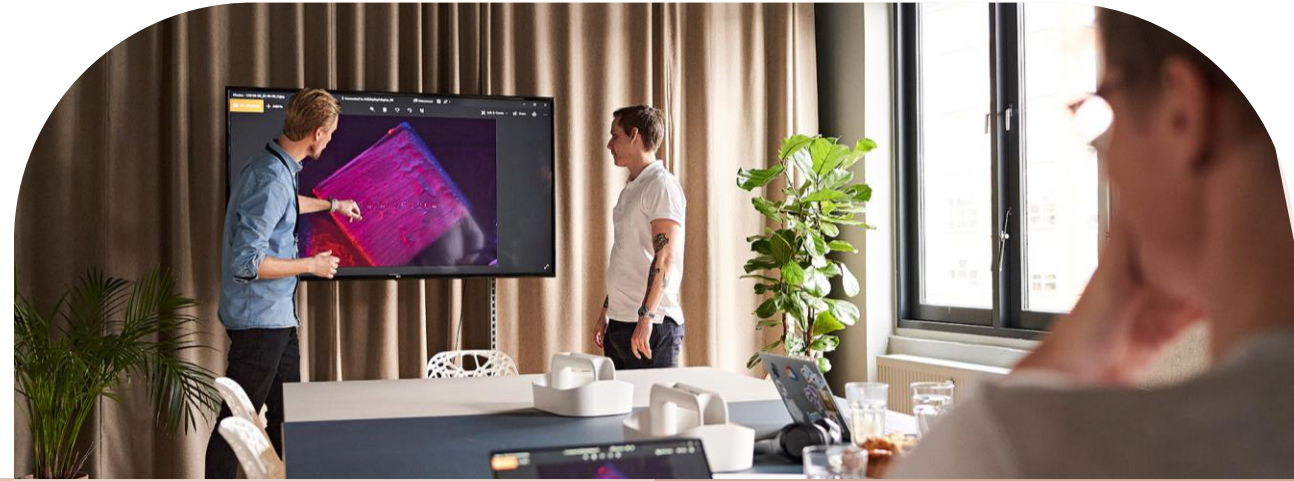


Content

A dark blue decorative shape, resembling a rounded rectangle or a stylized 'D', is positioned on the left side of the slide.

- The VENZO team & introduction
- Approach and Data Platform
- Standard data platform
- Archive Data Lake
- Data ingestion
- Governance & Security
- Q & A / Discussion

Different specialties. One **direction**.



15

Years of customer
success

240+

Full-time
employees

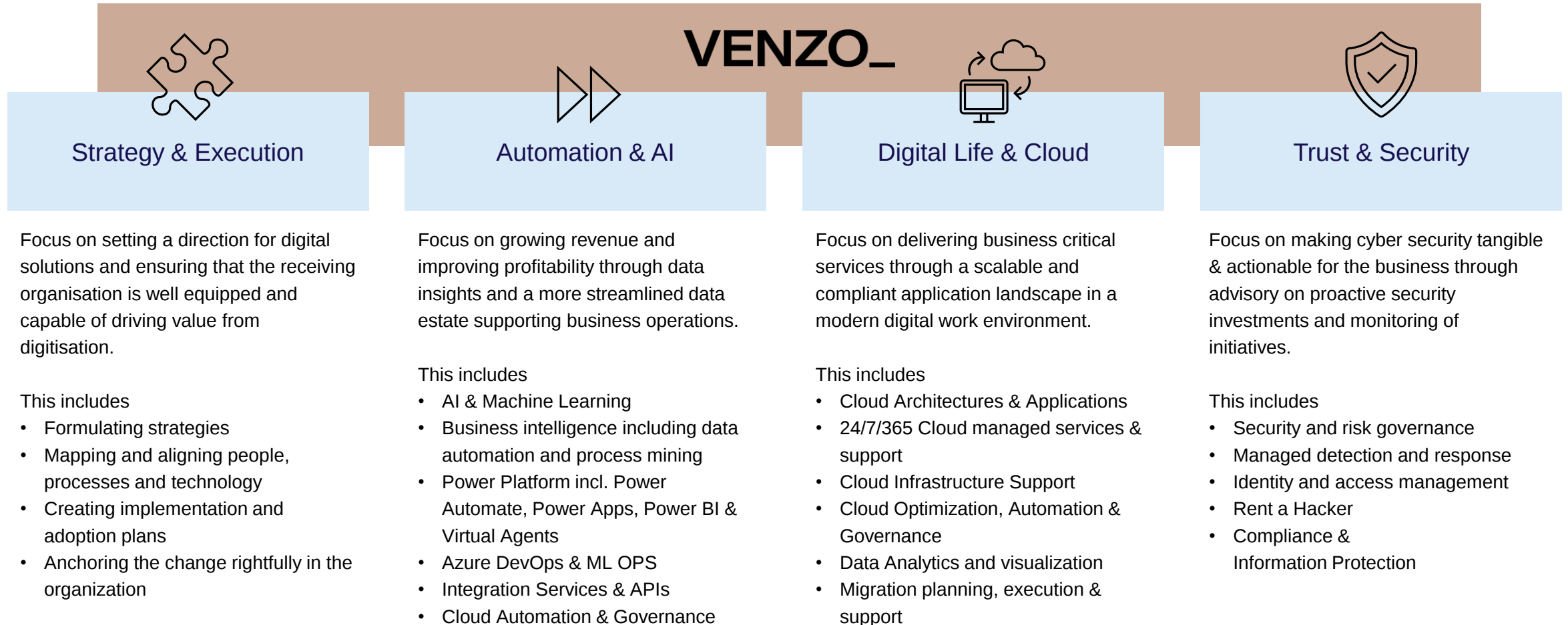
340+

mDKK in revenues
in 2020

110+

Customers across
public and private
sector

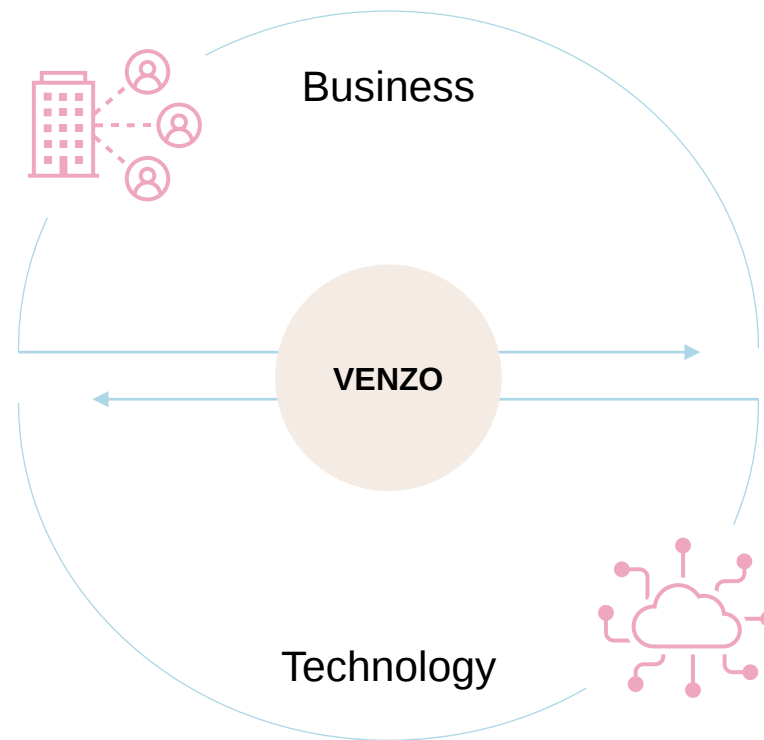
Our domains of expertise



Bridging tech & advisory with a **human** perspective

We are pragmatic problem solvers who are passionate about people and organizations yet focused on reducing complexity and driving fast benefits.

- Digital Strategy
- Transformation roadmap
- Data strategy & qualification
- Business process excellence
- Program and project management
- Organizational Change management
- Technology Adoption
- ITSM & Life cycle management
- IT Regulatory & Compliance
- End-of-life assessment and execution



- Application re-factoring
- Agile and Azure DevOps
- Integration and automation
- AI & Machine Learning
- Data reporting & visualization
- Data warehousing & analytics
- Cloud infrastructure
- Incident and problem management
- Operations and monitoring
- Endpoint management

We are a Microsoft-centric technology powerhouse, who specializes within cloud platforms, digital products and modern work.

Trusted Microsoft **Specialists** for 15 years



2020 Partner of the Year Winner
Denmark



2017 Partner of the Year Winner
Denmark



Data & AI
Azure



Digital & App Innovation
Azure

Specialist
Low Code Application
Development



Infrastructure
Azure

Specialist
Microsoft Windows Virtual
Desktop



Modern Work

Specialist
Adoption and Change
Management
Calling for Microsoft Teams
Modernize Endpoints



Security

Specialist
Cloud Security
Identity and Access
Management
Information Protection and
Governance
Threat Protection

Partner Awards

2022

- Security Partner

2021

- Security Partner
- Customer Success Partner

2020

- Modern Workplace Partner

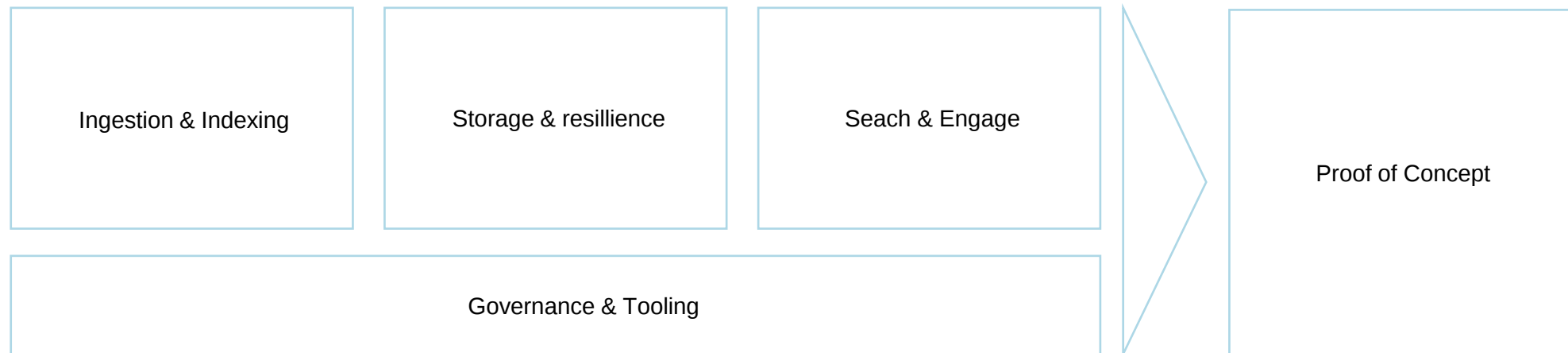
2017

- Modern Desktop Partner

2016

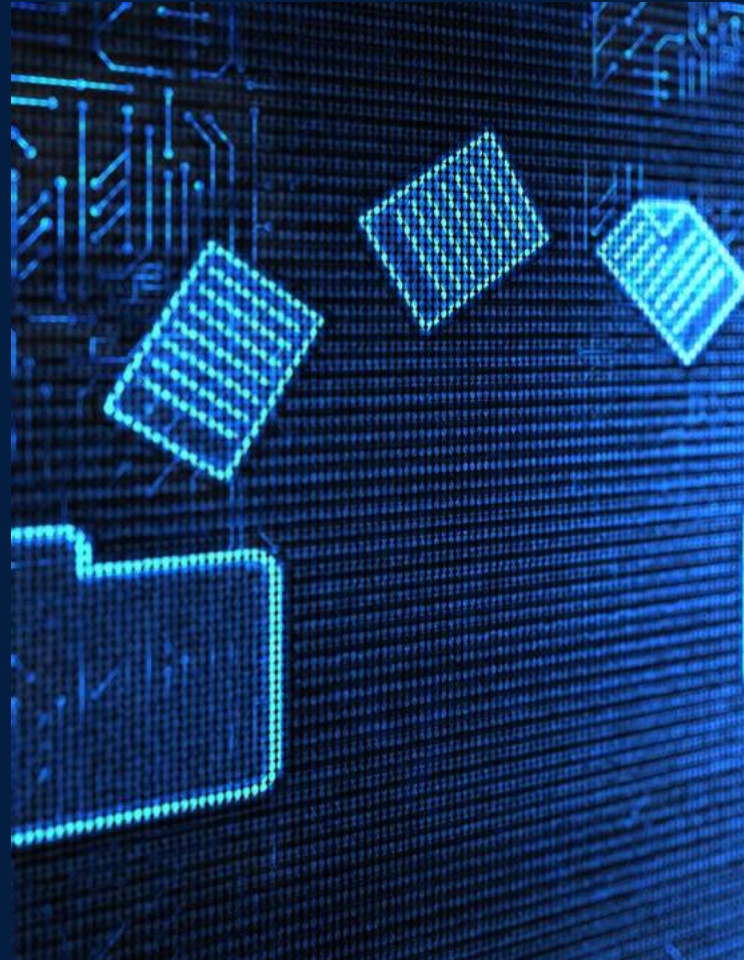
- Modern Platform

Areas of discussion > Outcome



01

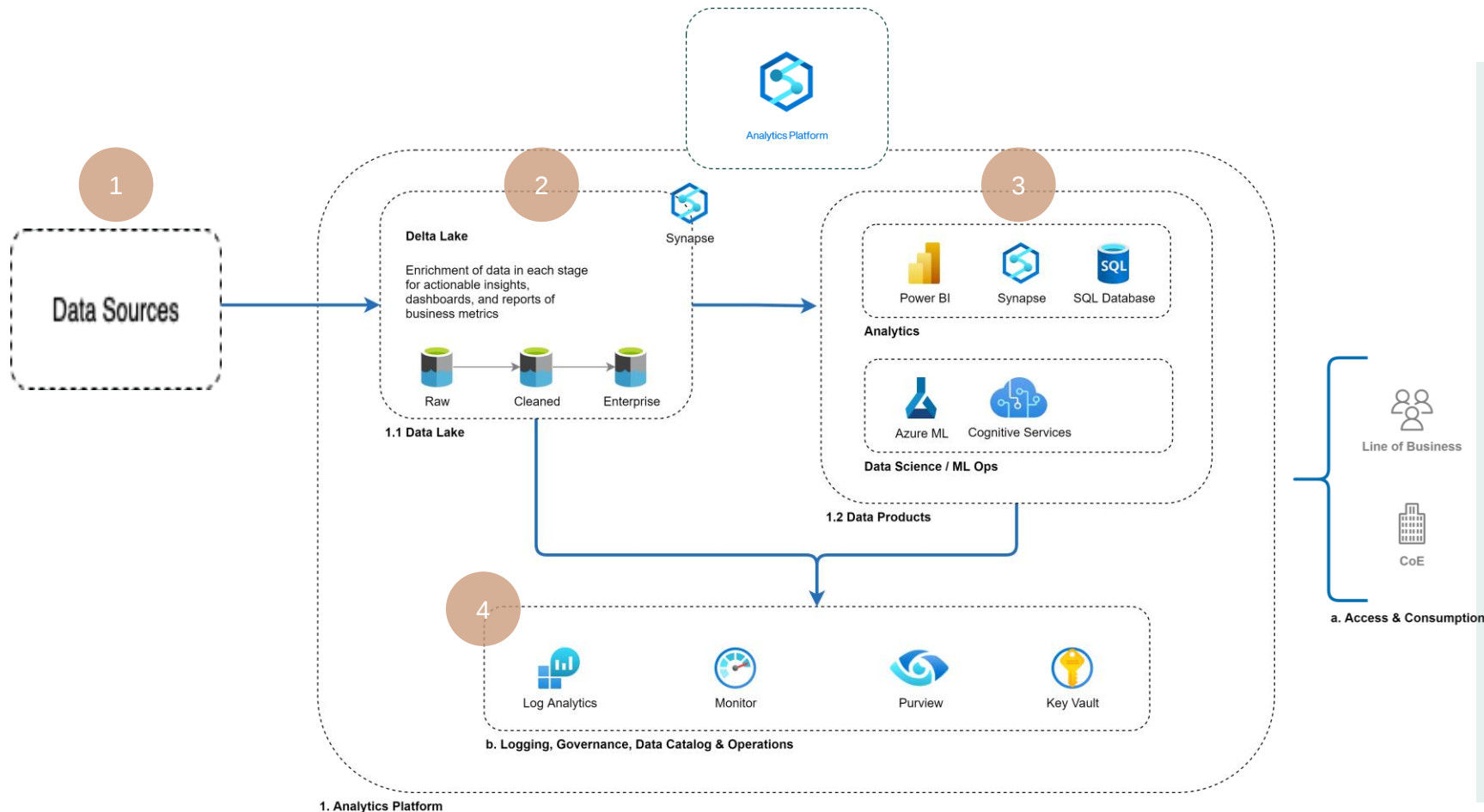
Approach and Archive Data Platform



We don't give answers.

Unless we explore questions first.

Example: Data Platform



1

Source data moves its raw data layer into the Delta Lake's raw layer on a fixed time interval.

2

The Delta Lake is a parallel computing and storing unit, which will clean and transform the data using Spark Continuous to prepare it for analytical work.

3

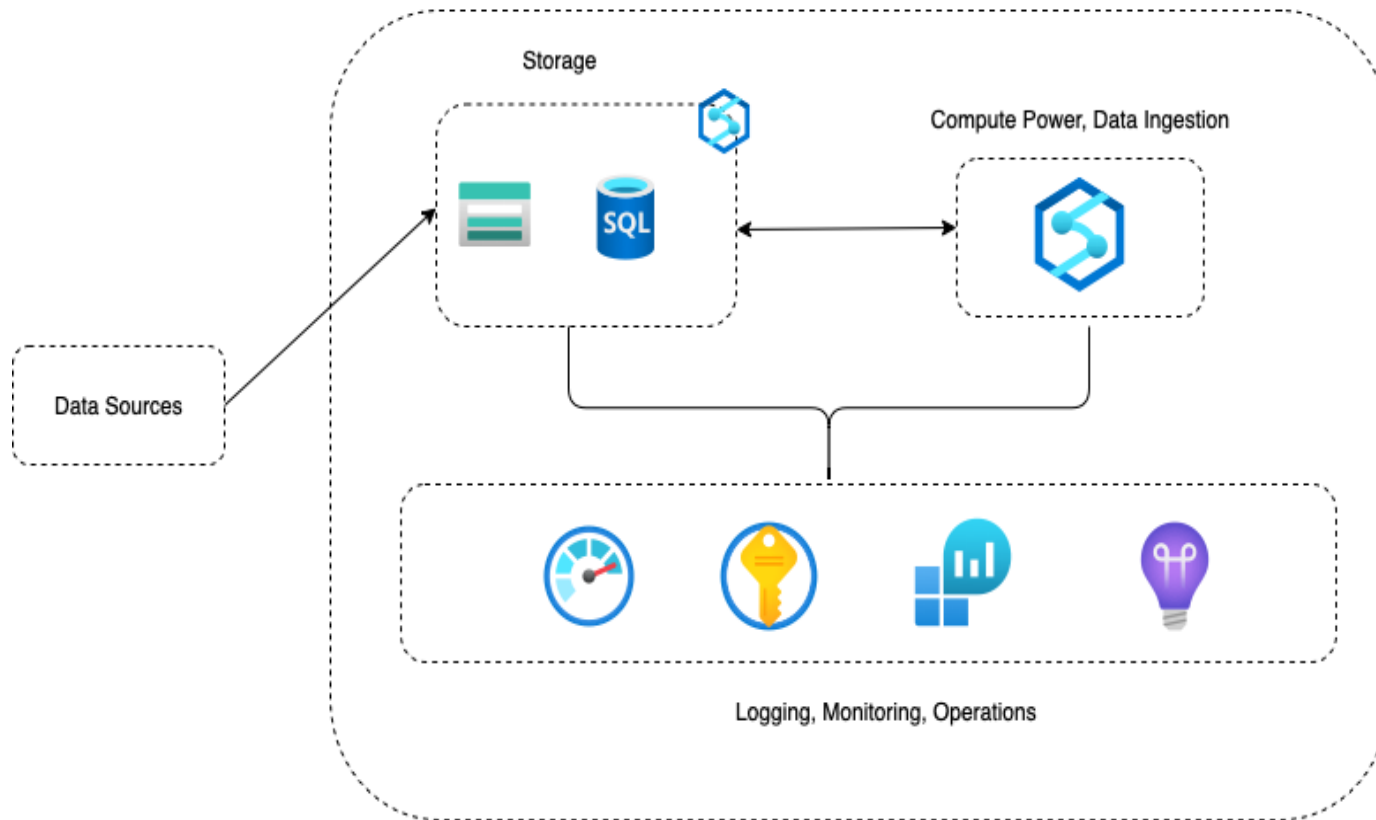
Data products are created for the business units. A data product can be anything from a Power-BI report to a machine learning model, performing continuous predictions.

4

To ensure compliance, we implement proper logging and monitoring of all the systems above. Sensitive password and tokens that our services need are handled in the Key Vault.

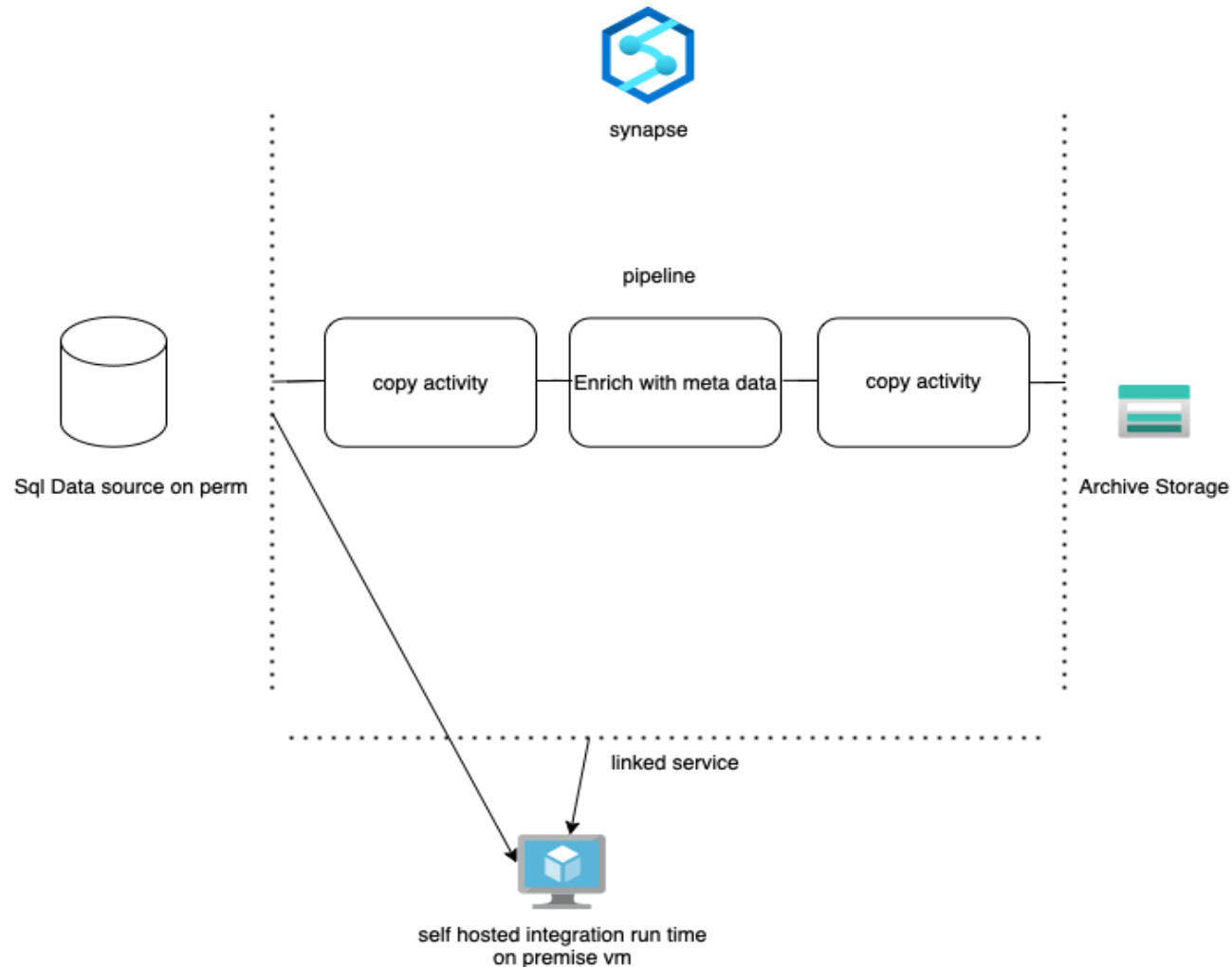
Data Archive: Data Platform

Archive Data Lake



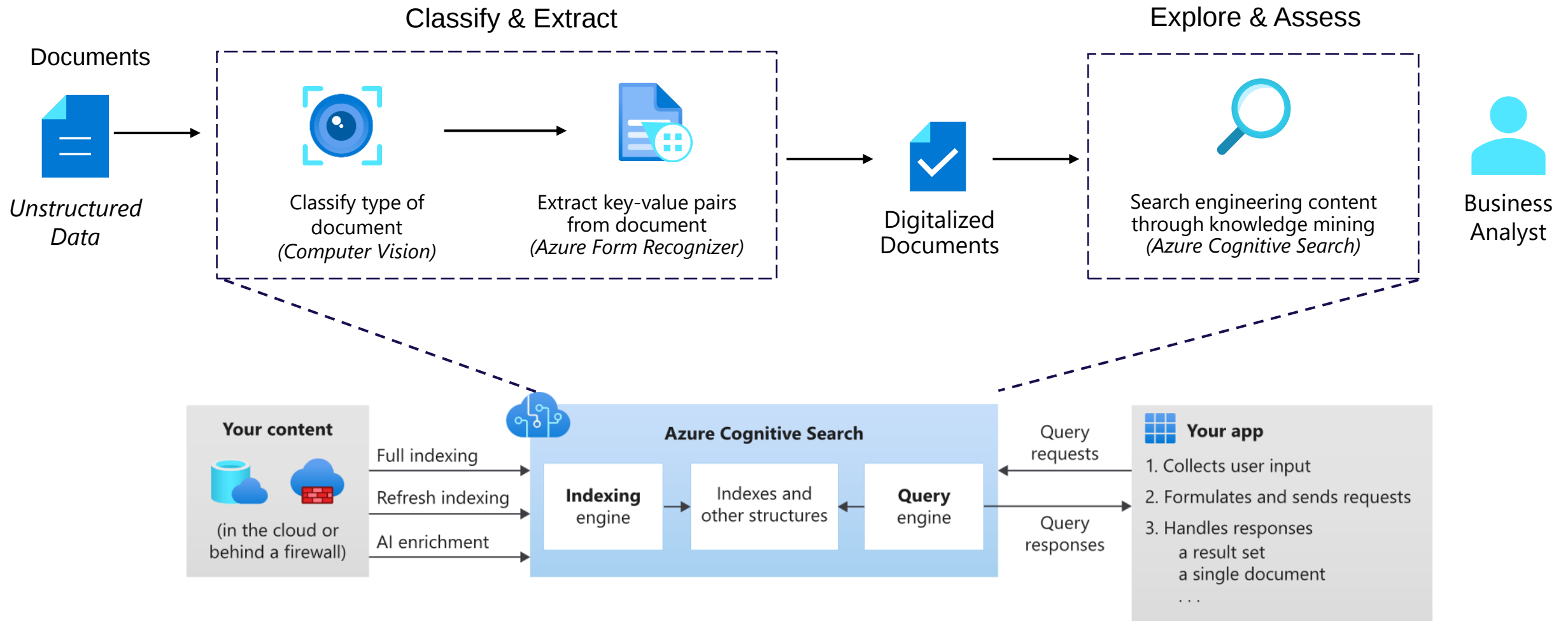
- 1 Data Immutable to ensure data quality and protection.
- 2 Parallel computing for data ingestion. Easy ingestion to data sources.
- 3 Automatic life cycle management of data.
- 4 Data can be made queryable with SQL through Azure Synapse

Example: Data Ingestion from Source to Platform



- 1 On-premises VM to integrate to the on-premises data source.
- 2 Linked services to connect to each data source and archive storage.
- 3 Pipeline made from drag and drop interface. Fast and easy to develop.
- 4 Data is saved in archive mode for minimal cost.

Automatic indexing of **unstructured** data

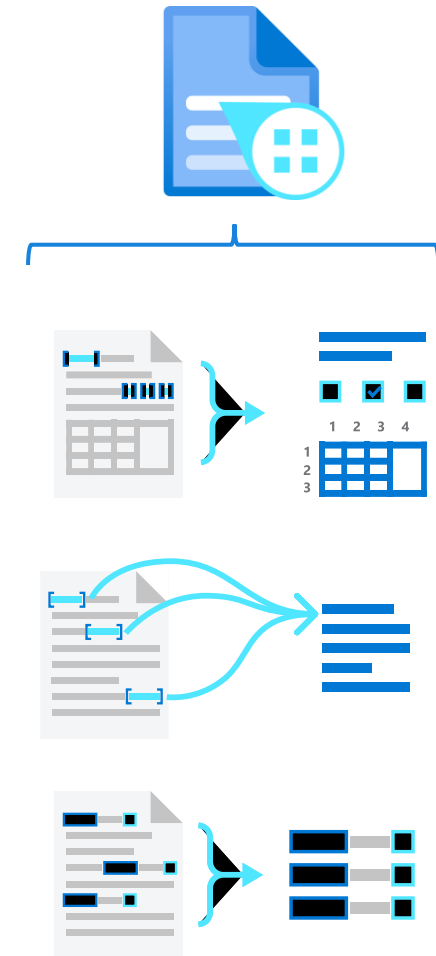


Azure Form Recognizer

Analyze

The screenshot displays the Azure Form Recognizer 'Analyze' interface. On the left, a scanned invoice from 'CONTOSO LTD' is shown. The invoice includes fields for 'INVOICE DATE', 'DUE DATE', 'CUSTOMER NAME', 'SERVICE PERIOD', 'CUSTOMER ID', 'BILL TO', 'SHIP TO', 'SERVICE ADDRESS', 'SALESPERSON', 'P.O. NUMBER', 'REQUISITIONER', 'SHIPPED VIA', 'F.O.B. POINT', 'TERMS', 'DATE', 'ITEM CODE', 'DESCRIPTION', 'QTY', 'UM', 'PRICE', 'TAX', 'AMOUNT', 'SUBTOTAL', 'SALES TAX', 'TOTAL', 'PREVIOUS UNPAID BALANCE', 'AMOUNT DUE', and 'REMIT TO'. On the right, a table lists the extracted fields with their values, result codes, and confidence percentages.

Values	Result	Code	Confidence
AmountDue #1	610		97.30%
BillingAddress #1	123 Bill St, Redmond WA, 98052		94.70%
BillingAddressRecipient #1	Microsoft Finance		95.70%
CustomerAddress #1	123 Other St, Redmond WA, 98052		94.70%
CustomerAddressRecipient #1	Microsoft Corp		95.60%
CustomerId #1	CID-12345		96.40%
CustomerName #1	MICROSOFT CORPORATION		94.90%
DueDate #1	2019-12-15		97.30%
InvoiceDate #1	2019-11-15		97.20%



02

Data governance and security

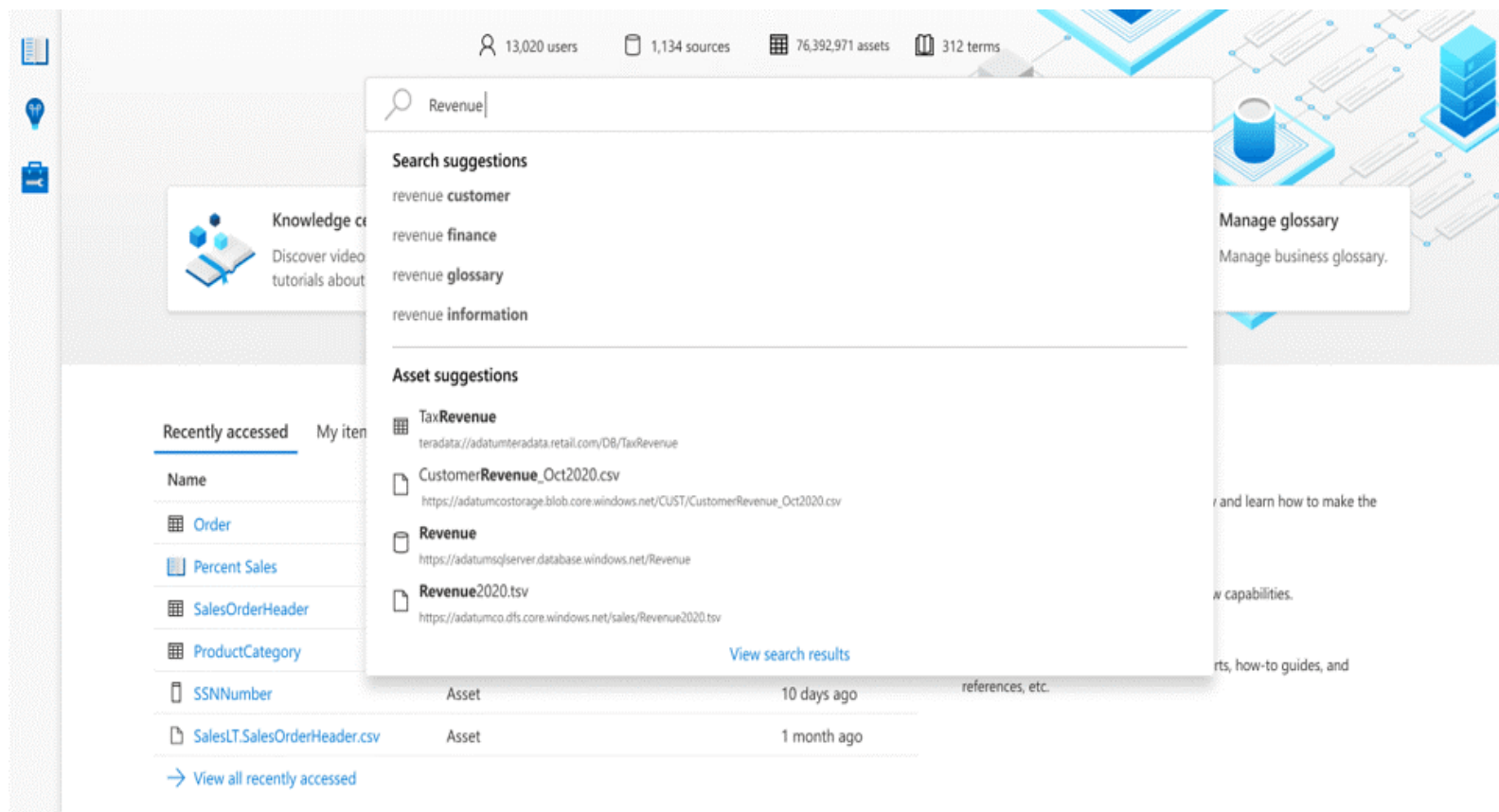


Secure data, ensure trust - no shortcuts, no compromises.

What is Microsoft Purview Studio?

Microsoft Purview is an Azure resource for admins to gain an overview of data within an organization and for end-users to use this overview for business value purposes. Built on Apache Atlas.

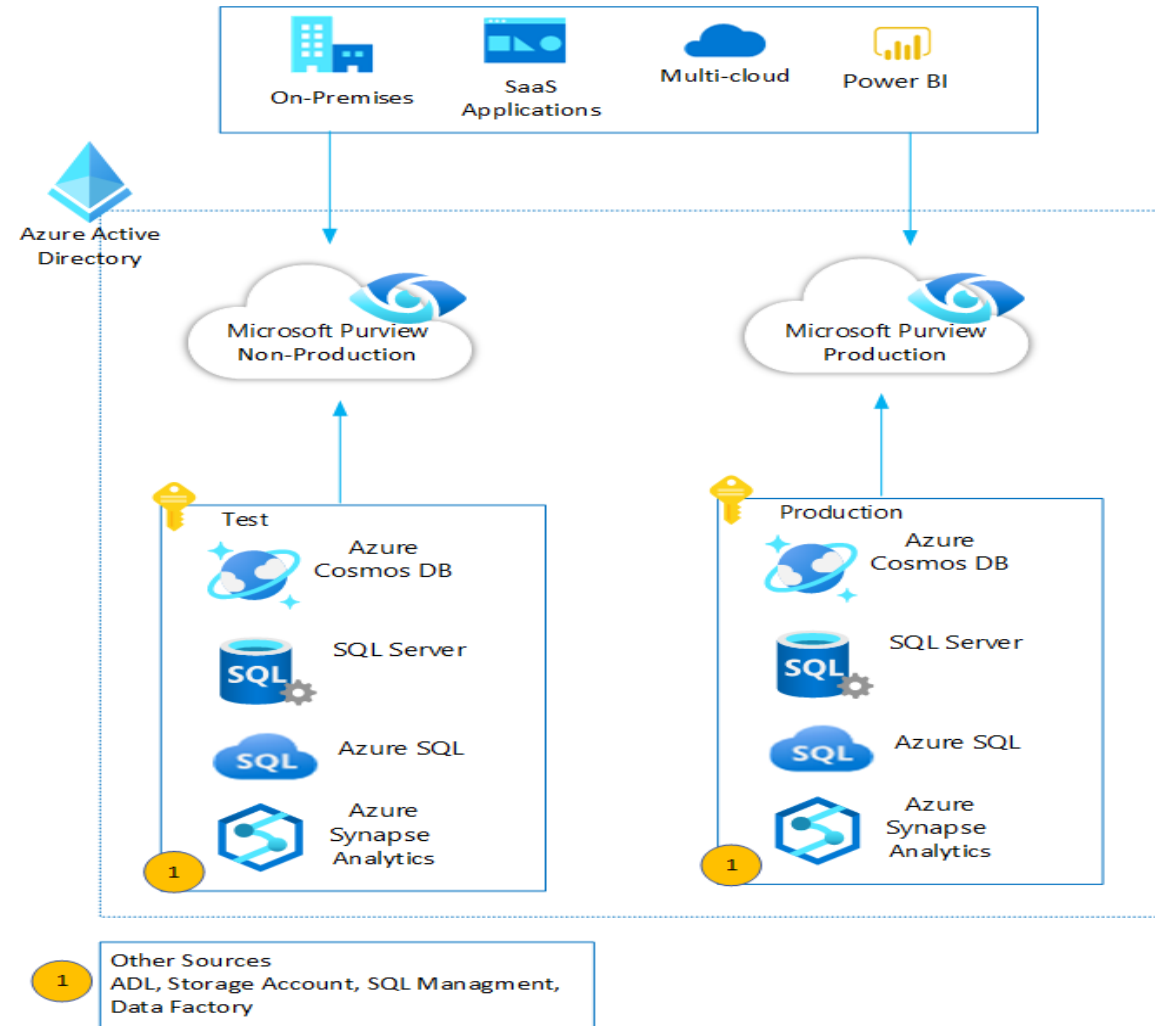
This constitutes **Data Governance** and **Data Adoption**



Reference Architecture

Microsoft Purview Studio is hierarchically situated on the top of infrastructure zones or directly peered to them in order to retrieve metadata. A common scenario for organizations in the pharmaceutical sector is to have a non-production and production environment (sometimes with associated GxP / Non-GxP environments). Segregation is possible and multi- or cross tenant functionality is similarly available.

Again, emphasis on the fact that Purview is an overlay to data already existing within the organization.



What can we do with Purview Studio?

Data Governance

Automatically apply labels to data

Create custom labels, that are applied upon scan to resources – tagging sensitive and secret data.

Glossary

Create common definitions, synonyms and thesaurus for descriptions surrounding data. Ensures common data understanding.

Data Lineage

See where data lives, where it is transformed and what it is turned into

Data Adoption

Data Catalog and Insights

Discover data across the entire data estate depending on end-user's exact use case.

Self-service access policies

Ask for viewing access to data automatically, with minimal time-to-decision.

Common Data Understanding

Ensure that your datasets follow the agreed upon data schematics

Example: Labeling in the Microsoft Purview Data Map

Automatically apply sensitivity labels to data in the Microsoft Purview Data Map



Example: Labeling in the Microsoft Purview Data Map

Automatically apply sensitivity labels to data in the Microsoft Purview Data Map

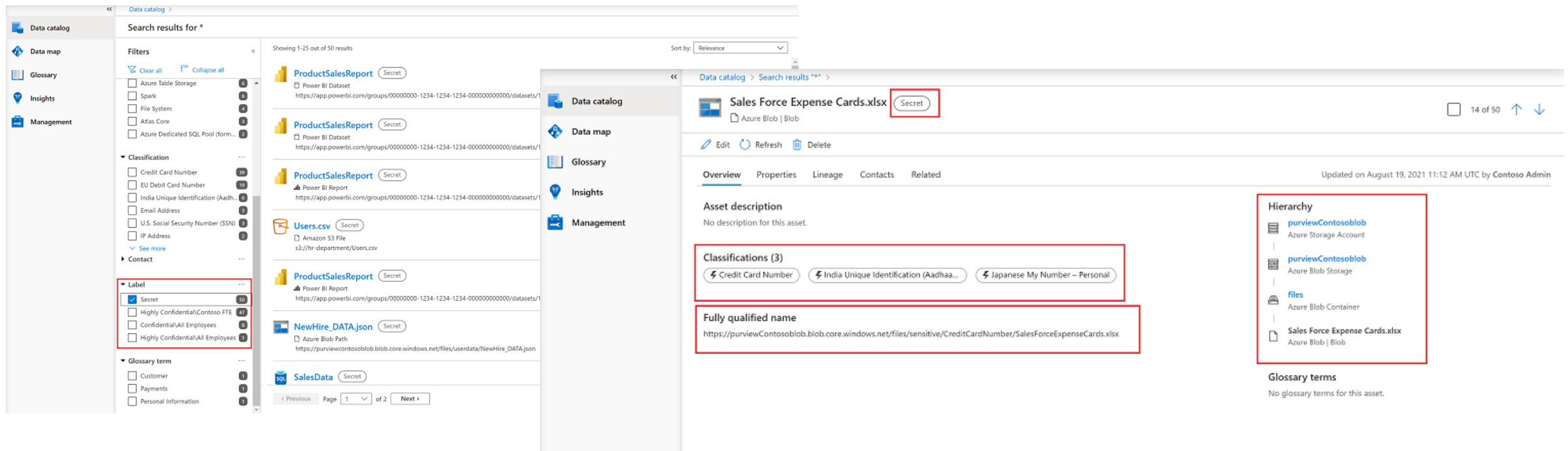
The screenshot displays the Microsoft 365 compliance center interface. On the left, the 'Information protection' solution is selected in the navigation pane. The main area shows the 'Information protection' section with tabs for Overview, Labels, Label policies, and Auto-labeling. The 'Labels' tab is active, showing a table of existing sensitivity labels.

Name	Order	Scope	Created by
Personal	0 - lowest	File,Email	Contoso Admin
Public	1	File,Email	Contoso Admin
General	2	File,Email	Contoso Admin
Confidential	3	File,Email	Contoso Admin
Highly Confidential	7	File,Email	Contoso Admin
Secret	12 - highest	File,Email,Schematized data assets	Angus MacGregor

Below the table, the 'Schematized data assets' step is highlighted in the process flow. The 'New sensitivity label' wizard is open, showing the 'Auto-labeling for schematized data assets' toggle switch, which is currently turned on. The wizard also displays a list of sensitive info types to choose from, including ABA Routing Number, Argentina National Identity (DNI) Number, Argentina Unique Tax Identification Key (CUIT/CUIL), Australia Bank Account Number, Australia Driver's License Number, Australia Medical Account Number, Australia Passport Number, Australia Tax File Number, and Australian Business Number.

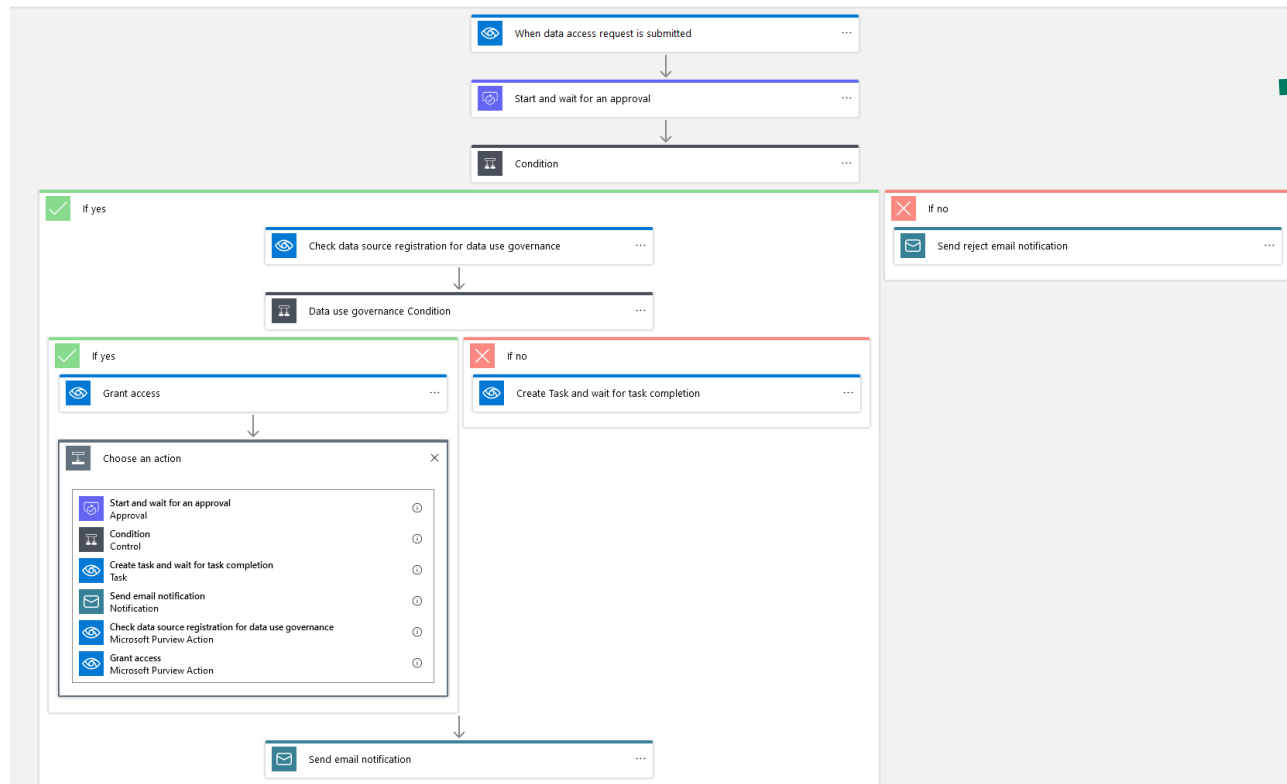
Example: Labeling in the Microsoft Purview Data Map

Automatically apply sensitivity labels to data in the Microsoft Purview Data Map



Example: Request access to data sets

Create custom access grant scripts, with minimal time-to-decision.



Microsoft Azure

Action required

Approve or reject the Azure Purview request for https://sasexploration001.blob.core.windows.net/mockdataraw/MOCK_DATA_health+cc.csv

Required action: Approve or reject the following Azure Purview request.

Item: https://sasexploration001.blob.core.windows.net/mockdataraw/MOCK_DATA_health+cc.csv

Requested By: Simon Stenroos Lorentzen

Date submitted: April 29, 2022 11:28 UTC

Approve >

Reject >

View all requests and approvals in Azure Purview. [Open Purview Studio](#) to learn more.

This email is generated from an unmonitored alias. Please don't reply.

f t y in

[Privacy Statement](#)

Microsoft Corporation, One Microsoft Way, Redmond, WA 98052

Microsoft

Securing Infrastructure

VENZO recommends that organization use the Microsoft best practice framework (Cloud-Adoption Framework) as the guiding principle for cloud-based infrastructure. This best practice inherently focuses on segregation of duties, accesses and infrastructure. Security is thus a built-in principle of the architecture.

Policies

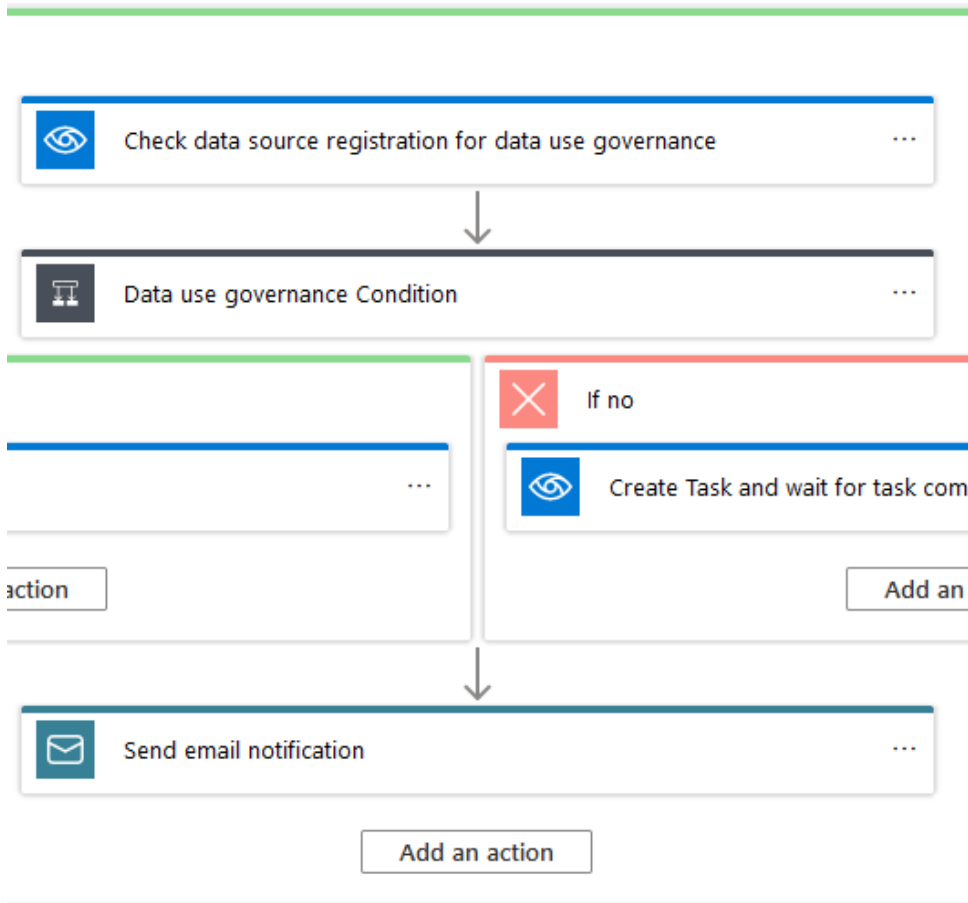
Strict deployment policies should be applied on the supporting infrastructure. This ensures that resources/infrastructure is not able to be deployed without applying to the secure principles that the organization has agreed upon.

Policies that are non-compliant can be audited, reworked and exempt if necessary. *However, nothing is left to guessing.*

Least Privilege Principle

When resources are deployed, they are deployed with the minimal required privilege needed to fulfill the task at hand. Additionally, managed identities that support resource should be assigned directly to resources in a limited privilege scope.





Securing Access

Data access in Purview Studio seeks to combine easy-of-use and reduced time-to-resolve, whilst ensuring that authorization and authentication processes are not left behind.

Authorization (Granting access)

Smart Authorization is enabled by creating automatic grant workflows on data and infrastructure (as shown in Azure Purview demo). Authorization structure follows native Azure Role-Based Access Controls (RBAC).

Authentication (Securing the access grant)

Validate users' access. When a user tries to log into a system, the system needs to verify that the person is who he or she claims to be.

All transmissions during authentication are encrypted to prevent theft of the authenticating information. MFA is likewise enforced upon authentication attempts.

Securing Data

Data Security within Microsoft Purview Studio seeks to ensure data encryption becomes a standard and that data accessibility is limited using said encryption. Sensitive data should be treated as such and by combining capabilities, we ensure that this is possible.

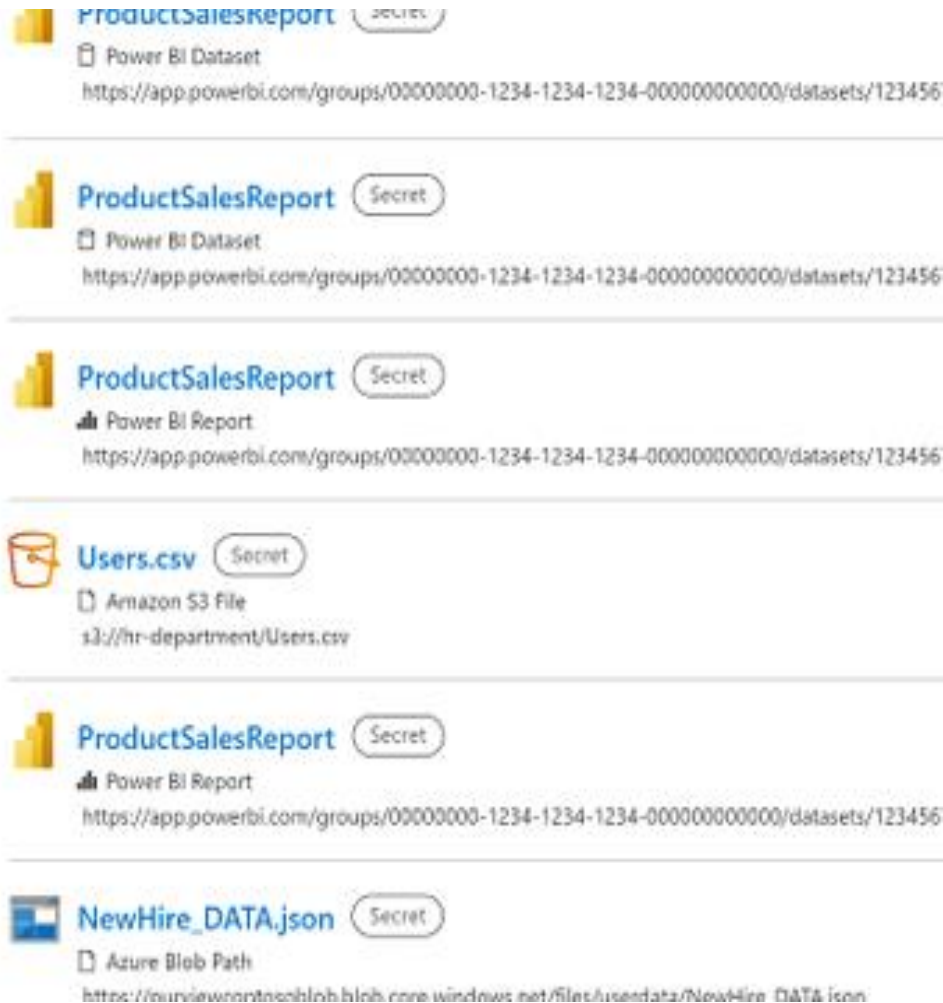
Labelling

Automatically labelling based on custom rules allow for any data types (either by pattern or dictionary) to become marked as “Secret”, “Sensitive” etc. This automation assists in automatically assessing one's data estate – even at scale.

Data Masking and Data Encryption

Transparent data encryption encrypts databases, backups, and logs at rest without any changes to your application. Without access to the databases, data cannot be read unencrypted.

Data Masking offers the possibility of segregating specific tables, rows or columns of data to select users and/or roles. This can become necessary to enforce sensitivity labels.



Monitoring & auditing

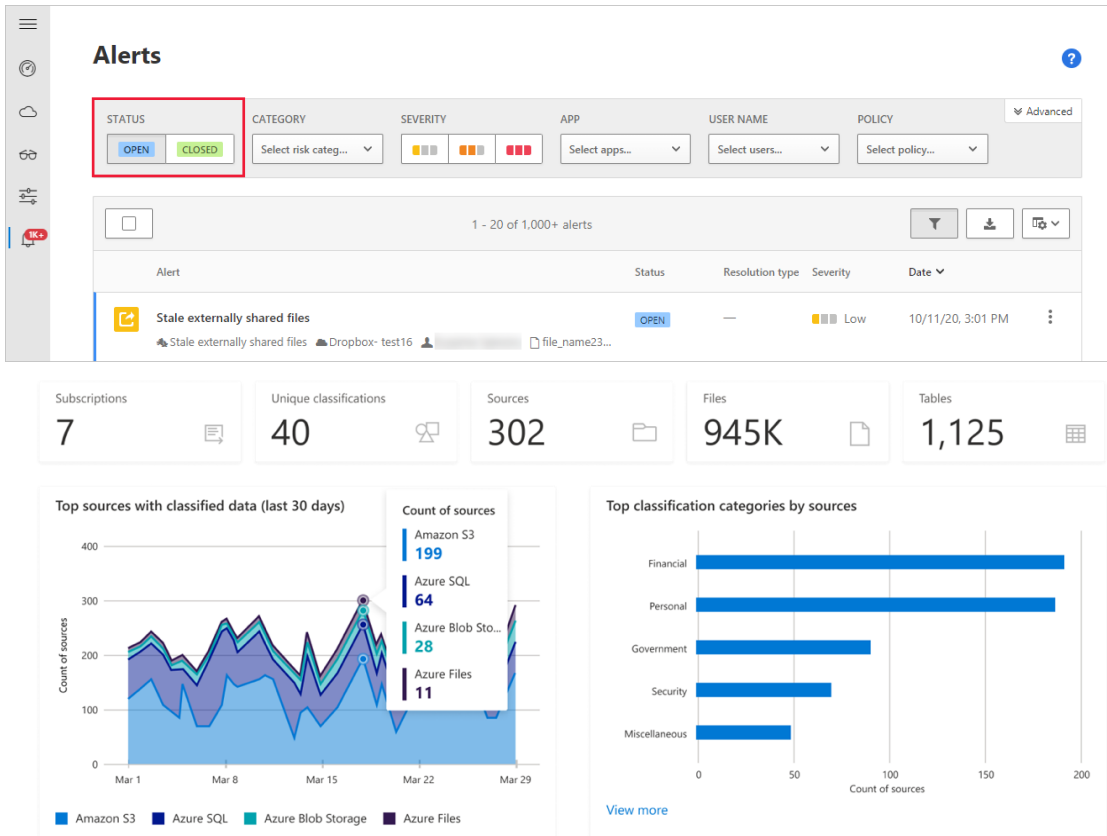
We create infrastructure to host data products and data models. However, we also want to ensure that when data is extracted, applied, transferred or changed, that we know what happened, and where it moved to. Additionally, we want to ensure that if unwanted data sharing occurs, that it be blocked, and alerts be raised.

Where is our data? Where did it move?

Who accessed what, when and why?

Using Data Lineage, we are able to see where Data moves (within scope of scanned infrastructure), when it leaves the realm of Azure into excel reports and the likes, we want to extend the functionality by securing it similarly with retention and sensitivity labels.

With active monitoring and sensitivity labels, we can create a direct correlation between logs and actions.



Wrap up & Next steps

- **Q & A / Discussion**
- **Definition & scope of Pilot/PoC**
- **Dependencies**
- **Timelines**



VENZO assisted accelerating the data-journey of a transforming pharmaceutical company



Background

The fully integrated bio-technology company was on a journey from going from a limited number of customers products to multiple of each.

Hence, this resulted in increased need for data, more structure, governance and transparency in order to fully utilize data & insights as a strong value-driver. The company was looking for a partner who could strategize, plan and deliver on a data & architecture roadmap, while ensuring data literacy and adoption in Line of Business.

VENZO's role

VENZO designed a roadmap for the customer, with clear direction in a formalized and adopted data strategy. To this, VENZO rolled out a plan for implementing a data quality & governance structure and proposed a future data architecture design, mapped to selected use cases.

With a three-step plan, VENZO discovered, designed and developed a plan for how to realize and embark on the data journey.

Output

- ✓ A data strategy, including a governance framework and operating model with roles & responsibilities to be aligned with DnA teams and Line of Business (with a hybrid model suggested)
- ✓ Target architecture and co-creation of fully GxP qualified data platform
- ✓ MVP designed and delivered within first month of partnership
- ✓ First data products incl. BI reports for selected line of business and GxP data product



Eating M&A's for breakfast: VENZO getting data under control 1 month of newly acquired companies

Need

Our Logistics client executed on a M&A-strategy to expand their business geographically. With a new company acquired on a monthly basis, The client needed to manage the data complexity and report on financial and logistical data across acquired companies.

The client wanted to build an efficient model for integrating data into a data warehouse, so management quickly could compare performance across all companies in their portfolio.

Process

1. Clarification of required insights
2. Goal-setting for the Data-model
3. Design of delivery model and deployment pipelines
4. Implementation of delivery model and hand-over to daily operations

Deliverables

VENZO delivered

- Team of data engineers and analysts to handle integration of data
- Agile delivery designed for accelerated execution
- Standardized end-to-end integration process; from the deal is signed to the
- Continuous development of data warehouse to meet changing reporting demand

Results and value add

- ✓ Integration of new source systems shortened from 6 to 1 month
- ✓ Data model optimized to report more accurately on financial results across acquired companies
- ✓ Several integration activities automated





VENZO assisted global infrastructure company in optimizing their logistic forecasting

Need

The CFO of the global infrastructure company struggled to get a full overview of train utilization including kilometers driven, vehicle capacity, and goods transported. The overview is instrumental for the financial forecast at the company and hence used on both an operational and strategic level.

Process

1. Prototype development
2. Scoping workshop
3. System integration.
4. Agile development practice with 3 iterations in 6 weeks with prototyping and redefinition.

Deliverables

VENZO delivered

- Data-integration from 5 systems to one source of truth.
- Dashboard views for daily operation and strategic optimization.

Results and value add

- ✓ Better forecasting: Complete data driven overview.
- ✓ Better variance analysis: Ability to find root-causes through data.
- ✓ Optimize train utilization

