



TOGAF & Co

Microsoft Purviews Metamodel in Context

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Topics

1. Purview basics
2. Data Governance
3. The meta model
4. TOGAF & Co
5. Wrap Up



Topics

1. **Purview basics**
2. **Data Governance**
3. **The meta model**
4. **TOGAF & Co**
5. **Wrap Up**



Purview Studio: “Google your data estate”

A single, centralized place that provides unified experience for data producers, data consumers, data & security officers

The screenshot displays the Microsoft Purview Studio interface for 'Adatum Corp' (adatumcorpetail). The top navigation bar includes 'Microsoft Azure', 'Purview', and 'Adatum Corp'. The user profile 'nayenama@microsoft.com' is visible in the top right corner. The main content area features a search bar labeled 'Search catalog' and three primary action cards: 'Browse assets' (Explore assets by source type and collection), 'Manage glossary' (Create and edit terms with custom term templates), and 'Knowledge center' (Discover learning materials and tutorials). A background diagram illustrates a data estate with various data sources and connections. Below the main content, there are two sections: 'Recently accessed' and 'My items'. The 'Recently accessed' section contains a table with the following data:

Name	Last update
starter3	12 days ago
customer.docx	12 days ago
demoreportingblob	12 days ago
democatalogadcadls	12 days ago
democatalogadcadls	12 days ago
Contoso Dev DebtServiceCoverageRatio	12 days ago

Below the table is a link: [→ View all recently accessed](#). To the right, the 'Links' section includes: [Purview overview](#), [Getting started](#), and [Documentation](#).

Data Catalog Page

All Data Catalog related activities

The screenshot displays the Microsoft Purview Data Catalog interface for 'Adatum Corp'. The top navigation bar includes 'Microsoft Azure', 'Purview', and 'Adatum Corp', along with user information 'nayenama@microsoft.com'. The main content area features a header for 'Adatum Corp (adatumcorpetail)' with three metrics: '33 sources', '10,234,314 assets', and '114 glossary terms'. Below this is a search bar labeled 'Search catalog'. Three activity tiles are visible: 'Browse assets', 'Manage glossary', and 'Knowledge center'. At the bottom, there are two sections: 'Recently accessed' and 'Links'. The 'Recently accessed' section contains a table with columns 'Name' and 'Last update', listing items like 'DimOrganization' and 'starter3'. The 'Links' section provides links for 'Purview overview', 'Getting started', and 'Documentation'.

Catalog metrics

Search bar to browse and search data catalog

Data Catalog tiles for key activities

Recently accessed entities and list of entities owned by logged-on data user.

Links for Overview, getting started and purview documentation

Browse & Search

Use facets and filters based on asset metadata to narrow down your search results

The screenshot shows the Microsoft Purview Data Catalog interface. The search query is "customer north america". The left sidebar contains a "Collection" facet with three options: "AzureAndBINorthAmerica" (14688), "Adatum Corp" (12), and "AmazonNorthAmerica" (2). The "Adatum Corp" option is selected. Below the "Collection" facet is a "Classification" section with three options: "Email Address" (5), "Person's Name" (5), and "U.S. Phone Number" (1). The main content area displays 12 results, showing the first five. Each result is a "DimCustomer" table. The first result is an "Azure Blob Resource Set" with the URL "https://sep2019demostorage2.blob.core.windows.net/customerdata/customer/Custom(N).csv". The other four results are "Azure Synapse Dedicated SQL Table" instances with various connection strings. The interface includes a search bar, filter buttons, a "Filter by keyword" input, and a "Sort by" dropdown set to "Relevance".

Microsoft Azure | Purview > Adatum Corp | customer north america

Data catalog > Search results for customer north america

Source types : all | Instances : all | Clear all filters

Filter by keyword

Showing 1-12 out of 12 results | Sort by: Relevance

Collection

- AzureAndBINorthAmerica (14688)
- Adatum Corp (12)
- AmazonNorthAmerica (2)

Classification

- Email Address (5)
- Person's Name (5)
- U.S. Phone Number (1)

Customer
Azure Blob Resource Set
https://sep2019demostorage2.blob.core.windows.net/customerdata/customer/Custom(N).csv

DimCustomer
Azure Synapse Dedicated SQL Table
mssql://nayenamaworkspace.sql.azuresynapse.net/salespool/dbo/DimCustomer

DimCustomer
Azure Synapse Dedicated SQL Table
mssql://nayenamaworkspace.sql.azuresynapse.net/marketingpool/dbo/DimCustomer

DimCustomer
Azure Synapse Dedicated SQL Table
mssql://nayenamaworkspace.sql.azuresynapse.net/adatumcorp/dbo/DimCustomer

DimCustomer
Azure Synapse Dedicated SQL Table
mssql://nayenamaworkspace.sql.azuresynapse.net/financepool/dbo/DimCustomer

DimCustomer
Azure Synapse Dedicated SQL Table
mssql://nayenamaworkspace.sql.azuresynapse.net/nayenamapool/dbo/DimCustomer

< Previous | Page 1 of 1 | Next >

Asset Overview

Discover technical, semantic and business information about an asset including applied classifications, associated glossary terms, sensitivity labels, and endorsement labels

The screenshot shows the 'Asset Overview' page for a Power BI Dataset named 'ProductSalesReport'. The page is part of a search results list for 'customer' in the Data Catalog. The asset is marked as 'Certified' and is a Power BI Dataset. It has been updated on July 27, 2021, at 10:02 PM UTC by an automated scan.

Asset description: Dataset with sales and customer details.

Classifications (4): Canada Social Insurance Number, Franmer Product, Franmer SIN, Person's Name.

Schema classifications (1): Franmer Product.

Fully qualified name: <https://app.powerbi.com/groups/657d261d-247b-4234-9c2d-515b0bbdd328/datasets/0a0ca805-3934-4265-be58-3afc833d8ac5>

Hierarchy:


- Shared (Power BI Capacity)
- SalesDepartment (Power BI Workspace)
- ProductSalesReport (Power BI Dataset)

Glossary terms (7): Customer Product, Product client, Global Markets, Products, Sales, Saleswithtax, SSN.

Asset Schema

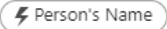
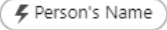
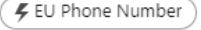
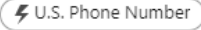
See an assets schema and the metadata associated with each column

Data catalog > Search results "customer" >

 **Customers**
Azure Synapse Dedicated SQL Table

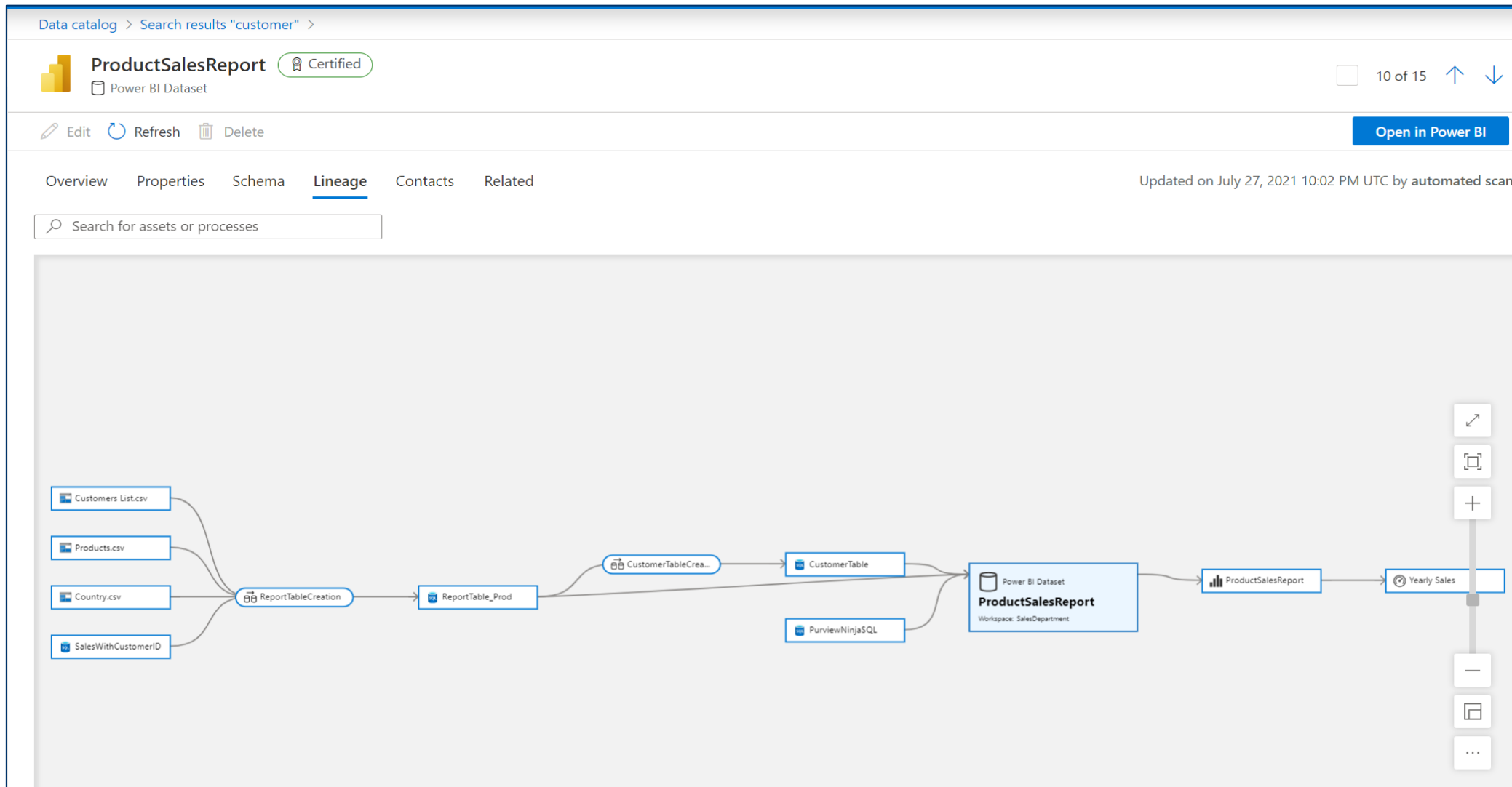
[Edit](#) [Refresh](#) [Delete](#) [Edit columns](#)

Overview **Properties** Schema Lineage Contacts Related Updated on March 31,

Column name	Classifications	Sensitivity label	Glossary terms	Data type	Asset description
AddressLine1				varchar	
AddressLine2				varchar	
City				varchar	
CreatedDate				date	
CustomerID				varchar	
FirstName				varchar	
LastName				varchar	
PhoneNumber	 			varchar	
State				char	
UpdatedDate				date	
ZipCode				varchar	

Asset Lineage

Trace lineage of data assets across the data estate

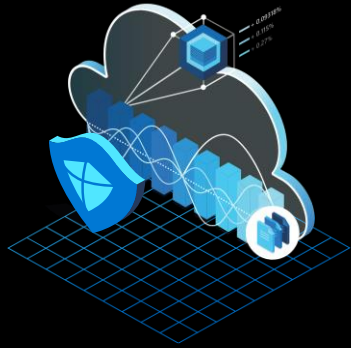


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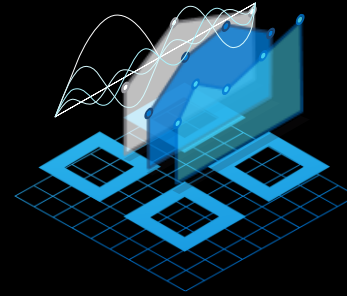
Microsoft Purview enables unified data governance



Reimagine data governance in the cloud



Set the foundation for effective data governance

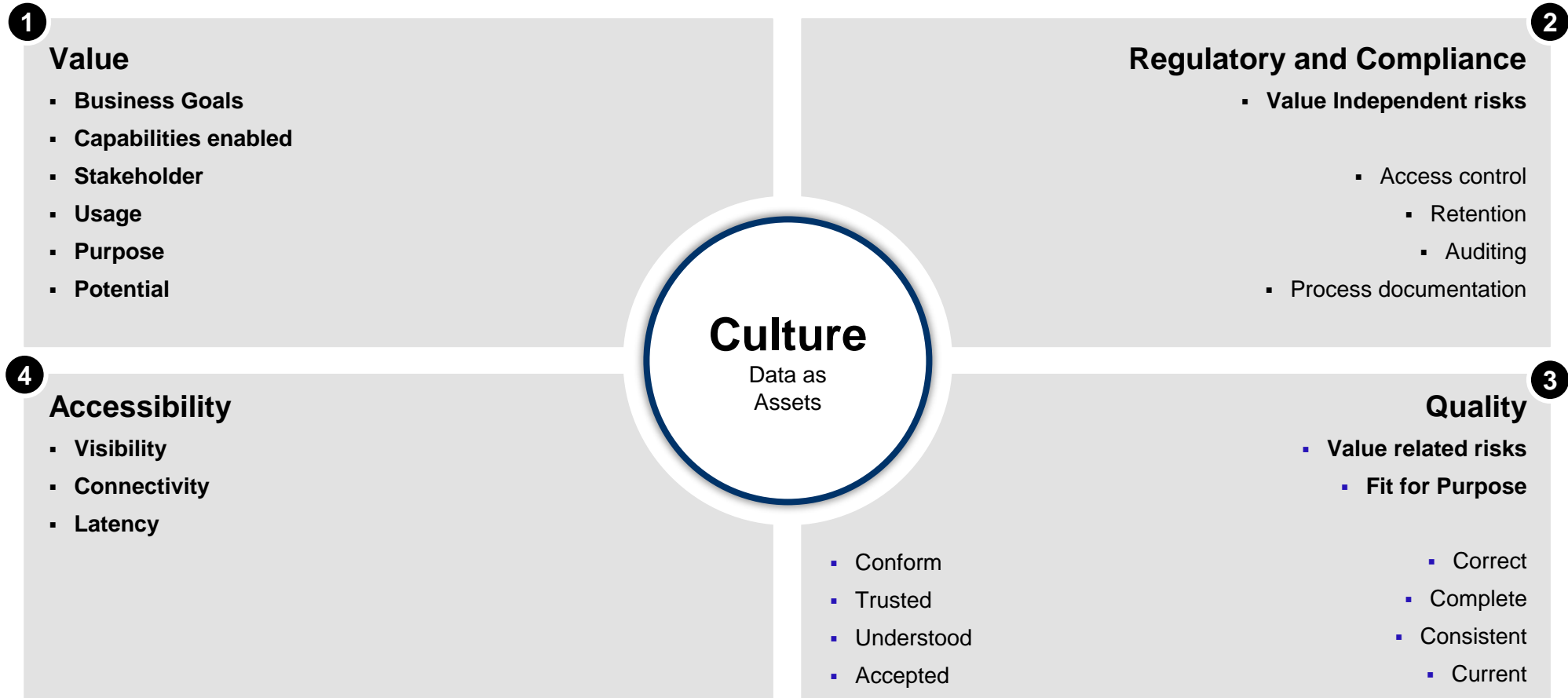


Maximize business value of data for data consumers

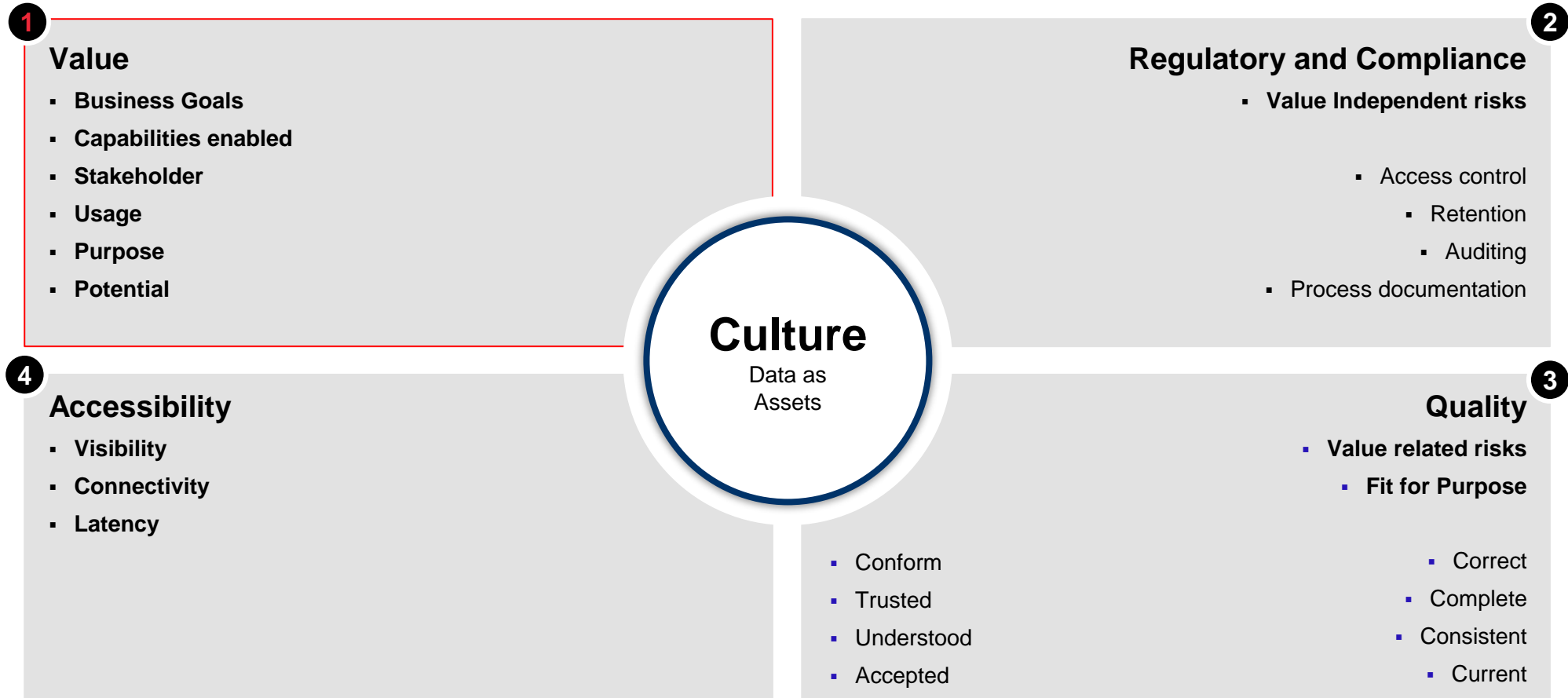


Gain strategic insight into data use across the estate

The core of Data Governance



The core of Data Governance



Capabilities needed

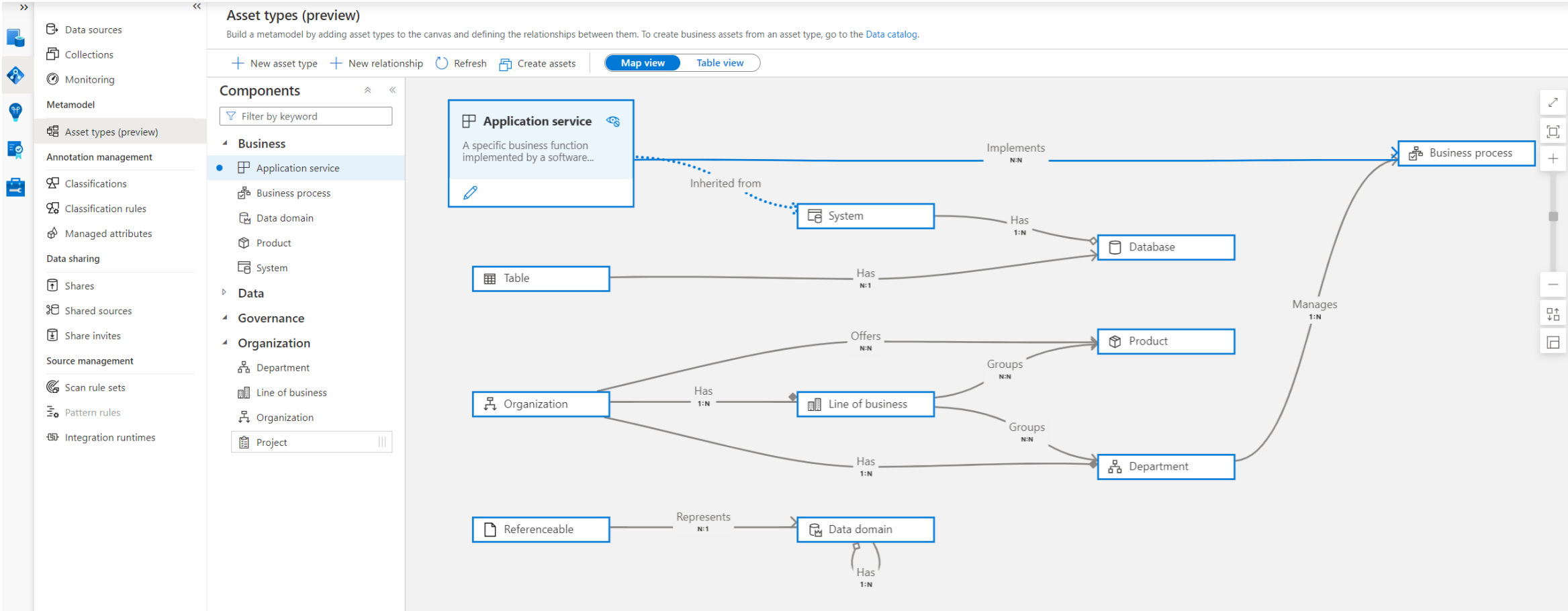
1. Map data assets/processes and business entities/processes
2. Know your business goals
3. Know the business capabilities needed/missing
4. Understand how technical capabilities enable business capabilities

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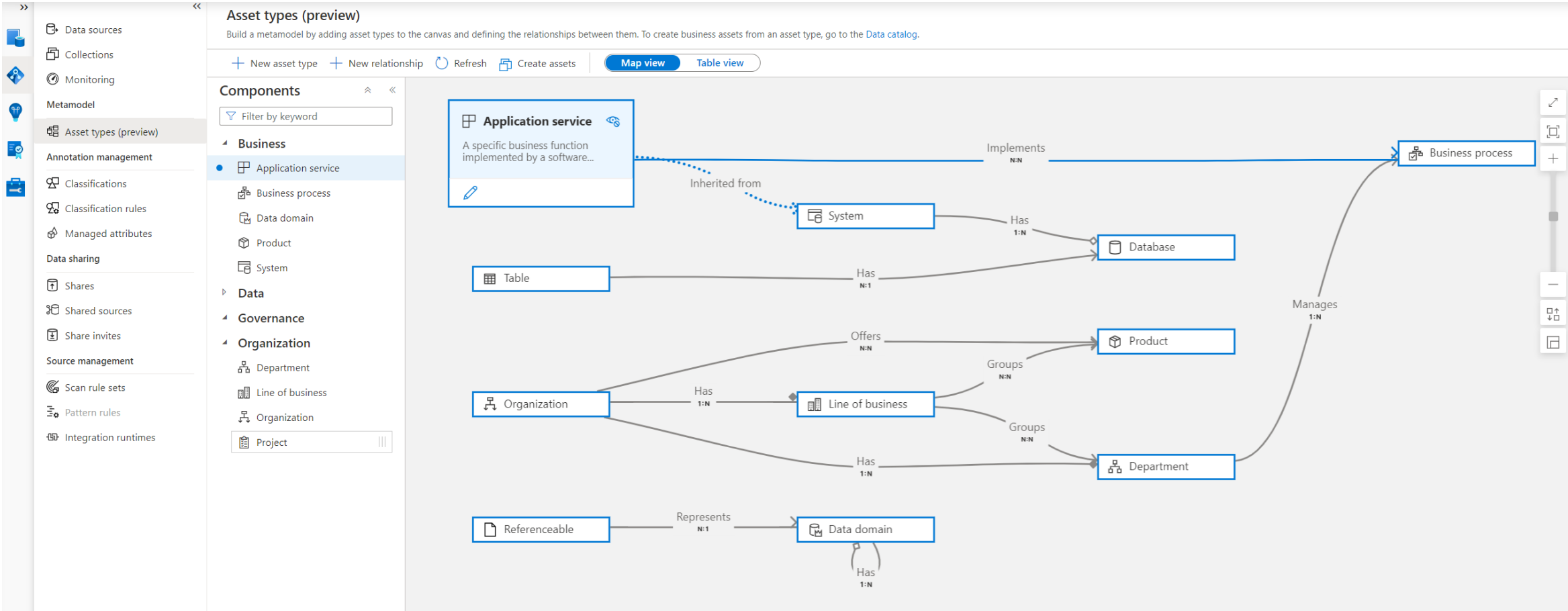
New Asset Types



New Asset Types

Asset Type	Description
Application service	A well-defined software component, especially one that implements a specific business function such as on-boarding a new customer, taking an order, or sending an invoice.
Business process	A set of activities that are performed in coordination in an organizational or technical environment that jointly realizes a business goal.
Data Domain	A category of data that is governed or explicitly managed for master data management.
Department	An organizational subunit that only has full recognition within the context of that organization. A department wouldn't be regarded as a legal entity in its own right.
Line of business	An organization subdivision focused on a single product or family of products.
Organization	A collection of people organized together into a community or other social, commercial or political structure. The group has some common purpose or reason for existence that goes beyond the set of people belonging to it and can act as a unit. Organizations are often decomposable into hierarchical structures.
Product	Any offered product or service.
Project	A specific activity used to control the use of resources and associated costs so they're used appropriately in order to successfully achieve the project's goals, such as building a new capability or improving an existing capability.
System	An IT system including hardware and software.

New Asset Types



New Assets creation

Microsoft Purview | CS-DataCatalog prod

>> <<

- Home
- Browse
- Business assets (preview)**
- Glossary

Business assets (preview)

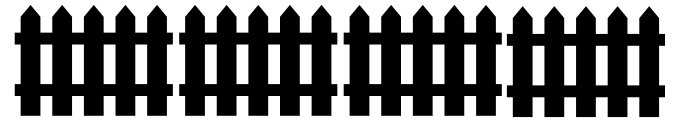
View and manage all business assets. To manage assets for different collections, go to the [Data map](#).

+ New asset | Edit | Delete | Refresh | Import | Export | Monitor import

Filter by keyword | Asset type : All | Add filter | Clear all filters

Showing 1 - 6 of 6 items

<input type="checkbox"/>	Asset name	Asset type
<input type="checkbox"/>	AppServ: ExternalReferencesMatch	Application service
<input type="checkbox"/>	BP: CleanAddresses	Business process
<input type="checkbox"/>	DD: Address	Data domain
<input type="checkbox"/>	DD: Customer	Data domain
<input type="checkbox"/>	DD: Supplier	Data domain
<input type="checkbox"/>	System: Main	System



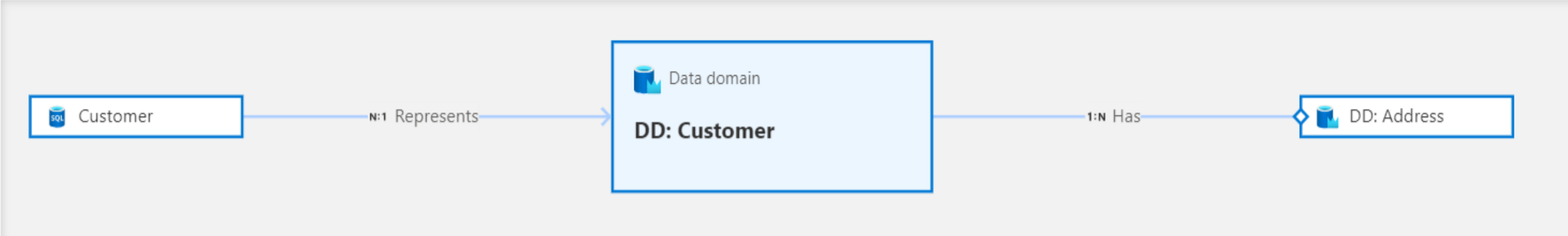
Limitations



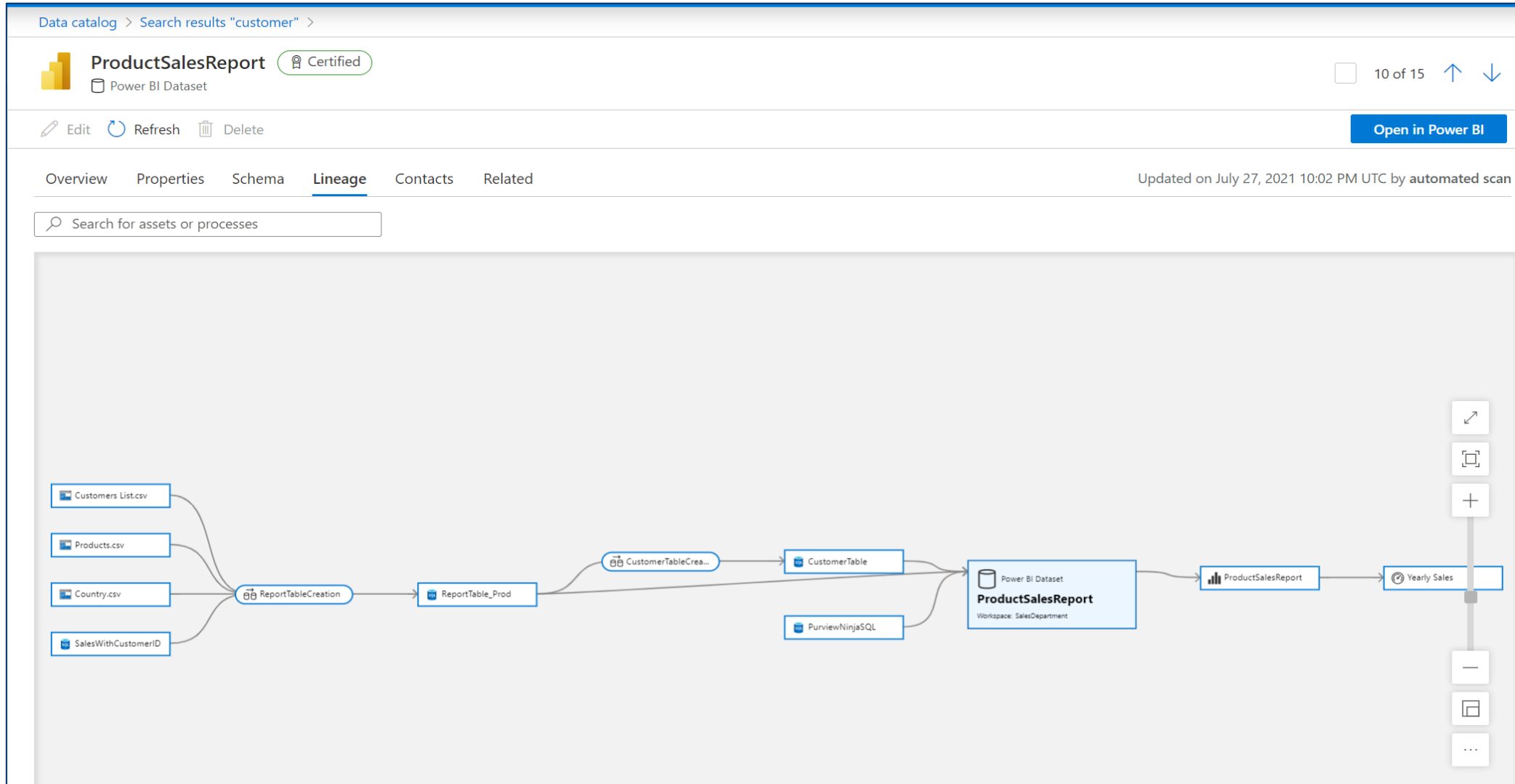
Chains: Just one hop

Overview Contacts Related

Search by asset name Show relationship Relationship category : All



Remember: Asset Lineage

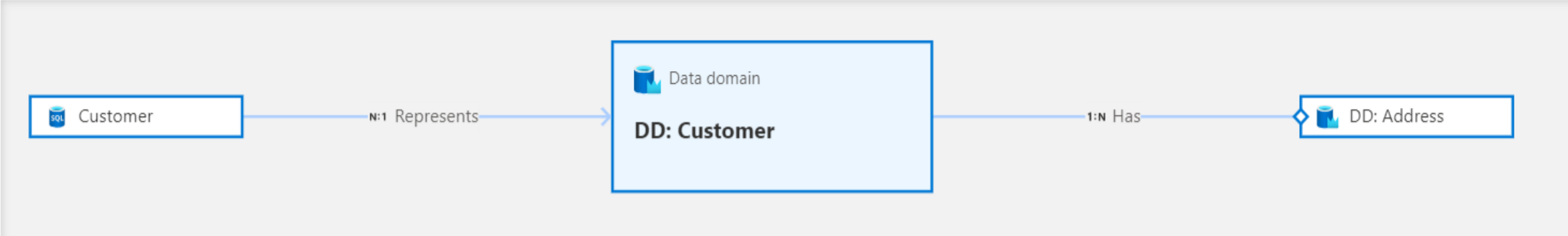




Chains: Just one hop

Overview Contacts Related

Search by asset name Show relationship Relationship category : All



Chains: Not for data assets



Address

Azure SQL Table

+ Add Tag

Edit Select for bulk edit Request access Refresh Delete

Overview Properties Schema Lineage Contacts **Related**

cs-test-sql.database.windows.net
Azure SQL Server

AdventureWorks
Azure SQL Database

SalesLT
Azure SQL Schema

Showing 1 to 10 of 10 items

Name	Type
Address	Azure SQL Table
Customer	Azure SQL Table
CustomerAddress	Azure SQL Table
Product	Azure SQL Table
ProductCategory	Azure SQL Table
ProductDescription	Azure SQL Table
ProductModel	Azure SQL Table
ProductModelProductDescription	Azure SQL Table
SalesOrderDetail	Azure SQL Table
SalesOrderHeader	Azure SQL Table



No manual data assets

New asset

Asset type

Application service

Overview

Contacts

Related

Name *

Description

Business

Application service

Business process

Data domain

Product

System

Organization

Department

Line of business



No “business level” lineage

DD: Customer
Data domain
+ Add Tag

Edit Refresh Delete

Overview **Contacts** Related

Description
No description for this asset.

Glossary terms
No glossary terms for this asset.

Properties
No records found

Managed attributes
Filter by attribute name | Show attributes without a value
No Attributes for this asset.

Has Data domain (1)
DD: Address

isRepresentedBy Referenceable (1)
Customer

Collection path
CS-DataCatalog

Address
Azure SQL Table
+ Add Tag

Edit + Select for bulk edit Request access Refresh Delete

Overview **Properties** Schema **Lineage** Contacts Related

Asset description

No description for this asset.

Managed attributes

Filter by attribute name | Show attributes without a value

No Attributes for this asset.

Classifications ^①

No classifications for this asset.

Schema classifications (1) ^①

World Cities

Fully qualified name ^①

mssql://cs-test-sql.database.windows.net/AdventureWorks/SalesLT/Address

Collection path

CS-DataCatalog

Hierarchy

cs-test-sql.database.windows.net
Azure SQL Server
|
AdventureWorks
Azure SQL Database
|
SalesLT
Azure SQL Schema
|
Address
Azure SQL Table

Glossary terms

No glossary terms for this asset.

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4. TOGAF & Co

1. Frameworks (the „Co“)
2. TOGAF
3. Architecture Domains
4. Architecture Development Method

4.1 Architecture Frameworks

- [The Open Group Architectural Framework \(TOGAF\)](#)
- [The Zachman Framework for Enterprise Architecture](#)
- Federal Enterprise Architecture Framework (FEAF)
- Gartner
- ...

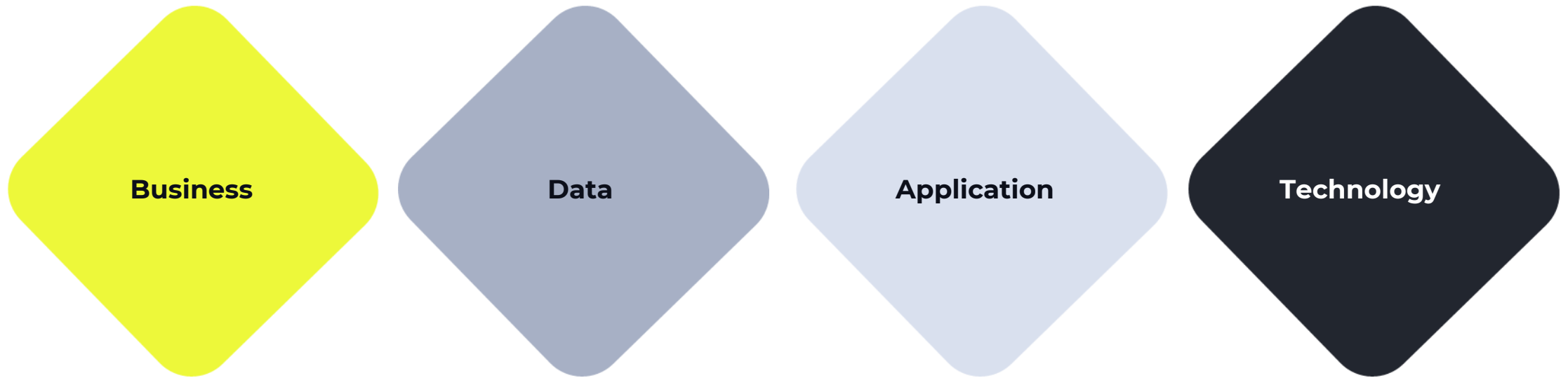


Attribution: Bundesarchiv, Bild 183-R0526-0028 / CC-BY-SA 3.0

4.2 TOGAF

Basically: “ADM” - Method for integrating Architectur Domains

4.3 Architecture Domains



Business

Data

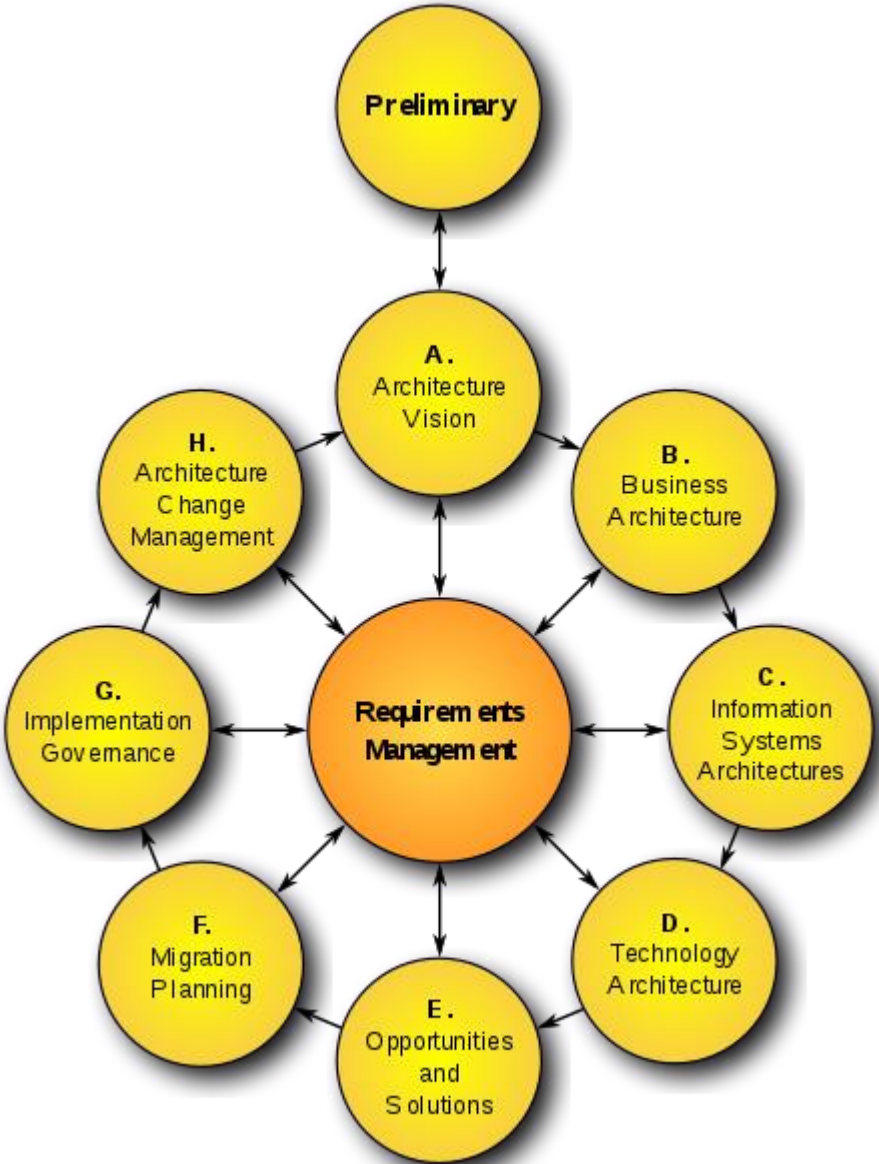
Application

Technology

- **Business strategy**
- **Organization**
- **Key business processes**
- **Regulations**

- **Infrastructure and related standards**

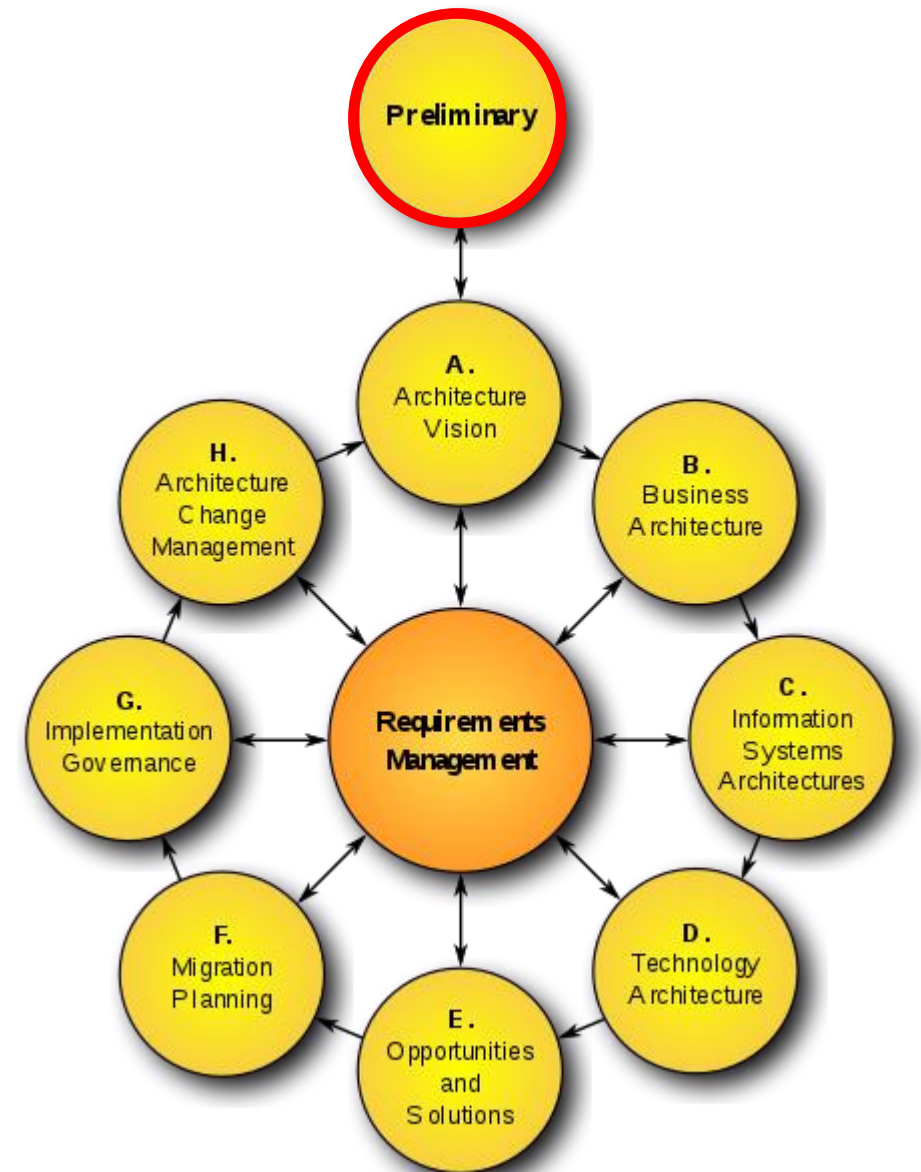
4.4 Architecture Development Method ("ADM")



4.4 ADM

Preliminary

1. Organisation
2. Architecture capabilities desired and enablement
3. Architecture principles
4. Link to business principles & goals
5. Governance





4.4 ADM Excuse: Architecture principles

1. Should have:

1. Name
2. Statement
3. Rational
4. Implications: “How does this affect me?”
(ressources, costs, tesks etc.)

2. Should be:

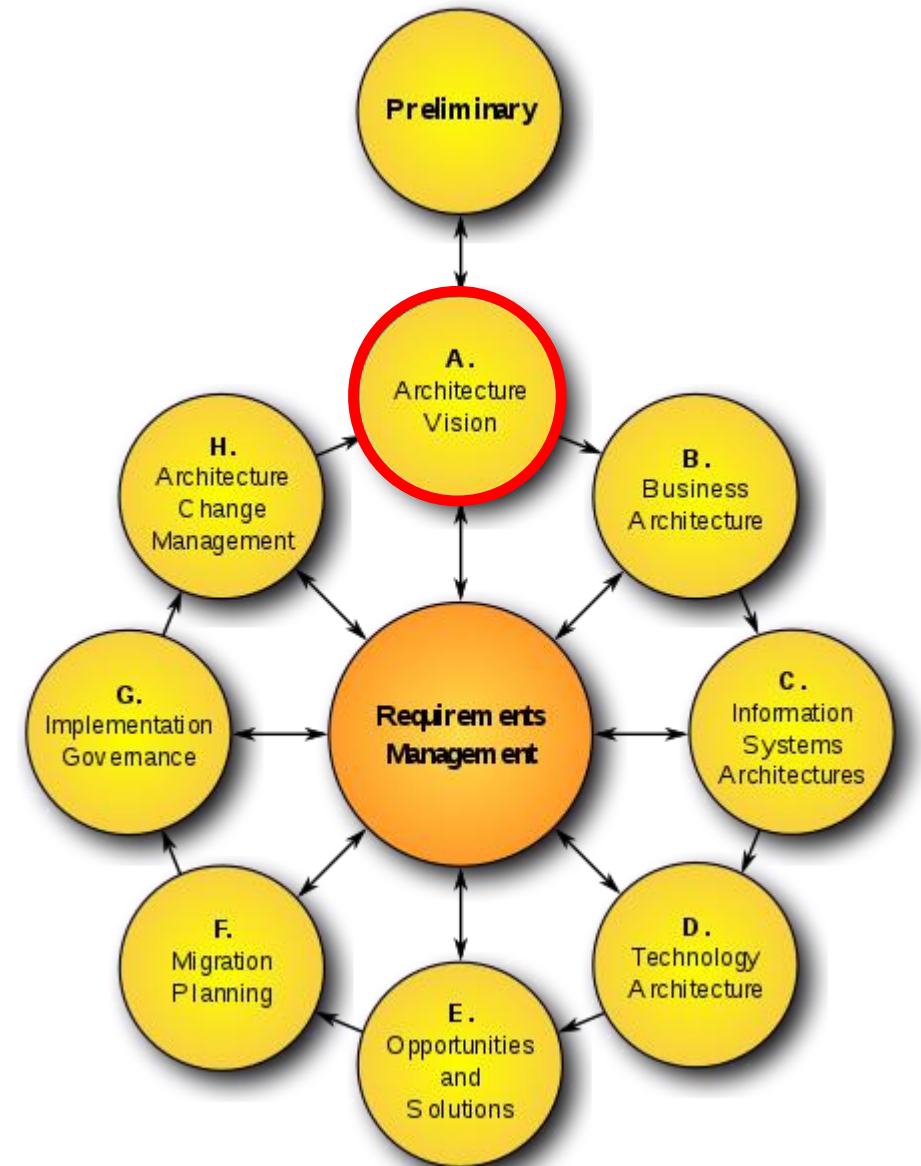
1. Understandable
2. Robust
3. Complete
4. Consistent
5. Stable

-> Samples in **TOGAF® Standard — ADM Techniques**

4.4 ADM

A. Vision

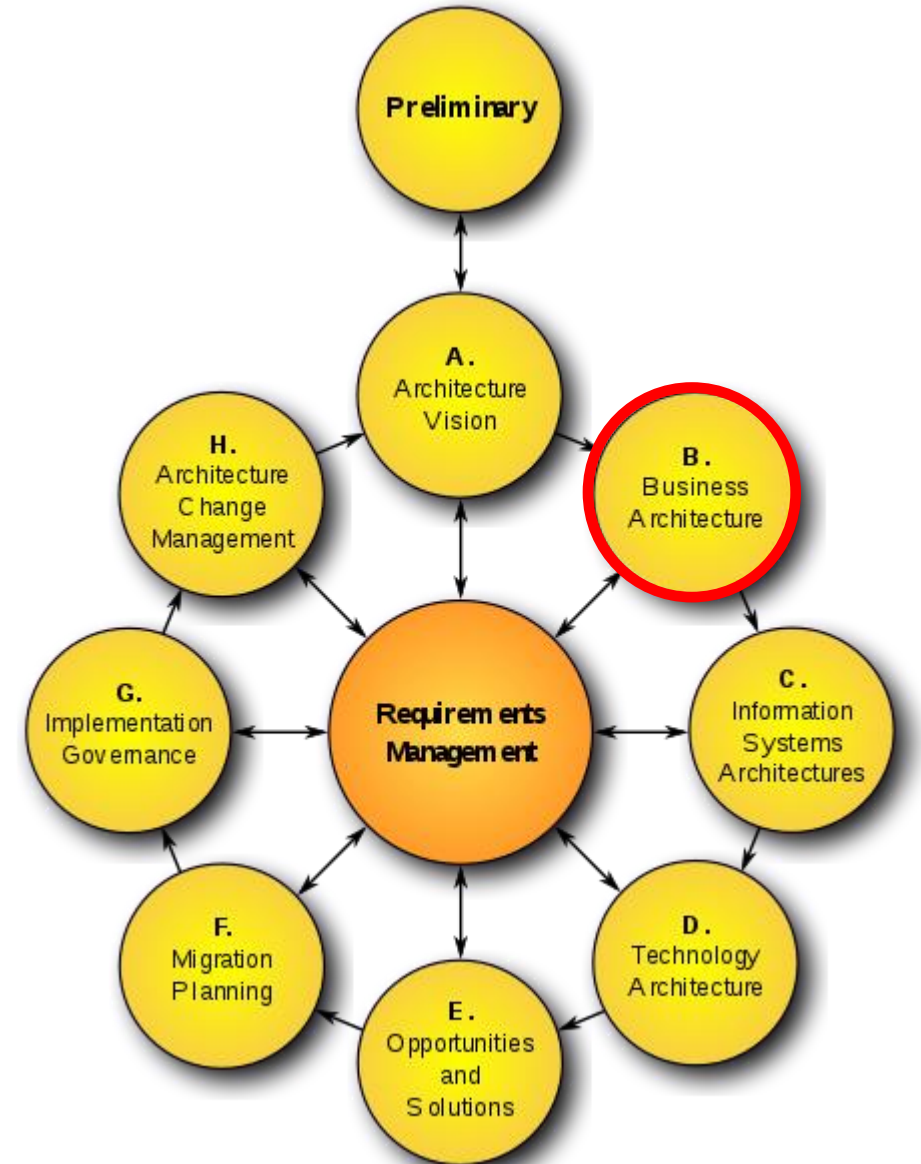
1. Vision of the capabilities and business value
2. Scope & buy in



4.4. ADM

B. Business Architecture

1. Business principles
2. Business goals
3. Business drivers
4. Business processes
5. Map capabilities to value stream



4.4. ADM

C. Information Systems Architecture

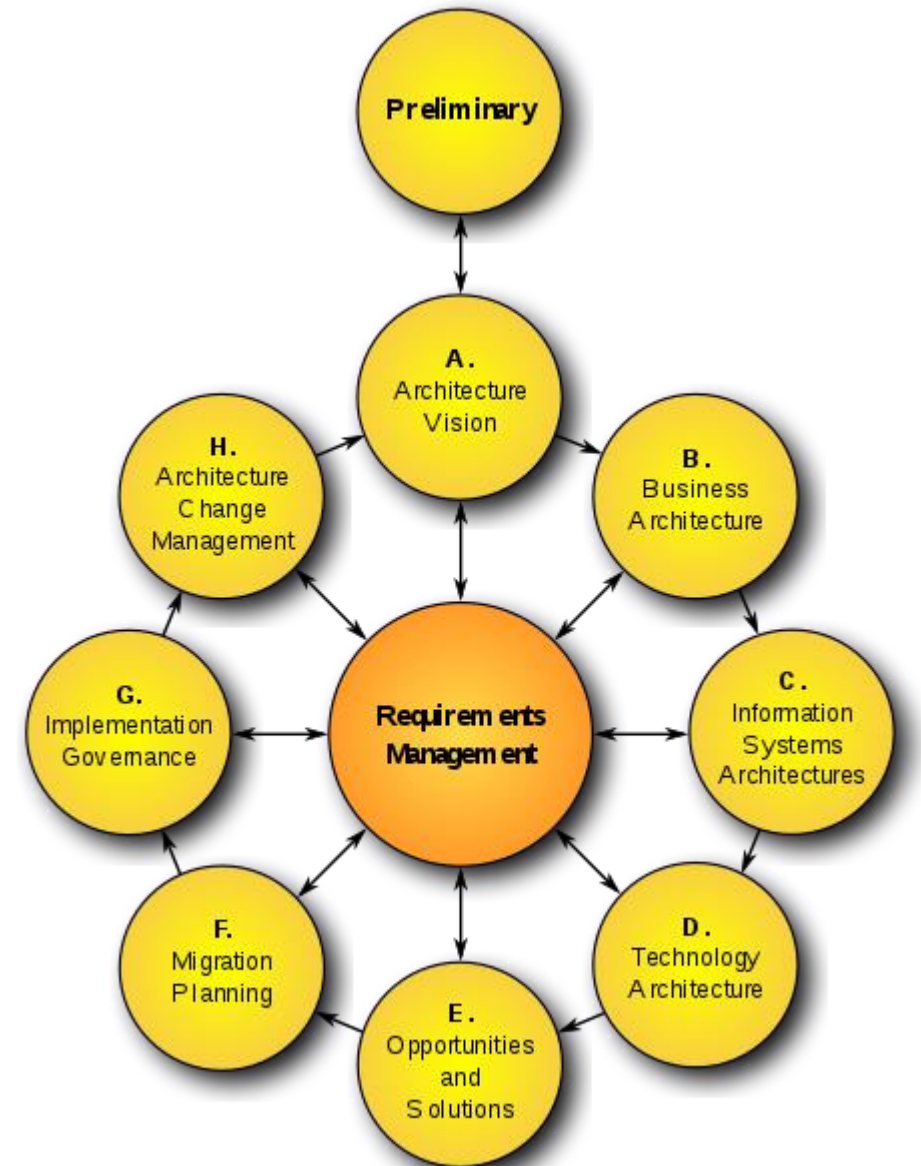
1. Data Architecture
2. Application Architecture

“In either order”

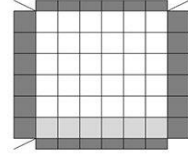
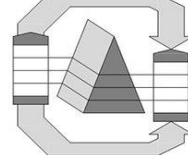
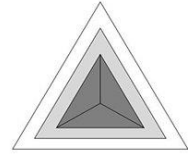
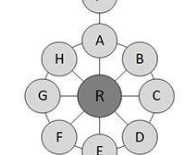


4.4. What I like ...

1. Integrating Tech & Business goals
2. Focus on capabilities
3. Tons of templates (but tempting ...)
4. Principles may discipline the hordes of geniuses/chemists



Beyond the promises

	Zachman	FEAF	DoDAF	TOGAF
Most Famous Emblem				
Initially Promised Value	Taxonomy for architectural descriptions, or 'ontology' for enterprise architecture	Rather comprehensive EA guidance outlining the overall approach to architecture	Steps, views and products necessary to develop and document architecture	End-to-end EA guidance defining steps, deliverables and many other practical aspects, industry standard
Actual Historical Origin	Conceived as a complement to BSP, based on sheer speculations and inappropriate analogies	Replica of EAP, which in turn cloned BSP from the 1970s that proved ineffective decades ago	Replica of C4ISR, which itself was inspired by earlier naive ideas that proved flawed long ago	Replica of TAFIM, which in turn imitated ancient methodologies that consistently proved impractical
Central Deceptive Theme	Information systems can be planned similarly to buildings or airplanes using detailed drawings	The desired state of complex organisations can be defined rather minutely by architects	The key challenge is to design proper architecture and fully describe it, then the rest will naturally follow	Practicing enterprise architecture implies following a sequential, step-wise process
Inflicted Financial Harm	No reliable estimations, but anecdotal evidence suggests considerable sums of money globally	Up to one billion dollars spent in the attempts to implement the framework in the U.S. Government	Up to 400 million dollars consumed by the framework in the U.S. Department of Defense	Inestimable global expenditures on implementation efforts, various trainings, courses and certifications
Real Practical Value	No value at all, the taxonomy is purely notional and inapplicable to real EA artifacts useful in practice	No value whatsoever, only obscure pictures and arcane reference models	At best, a loose catalogue of models that might be helpful only to experienced architects	An unsystematic 'trash can' where veteran architects can find certain useful ideas that they already know

Svyatoslav Kotusev (<http://kotusev.com>) for the British Computer Society (BCS)

Quoted from: <https://www.bcs.org/articles-opinion-and-research/a-comparison-of-the-top-four-enterprise-architecture-frameworks/>

Common usage ...



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5. Wrap Up

- Nice lineage graphs do not give you a business case (and thus funding)
- No data strategy without business strategy
- Focus on value, risks and capabilities
- Prioritize & start small (as usual)
- Align on principles where necessary
- Beware of the weight
- Purview still needs some time ...