

# EDM Webinar

## Automating CDMC key controls with BigID: Perspectives from LSEG

*A conversation with*



**Stephen Gatchell**  
Director of  
Customer Advisory  
BigID



**Oli Bage**  
Distinguished  
Engineer,  
Head of Architecture  
Data & Analytics  
LSEG



**Shobana  
Ragothaman**  
Data Management  
Consultant  
Projective Group



**Scott Beange**  
Head of Data  
Management  
Projective Group



Moderator



**Jim Halcomb**  
Head of Product  
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**Stephen Gatchell**  
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Customer Advisory  
BigID



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Distinguished Engineer,  
Head of Architecture,  
Data & Analytics,  
LSEG



**Shobana  
Ragothaman**  
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Consultant  
Projective Group



**Scott Beange**  
Head of Data Management  
Projective Group



## Agenda

### Overall Objective:

Highlight the value of CDMC and why it is important for technology to align with industry leading frameworks

**01**

Introductions

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**02**

Origins of Cloud Data Management Capabilities & The Key Controls

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**03**

The strategic importance of aligning technology and industry leading frameworks

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**04**

CDMC certification process

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**05**

AI, Data & Analytics Controls & Data Products

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**06**

Q&A

# **Origins of Cloud Data Management Capabilities & The Key Controls**

# CDMC: Industry Engagement

100+ Leading firms and 300+ participants actively participating since May 2020



## CDMC Working Group



## Cloud & Technology Provider Certification



## Regulatory Engagement

- EDMCouncil**
- **US:** Federal Reserve, CFTC, FDIC, SEC
  - **Canada:** OSFI
  - **UK:** BoE, FCA, ICO
  - **Germany:** BaFin
  - **Swiss:** FinMA
  - **Australia:** APRA
  - **Singapore:** MAS
  - **African Continental Cloud Regulatory Symposium**
  - Others

## EDMC Support

- EDMCouncil**
- **Training Courses**
  - **Assessments & Certification**
  - **Authorized Partner Program**
  - **FINOS** Open Source Project
  - **Other industries engaged:** Pharma/Life Sciences, Telecommunications, Manufacturing, Energy, Insurance, Government

## CDMC+ Extensions

- EDMCouncil**
- 2023 Working Groups:**
- Analytics
  - Data Marketplace
  - Data Sharing
  - Master Data Management
  - Federated Data Governance
  - Data Mesh

**CDMC Framework v1 Published September 2021**



# CDMC Framework

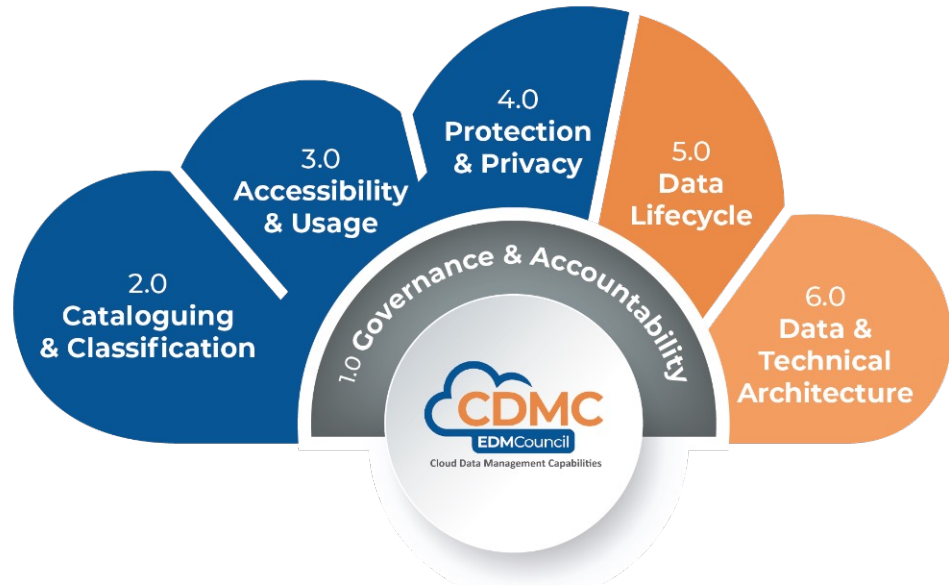
**160+** Pages

**6** Components

**14** Capabilities

**37** Sub-capabilities

**14** Key Controls



Best practice framework for the migration, management,  
and enablement of sensitive data in cloud

Free license – Download at:  
[EDMCouncil.org](https://EDMCouncil.org) > Frameworks > CDMC

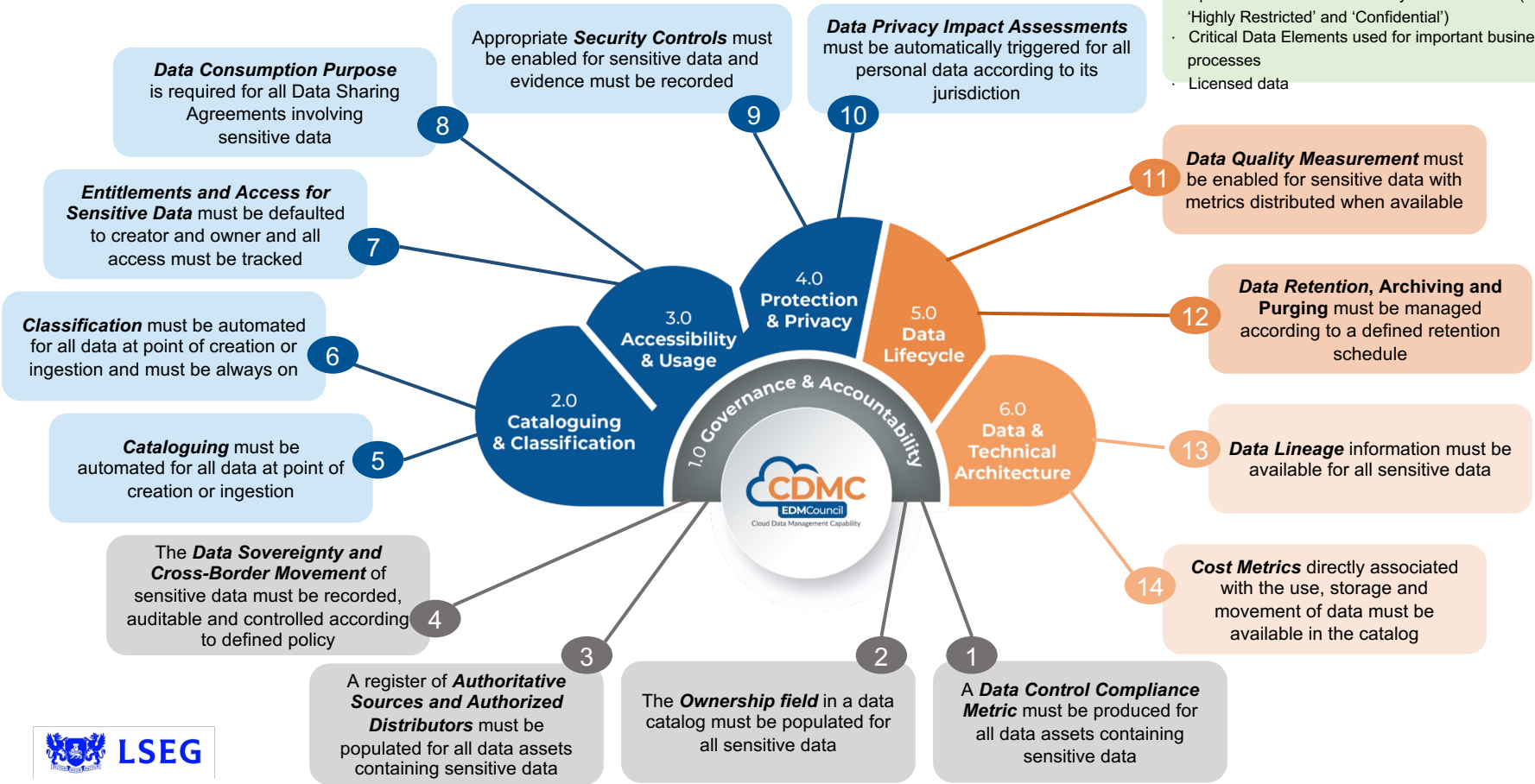


# Cloud Data Management Capabilities (CDMC)















## 14 Key Controls and Automations

**Sensitive Data** includes classifications such as:

- Personal Information (PI) / Sensitive Personal Data
- Personally Identifiable Information (PII)
- Client Identifiable Information
- Material Non-Public Information (MNPI)
- Specific Information Sensitivity Classifications (such as 'Highly Restricted' and 'Confidential')
- Critical Data Elements used for important business processes
- Licensed data



# CDMC Components, Capabilities & Sub-Capabilities

Component	Capability	Sub-Capability
1. Governance & Accountability	 <b>1.1 The Cloud Data Management business case</b> is defined and measurable	1.1.1 Cloud data management business cases are defined 1.1.2 Cloud data management business cases are governed and syndicated
	 <b>1.2 Data ownership</b> established for both migrated & cloud-generated data	1.2.1 Data Owner roles and responsibilities are defined and agreed 1.2.2 Data ownership is established in the Cloud
	 <b>1.3 Data sourcing and consumption</b> are governed and supported by automation	1.3.1 Data sourcing is managed and authorized 1.3.2 Data consumption is governed and supported by automation
	 <b>1.4 Data Sovereignty and Cross-Border Data Movement</b> are actively managed	1.4.1 Sovereignty of data is tracked 1.4.2 Data Sovereignty and Cross-Border Data movement risks are mitigated
2. Data Cataloguing & Classification	 <b>2.1 Data catalogues</b> are implemented, used and interoperable	2.1.1 Data cataloguing is defined, scoped and actively used 2.1.2 Metadata is discoverable, enriched, managed and exposed in Data Catalogues 2.1.3 Data catalogues are interoperable across multi and hybrid cloud environments
	 <b>2.2 Data classifications</b> are defined and used	2.2.1 Data classifications are defined and approved 2.2.2 Data classifications are applied and actively used
3. Accessibility & Usage	 <b>3.1 Data entitlements</b> are managed, enforced and tracked	3.1.1 Data entitlement rights and obligations are captured as metadata 3.1.2 Data entitlement rights are enforced 3.1.3 Automated access and entitlement tracking is established
	 <b>3.2 Ethical access, use, and outcomes of data</b> are managed	3.2.1 Data Ethics organization structures are established 3.2.2 Data Ethics processes are operational
4. Protection & Privacy	 <b>4.1 Data is secured,</b> and controls are evidenced	4.1.1 Encryption policies are defined and enforced for data at rest, in motion, and in use 4.1.2 Implementation of data security controls is evidenced 4.1.3 Data obfuscation techniques are defined, scoped and applied 4.1.4 A Data Loss Prevention program is in place
	 <b>4.2 A data privacy</b> framework is defined and operational	4.2.1 A data privacy framework is defined and agreed 4.2.2 The data privacy framework is operational
5. Data Lifecycle	 <b>5.1 The data lifecycle</b> is planned and managed	5.1.1 A data lifecycle management framework is defined and adopted 5.1.2 The data lifecycle is implemented and managed
	 <b>5.2 Data quality</b> is managed	5.2.1 Data Quality rules management is established 5.2.2 Data Quality measurement is established and operational 5.2.3 Data Quality metrics reporting is established and operational 5.2.4 Data Quality issue management is established and operational
6. Data & Technical Architecture	 <b>6.1 Technical design principles</b> are established and applied	6.1.1 Optimization of cloud use and cost efficiency is facilitated 6.1.2 Principles for data availability and resilience are established and applied 6.1.3 Backups and point-in-time recovery are supported 6.1.4 Portability and exit planning are supported
	 <b>6.2 Data provenance and lineage</b> are understood	6.2.1 Multi-environment lineage discovery is automated 6.2.2 Data lineage changes are tracked and managed 6.2.3 Data lineage reporting and visualization are implemented





# **The strategic importance of aligning technology and industry leading frameworks**

# The strategic importance of aligning technology and industry leading frameworks

## Projective Group and BigID

### Unlocking the Power of Data

- **Data-Driven Decisions:** Industry frameworks ensure data is collected, structured, and categorized in a consistent way.
- **Shared Understanding:** A common language fosters better communication and collaboration between the business and technology teams.

### Competitive Advantage

- **Innovation:** Aligned data and technology can help fuel innovation by supporting the development of new products and services.
- **Improved Automation:** Standardized data through frameworks makes it easier for technology to automate tasks and optimize processes.

### Increased Efficiency and Compliance

- **Data ROI:** Data frameworks are a key component in organising a data programme for success and providing data ROI
- **Risk Reduction:** Data frameworks can identify potential risks. Technology can then analyse this data to predict issues and implement preventive measures, boosting resilience.
- **Regulatory Compliance:** aligning technology and industry frameworks creates a structured and efficient data environment that simplifies compliance efforts.

# CDMC Certification Process

# CDMC Readiness Assessment and Full Certification

## Projective Group and BigID

### Process

- Step 1 - Self assessment provided insight into maturity of BigID product across sub-capabilities
- Step 2 - Systemic review of capabilities aligned to CDMC 14 key controls
- Step 3 - Identify key capabilities that can meet multiple controls
- Step 4 - Document evidence for each key control including screenshots
- Step 5 - Mitigate any control gaps
- Step 6 - EDM Council Review and Certification



**CDMC**  
EDM Council  
Cloud Data Management Capabilities

### CDMC v1.1.1 Assessment Sub-capability Survey

Respondent Name: Stephen Gatchell, Peggy Tsai Date: 11/5  
Title / Department: Dir, CDO ID:

Version 1.1.1  
September 2021  
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**EDM Council**

**Welcome!**  
By receiving this CDMC Assessment Survey workbook, you have been chosen to provide feedback on the current state of Data Management within your organization.

This survey consists of the 37 sub-capabilities of the CDMC Framework in addition to the 14 Key

### Big ID – CDMC Readiness Assessment

**BigID**

**EDM Council**

**Data**  
Part of ProjectiveGroup

**ProjectiveGroup**  
10 Lower Thames Street  
EC3R 6AF London  
+32 289 54 4 42  
hello@projectivegroup.com

## Control 6: Data classifications are defined and used

# Key Control - Classification

## Projective Group and BigID

### Control

- Review data catalog confirming metadata discovery (scanning) and generate classification

### Test Specification

- Catalog is documented, metadata is enabled, and populated with sensitivity categories.

### Evidence and output

- Catalog, scanning, classifications, and sensitivity categories

Test Specification	
	<ol style="list-style-type: none"> <li>Determine the data catalog is established.</li> <li>Inspect to confirm metadata discovery (scanning) capability is enabled and set to a recurring schedule.</li> <li>Generate report using catalog metadata classification in place for sensitivity and aligned to control description (e.g. PII, Information sensitive, MNPI, etc.):               <ol style="list-style-type: none"> <li>Review report and identify data assets with no assigned sensitivity description:                   <ol style="list-style-type: none"> <li>3.1.1 Confirm that assignment of no sensitivity is correct.</li> </ol> </li> <li>3.2 Review report where sensitivity and description are defined:                   <ol style="list-style-type: none"> <li>3.2.1 Verify with random sample that sensitivity description is accurate for each data asset's classification.</li> </ol> </li> </ol> </li> <li>Create a new data asset:               <ol style="list-style-type: none"> <li>4.1 Create a new data asset with the following metadata:</li> </ol> </li> </ol>

Evidence Output

Compound Attribute Rules ☆

38 Rules New Rule

Biometric Information

Online Profile

Health Document

Financial Document

Contract

Income Tax Return Document: w...

Income Tax Return Document: w...

Income Tax Return Document: w...

Income Tax Return Document: w...

Criminal Record Check Docume...

Criminal Record Check Docume...

Criminal Record Check Docume...

ICD Code

Health ID Number

Familial Status

Passport Number

AZ US Residence Address ✓

### AZ US Residence Address

ENABLED:  Enabled Apply Solve

ATTRIBUTE NAME: complex:AZ US Residence Address

Description: AZ US Residence Address

Query Builder     Input Query    Copy Query

AND    OR    + Add Group

AND:

NOT Attribute classifier:Arizona ZIP Code (classifier:Arizona ZIP Code)

AND:

NOT Attribute street\_address (street\_address (IDoSR Attribute))

AND:

NOT Attribute state (state - IDoSR Attribute)

AND:

NOT Attribute post\_code (post\_code - IDoSR Attribute)

# Key Control - Compliance

## Projective Group and BigID

### Control

- Data assets are continuously operational and tracked for sensitive data

### Test Specification

- Outlines reporting requirements, metrics, escalation thresholds

### Evidence and output

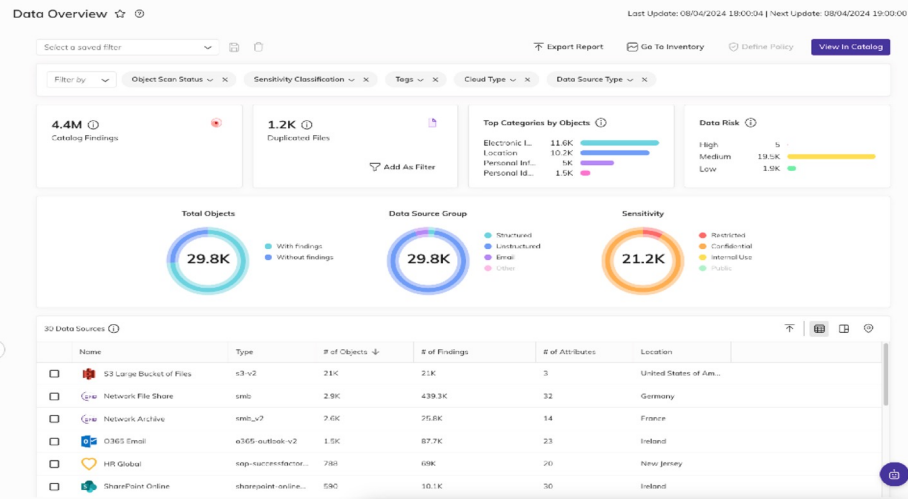
- Confirm reporting to reflect sensitive data.
- Provide policy capabilities to show data that exceeds the threshold

## Control 1: Data Control Compliance

### Test Specification

- Confirm data asset controls are continuously operational and tracked for sensitive assets for all other CDMC controls.
- Generate report/dashboard that presents the metrics for sensitive data controls.
- Confirm the ability to set an escalation threshold for each metric.
- Test the automated reporting against threshold limits:
  - Impact the effectiveness of a Key Control in a manner that causes a metric threshold to be outside threshold limits.
  - Confirm the automated reporting of the move outside threshold limits.

### Evidence & Output



# Key Control - Entitlements

Projective Group and BigID

## Control

- Metadata discovery used to identify data asset privileges and have remediation process

## Test Specification

- Review data assets with sensitive classification and review entitlement metadata

## Evidence and output

- Access Intelligence dashboard and security posture to remediate entitlements

## Test Specification

1. Determine the data catalog is established.
2. Create data catalog entries with entitlement populated.
3. Inspect to confirm metadata discovery (scanning) capability is enabled and set to a recurring schedule.
4. Generate report using catalog metadata for entitlement to determine whether populated or not populated:
  - 4.1 Review report and identify data assets with assigned entitlement
    - 4.1.1 Verify that data assets have alignment of data asset privileges mapped to user entitlements - check evidence that the entitlements are

## Evidence & Output

The screenshot displays the Access Intelligence dashboard with the following sections:

- Summary:** 6/13 Access Policies Triggered, 806 Objects Found by Access Policies.
- External Domains:**

github.com	778
Box.com	1
- Accessible Files By Users:**

user1@bigid.com	206
user2@bigid.com	231
user3@bigid.com	47
user4@bigid.com	2
user5@bigid.com	2
- External Users:**

user1@bigid.com	221
user2@bigid.com	2
user3@bigid.com	2
user4@bigid.com	1
user5@bigid.com	1
- Networks:**

Network	Attributes and tags	Count
Network: File-Share-1@bigid.com	Attributes and tags: 2570	2570
Network: File-Share-2@bigid.com	Attributes and tags: 2183	2183
Network: SharePoint Online-1@bigid.com	Attributes and tags: 1405	1405
Network: SharePoint Online-2@bigid.com	Attributes and tags: 60	60
Network: 1@bigid.com	Attributes and tags: 54	54

## HOW TO MAP TO THE CDMC FRAMEWORK



Data Governance & Accountability

Catalog, Manage & Assign  
Ownership with Automation

Data Cataloging & Classification

Discover & Classify  
Sensitive Data

Data Accessibility & Usage

Identify Overprivileged Users  
and Overexposed Data

Data Protection & Privacy

Protect Data &  
Sustain Compliance

Data Lifecycle Management

Ensure Data Quality and  
Manage Data Retention

Data & Technical Architecture

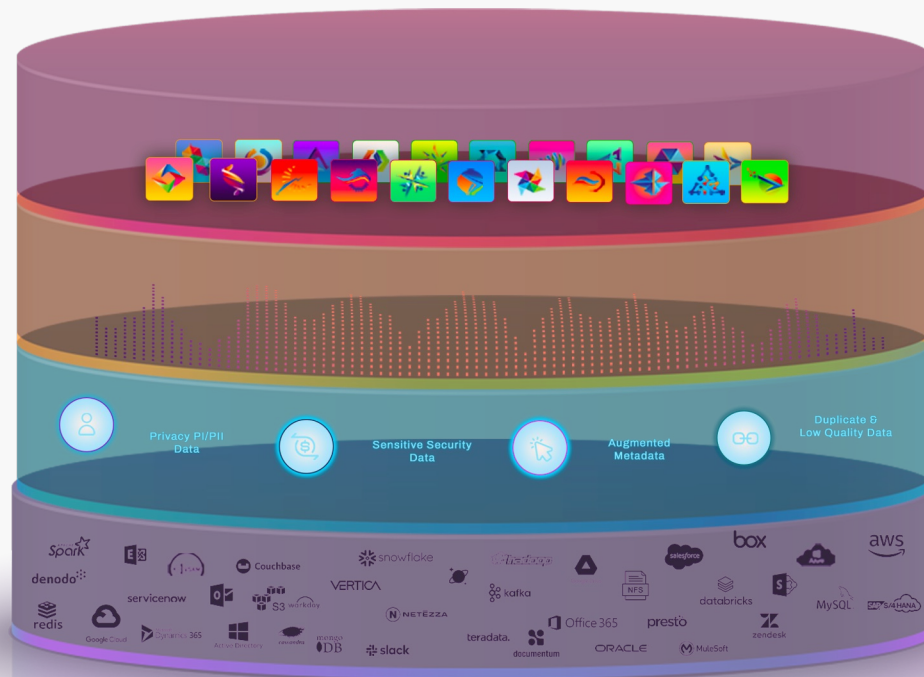
Trace Lineage Flows



# Open Extensible Data Visibility & Control Platform

One Platform Deployable as SaaS, Edge-to-Cloud, or Self-managed

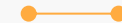
Action Your Data  
 De-Risk Your Data  
 Know Your Data  
 Access Your Data



Apps & APIs for Control, Reporting, Orchestration



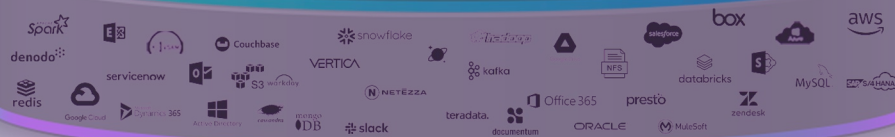
Data Risk Insights & Risk Posture Management



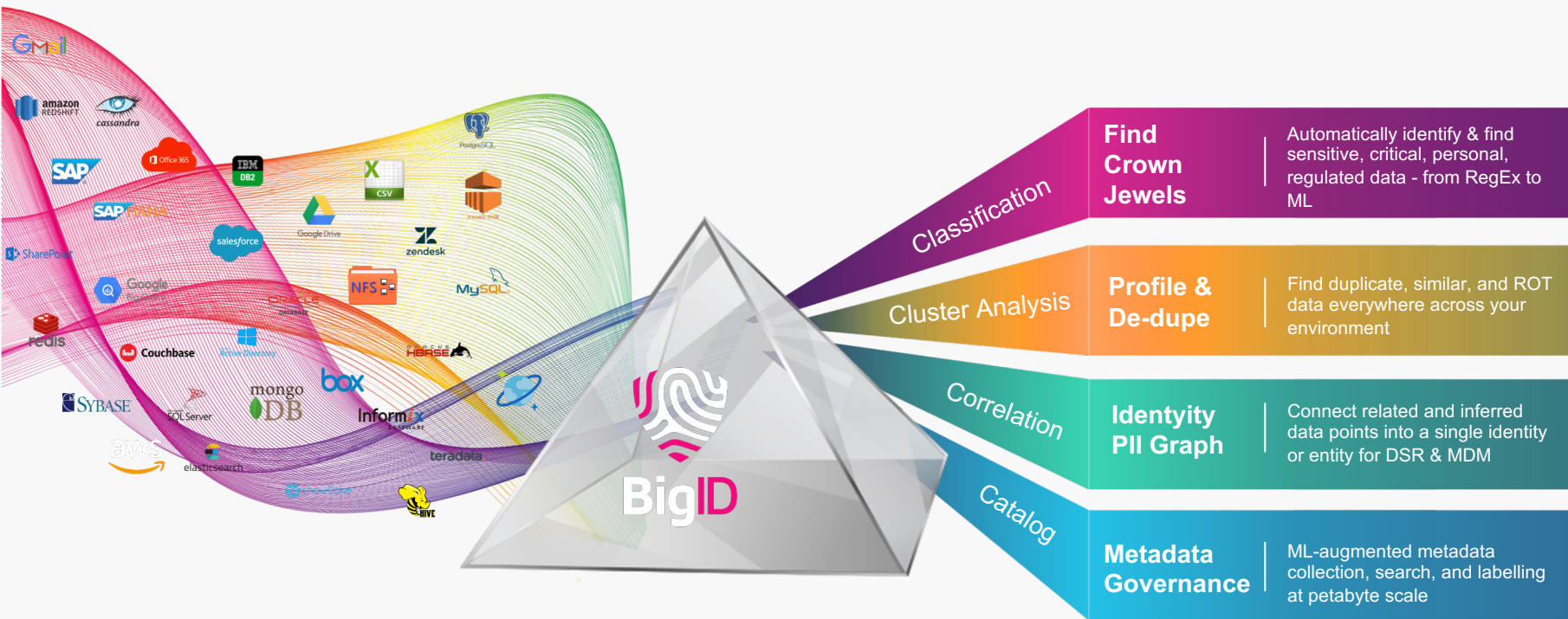
Virtual Data Exploration, Mapping, Inventory & Catalog



Cross Platform Data Virtualization & Abstraction



# Know Your Data with Patented 4-in-1 Data Scanning



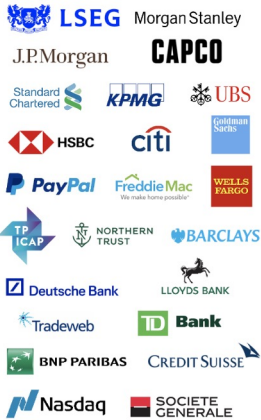
Know Your Data

# AI, Data & Analytics Capabilities built on CDMC automated controls

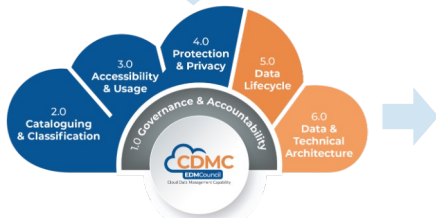
2020-2021



## CDMC Working Group



## Cloud & Technology Provider Certification



CDMC v1 Published 2021

AWS, Azure, GCP, Snowflake Certified 2021-2023

2022-2023



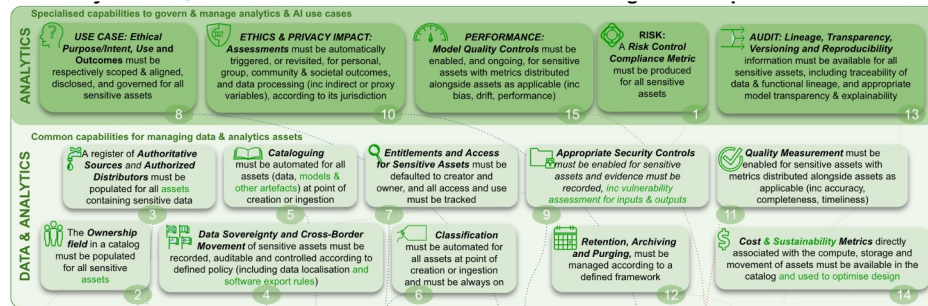
## Analytics Working Group

### Q4'22 - Q4'23: Extend CDMC for AI, Data & Analytics

**Members:** LSEG, Databricks, Standard Chartered, UBS, JPMorgan, Standard Bank, Schroders, Vanguard, Cloudera, Acquis Cortico-X

- ✓ Add **AI models & Analytical assets** to CDMC
- ✓ Add **NIST AI Risk Management Framework**
- ✓ Add **Data Ethics in Practice Framework**

## ADAC Use Case Governance



ADAC AI, Data & Analytics Capabilities

2024



## AI, Data & Analytics Controls (ADAC)

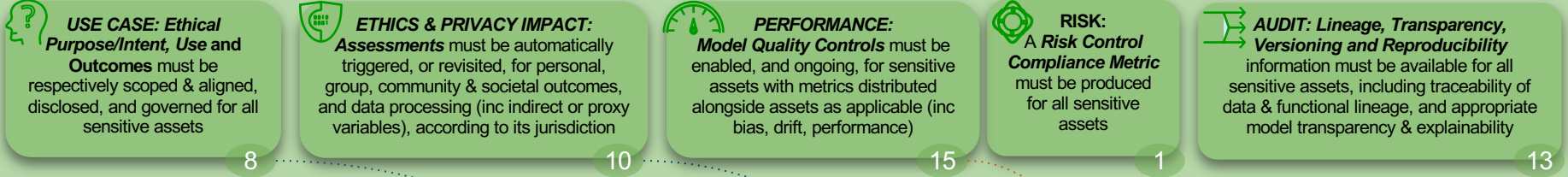
- ADAC framework - broad SME review
- ADAC Information Model & metadata inter-op
- ADAC Data Product extensions
- ADAC Regulatory mapping additions
- Reference Architecture



# AI, Data & Analytics Capabilities built on CDMC automated controls

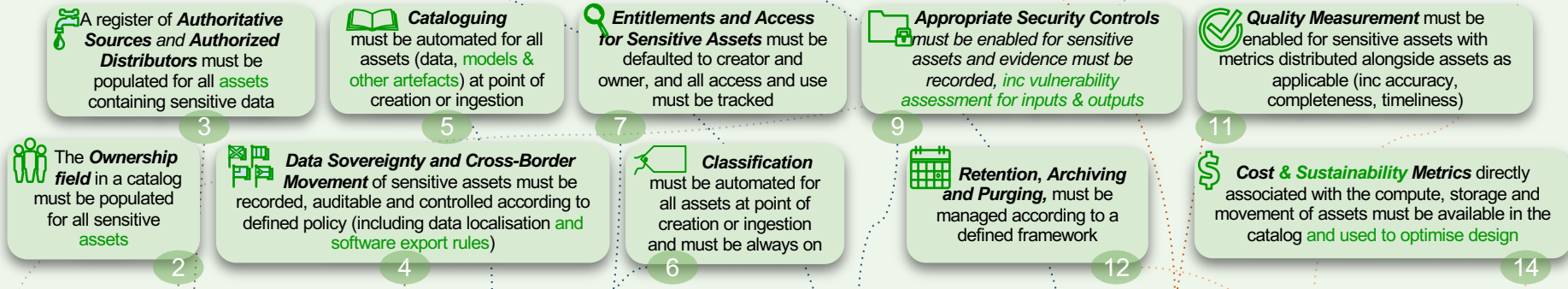
Specialised capabilities to govern & manage analytics & AI use cases

ANALYTICS

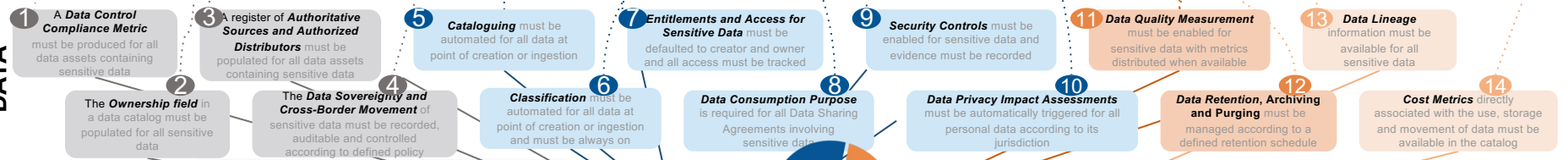


Common capabilities for managing data & analytics assets

DATA & ANALYTICS



DATA



- Classification of Sensitive Assets** includes:
- Personal Information (PI) / Sensitive Personal Data
  - Personally Identifiable Information (PII)
  - Client Identifiable Information
  - Material Non-Public Information (MNPI)
  - Specific Information Sensitivity Classifications (such as 'Highly Restricted' and 'Confidential')
  - Critical Data Elements used for important business processes
  - Licensed data
  - Model IP [new]
  - EU AI Act High Risk intended use models [new]



# EDM Webinar

**Designing and Managing Data Products**  
**Tuesday, April 30 – 11:00 A.M. EST**



**EDM Council**

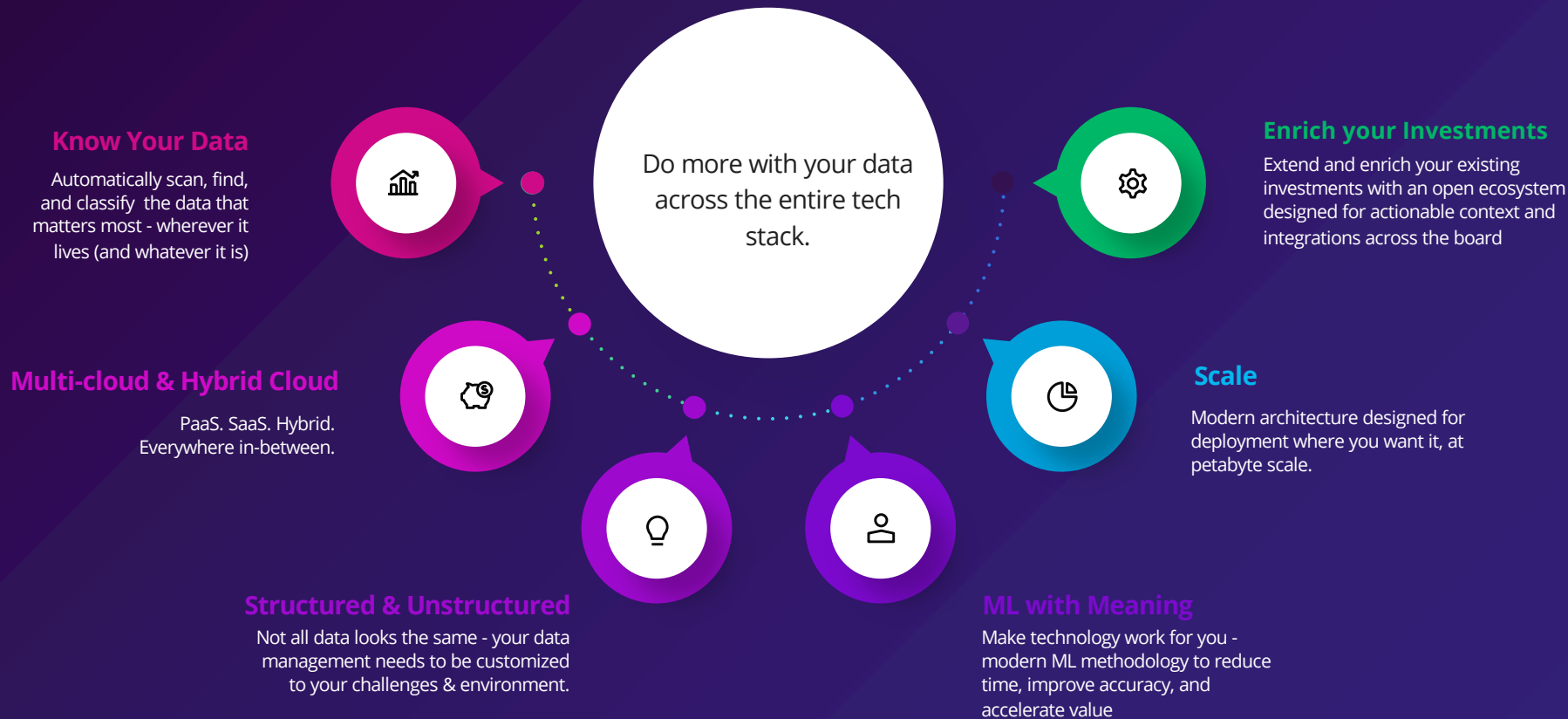


# Questions?



**EDM** Webinar 

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**Data**



**Payments**



**Transformation**



**Talent**



**Risk &  
Compliance**



**Pensions &  
Insurance**



**Projective**  
GROUP



## WE ARE A LEADING FINANCIAL SERVICES SECTOR TRANSFORMATION SPECIALIST

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We do this via our practices; communities of experts that have in-depth knowledge in the key areas that our clients' need. This includes transformation, risk & compliance, data, payments, talent and pensions & insurance, our unique talent programme.

Our people make the difference. Their passion, deep domain expertise and hands-on approach is what leads to success.



# Join EDM Council and our membership community of companies...



The screenshot shows the EDM Council website homepage. At the top, there is a navigation bar with links for Membership, Frameworks, Training, Engage, Innovation, About, Sign in, and a prominent 'Join now' button. The main header features the EDM Council logo and a large headline: 'Global Advocates for Data & Analytics Management'. Below the headline, a sub-headline reads: 'The leading global trade association providing best practices, standards and education to data and business professionals in our data-driven world.' A 'What we do' button is visible. To the right, a 'TODAY'S HIGHLIGHTS' section lists three news items: 'Bank of Valletta becomes the newest member to join the EDM Council', 'EDM Council welcomes Webber Wentzel as its newest member', and 'Lion Group joins EDM Council as its newest member'. At the bottom of the screenshot, a banner invites users to 'Join a vibrant community of 25,000+ business leaders, CDOs, and data and analytics professionals across all industries.' Below this banner, logos for various member organizations are displayed: Bank of England, NOVARTIS, HSBC, AWS, Schneider Electric, Microsoft, Google, and Egon. Two buttons are present: 'Explore membership' and 'See all 350+ member organizations'.



**350+ Member Firms**  
Cross-industry,  
including Regulators



**25,000+**  
Professionals



**Worldwide**  
Americas, Europe,  
Africa, Asia, Australia

[edmcouncil.org](https://edmcouncil.org)



**EDM** Webinar 

Thank you!

**FOR MORE INFORMATION:**

Website: [www.bigid.com/blog](http://www.bigid.com/blog)

Email: [info@bigid.com](mailto:info@bigid.com)

