





EDM Webinar

Realizing the value of cloud modernization in financial services

A conversation with

Peter Ku
Chief Strategist
Informatica

Sandeep Mangaraj
Industry Executive
Microsoft

John Bottega
President
EDM Council


Informatica

Microsoft

EDM Council

Today's Agenda

- Industry Trends: Cloud adoption in Financial Services
- Cloud impact on data management and data governance
- EDMC's Cloud Data Management Capabilities Workgroup
- Expert panel & audience Q&A (Submit your questions through Zoom)

Today's Speakers

Peter Ku
VP & Chief Industry Strategist – Financial Services
Informatica

Sandeep Mangaraj
Industry Executive, Digital Transformation
Microsoft

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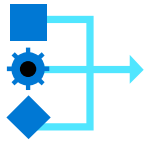
EDM Council

Forces at work driving change

Changing customer expectations

Non-traditional, cloud-native players (FinTech)



Changing business models

Data culture relying on 24/7, 360-degree AI-interpreted signals

Sophistication of fraud and cybercrime

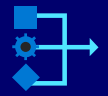
Cost optimization and legacy systems

Complex regulatory environment

New technical standards—e.g., ISO 20022

54% 

of banks think removing friction from the customer journey is the most important trend in retail banking

37% 

of Generation Y customers use non-traditional banks; retailers looking to be customer interface

37% 

of bank executives plan to upgrade their IT infrastructure to cut cost and improve efficiency

$72B 

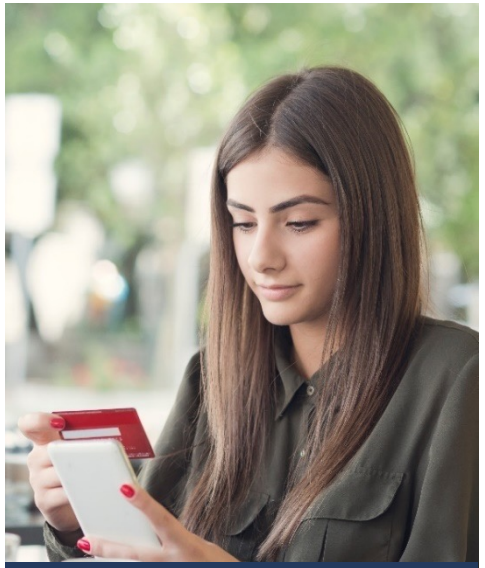
projected risk technology spending

25% 

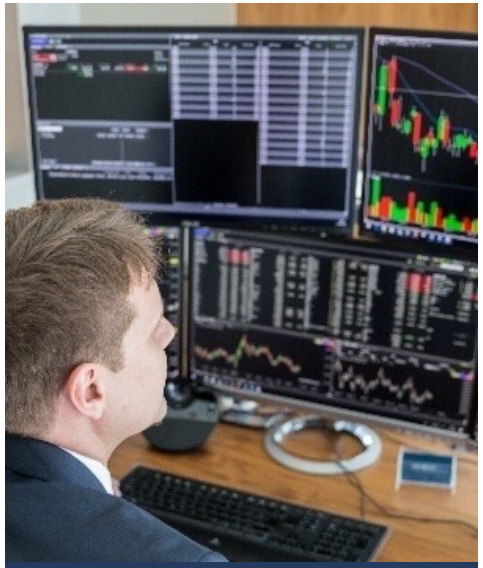
of banks think cyber risk is the top threat in the Financial Services industry

The COVID-19 pandemic was a catalyst for change and shifting business priorities

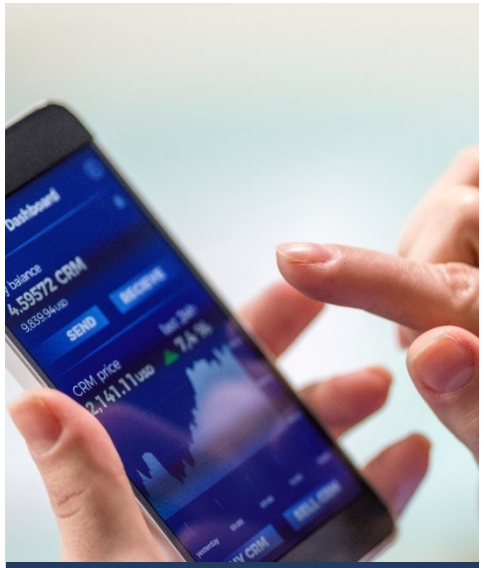
Here's what we've heard from the industry:



Customer engagement



Organizational productivity



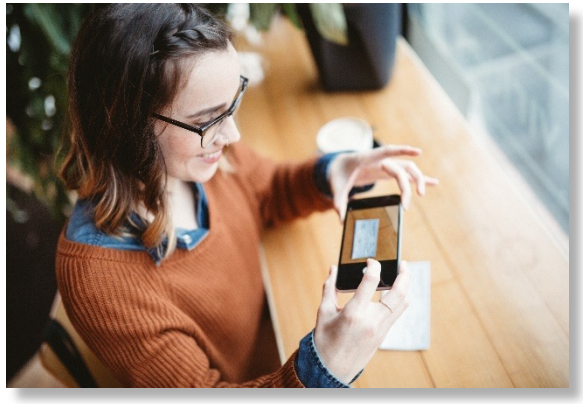
Value creation

Risk management

Security and compliance

Microsoft Cloud for Financial Services

Trusted cloud to accelerate innovation for sustainable growth



Deliver differentiated customer experience

Accelerate customer growth, profitability, and loyalty through more relevant and personalized interactions along with deeper customer insights

Empower employees through teamwork

Improve employee productivity virtually, enhance workflow efficiencies to improve cost savings, accelerate workplace modernization, and strengthen customer connections

Modernize core systems

Modernize core systems to gain cost savings and accelerate new product development. Support open banking models and unlock access to new market infrastructure to create new business models

Manage risk across the enterprise

Deepen insights, improve risk management to address business risk, and facilitate requirements for compliance

Trust, security and compliance

At Microsoft we are focused on trust, and we are always empowering and never competing with our customers. And most importantly we're not monetizing your data. We adhere to the strictest security and privacy standards in the industry to place you in control over security and encryption as well as help you to create your own governance

Critical considerations for managing financial data today

Growing
Volume

Expanding
Variety

Real-time
Velocity

What data do I have?

Is it trustworthy?

Can people access the data needed to make the right decisions?

How can I enable faster business insights?

What's my compliance exposure?

State of Cloud Adoption

92% of enterprises have a multi-cloud strategy

80% have a hybrid cloud strategy

42% of all participating organizations use multi-cloud management tools

60% of PII data will be in the cloud

N = 750 respondents

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As the industry adopts more cloud, it will be harder to answer critical questions about your data

Can we explain where all the data is and comes from?

Can we trust it?

Are we using right data to support our business needs?

Is the data where we need it to be?

Do we know what data is sensitive and needs protection?

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Cloud Adoption Brings New Data Management Challenges

Data Rationalization & Transparency

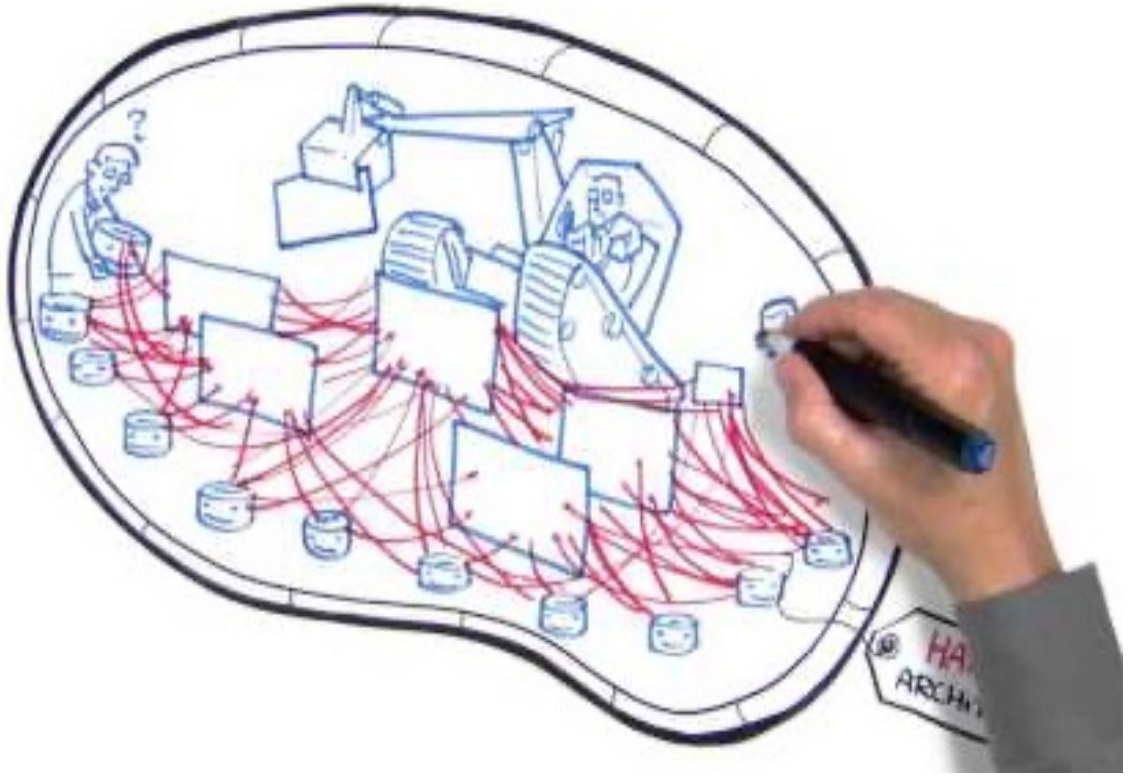
Data Access, Transformation, and Integration

Data Quality Errors

Data Literacy & Governance

Data Security & Protection

Data Rationalization & Transparency



- Locating existing data sources to migrate to the cloud
- Understanding the lineage of existing data
- Complying with existing data policies and standards
- Avoiding any business disruptions by migrating unintended data

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Data Access, Transformation, & Integration

- Accessing data from source systems
- Ensuring proper data conversation and transformation
- Satisfying data latency requirements (e.g. batch vs. real-time)
- Dealing with existing custom coded data integration processes (e.g. Hand coding)

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Data Quality Errors

- Understanding and dealing with source data errors and corruption
- Fixing errors with business user inputs
- Enforcing and executing data quality rules and controls
- Keeping business users informed about the quality of their data

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Data Literacy & Governance

- Developing and managing data policies, processes, and standards to support new cloud investments
- Controlling the cost of governing data
- Making it easy for business users to get answers to their data questions
- Standardizing on common technology solutions across the enterprise

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Data Privacy & Protection

- Identifying, locating, and tracking PII data across on-premise and cloud
- Accurately classifying and tagging sensitive data to comply with existing privacy regulations
- Knowing what data is protected vs. not while in motion and at rest

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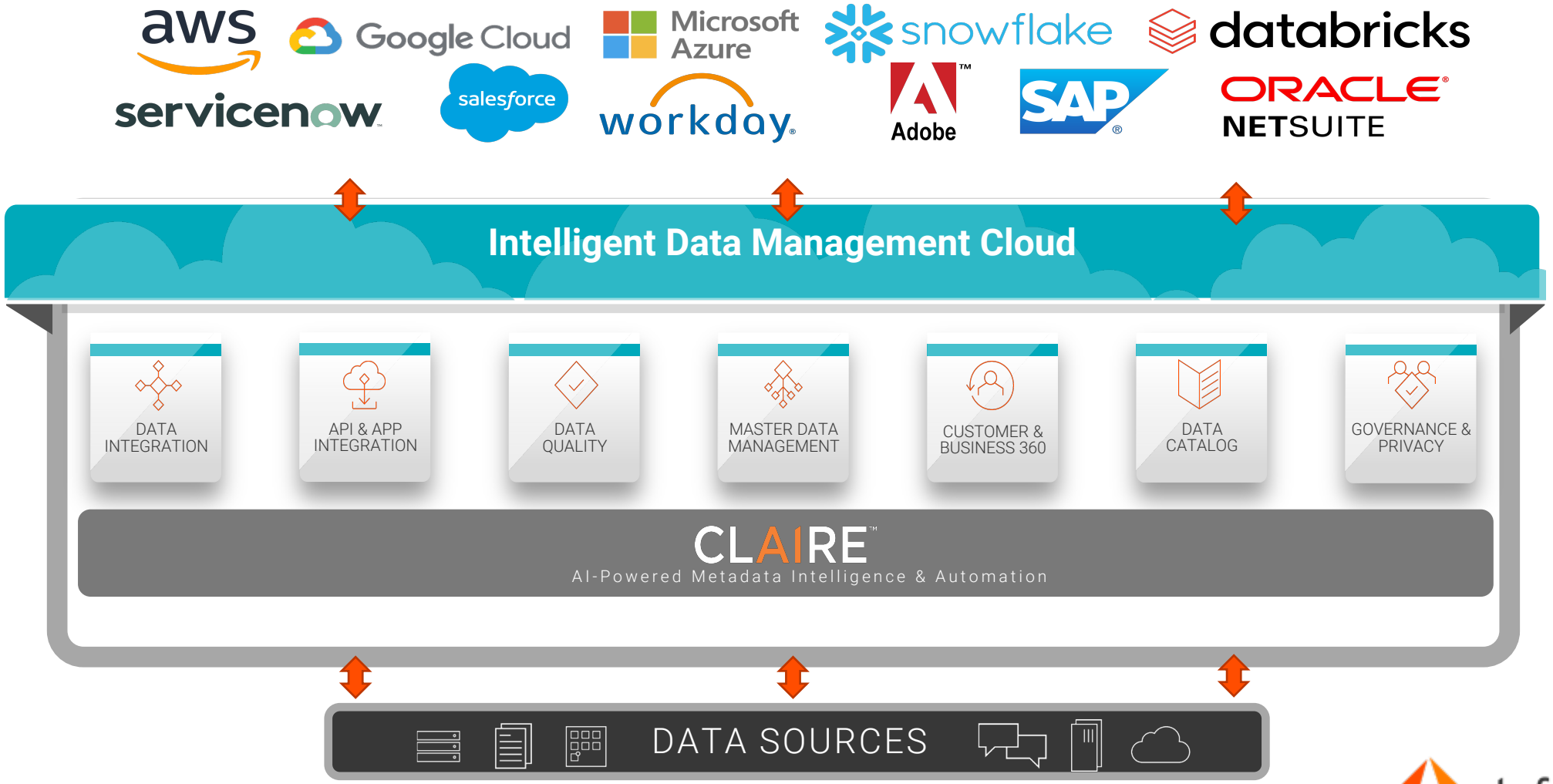
Informatica Intelligent Data Management Cloud

End-to-End Platform To Manage your Data and Apps in Today's Cloud Era



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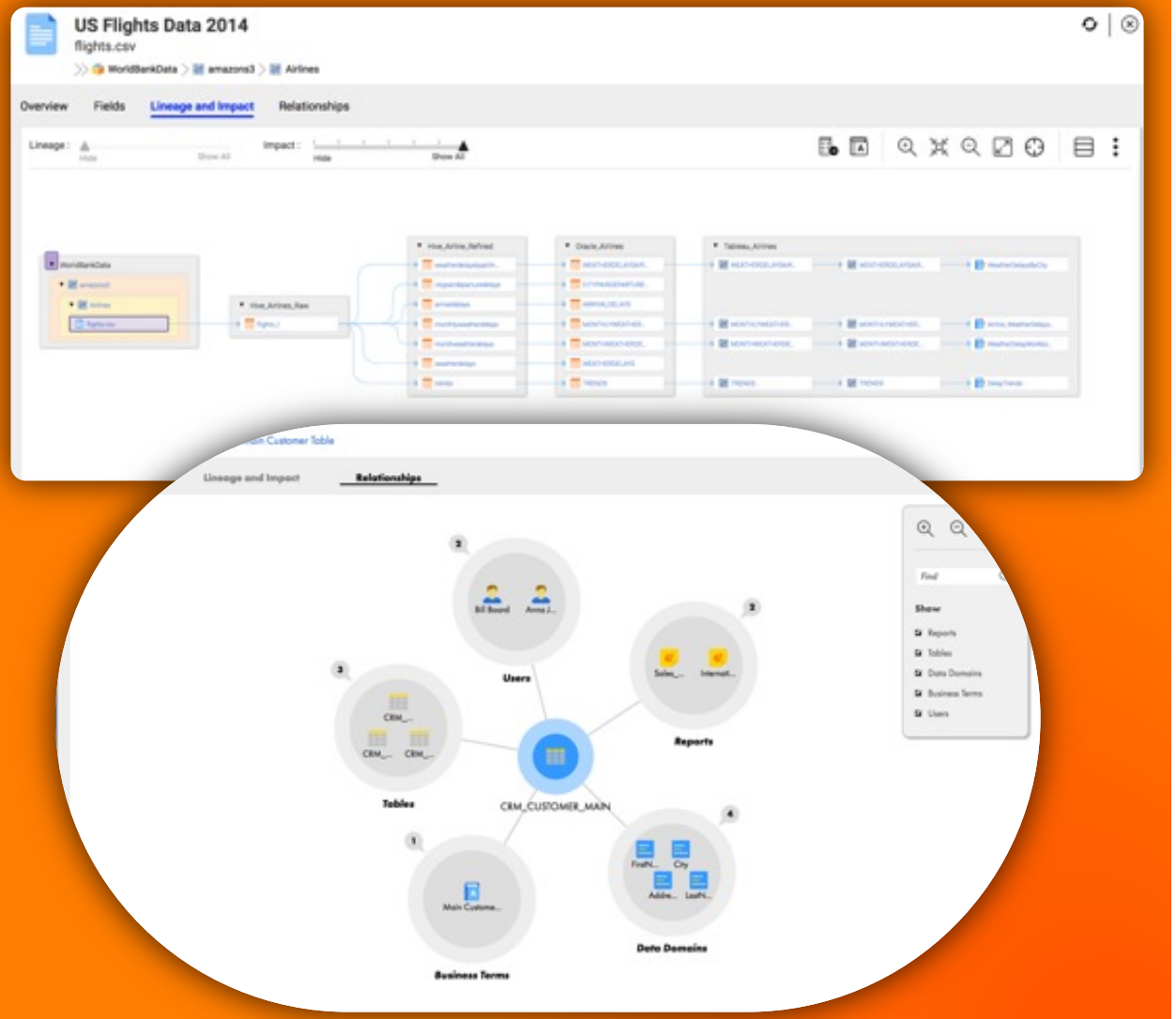
Enterprise Data Catalog



DATA CATALOG

Simplify Data Rationalization & Transparency

- Scan & Catalog enterprise metadata
- Easily search and discovery
- Provide end to end data lineage for audits & impact analysis
- AI-assisted data discovery, classification and business context
- Collaboration & social curation to tap into shared data knowledge

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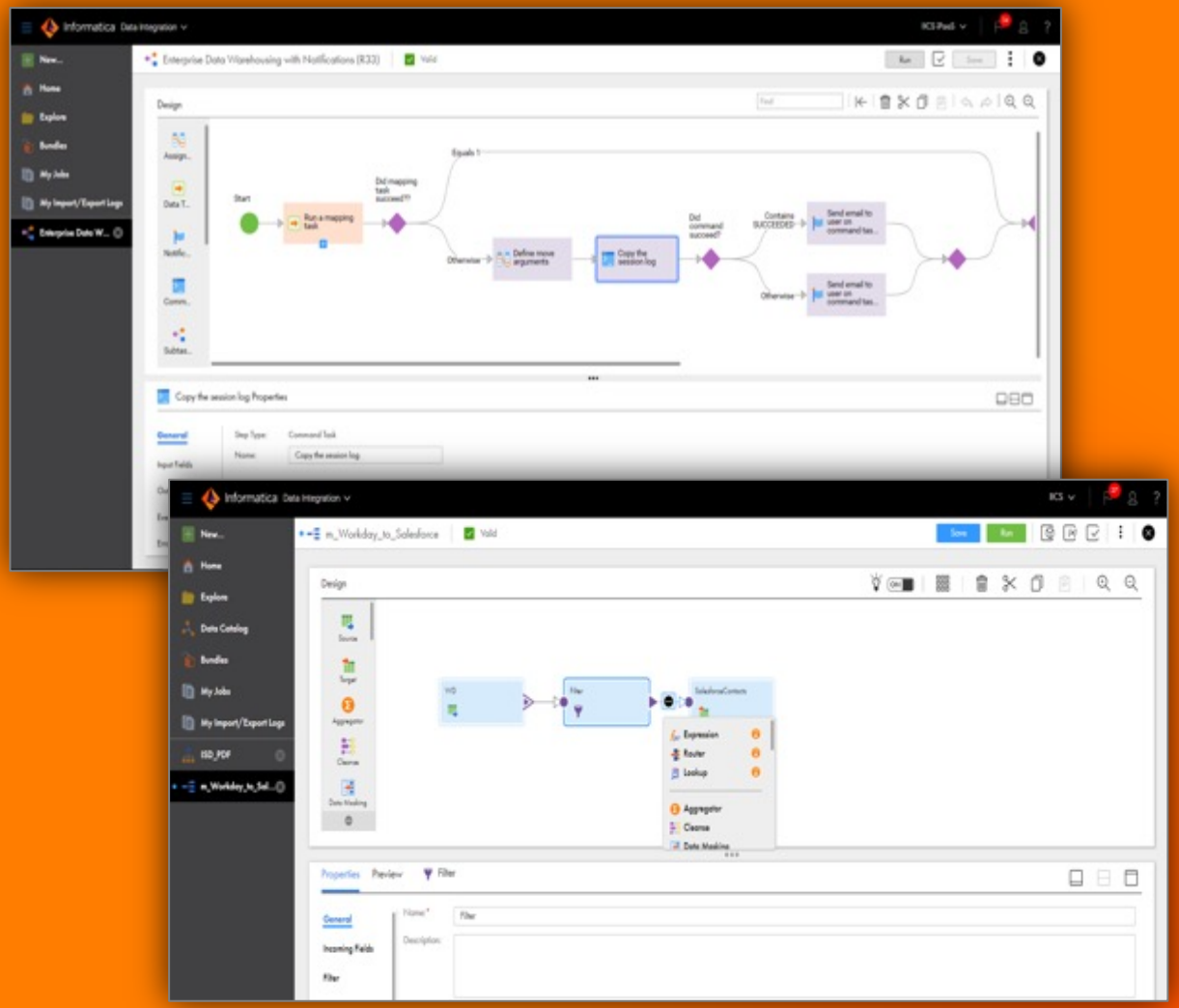
Enterprise Data Integration



DATA INTEGRATION

Access, Transform, Format Across Any System, Anywhere

- Supports simple to complex data and API integration requirements for Cloud/Hybrid needs
- Pre-built data integration transformations and mappings.
- Supports all data latencies, structures, formats, volume requirements.

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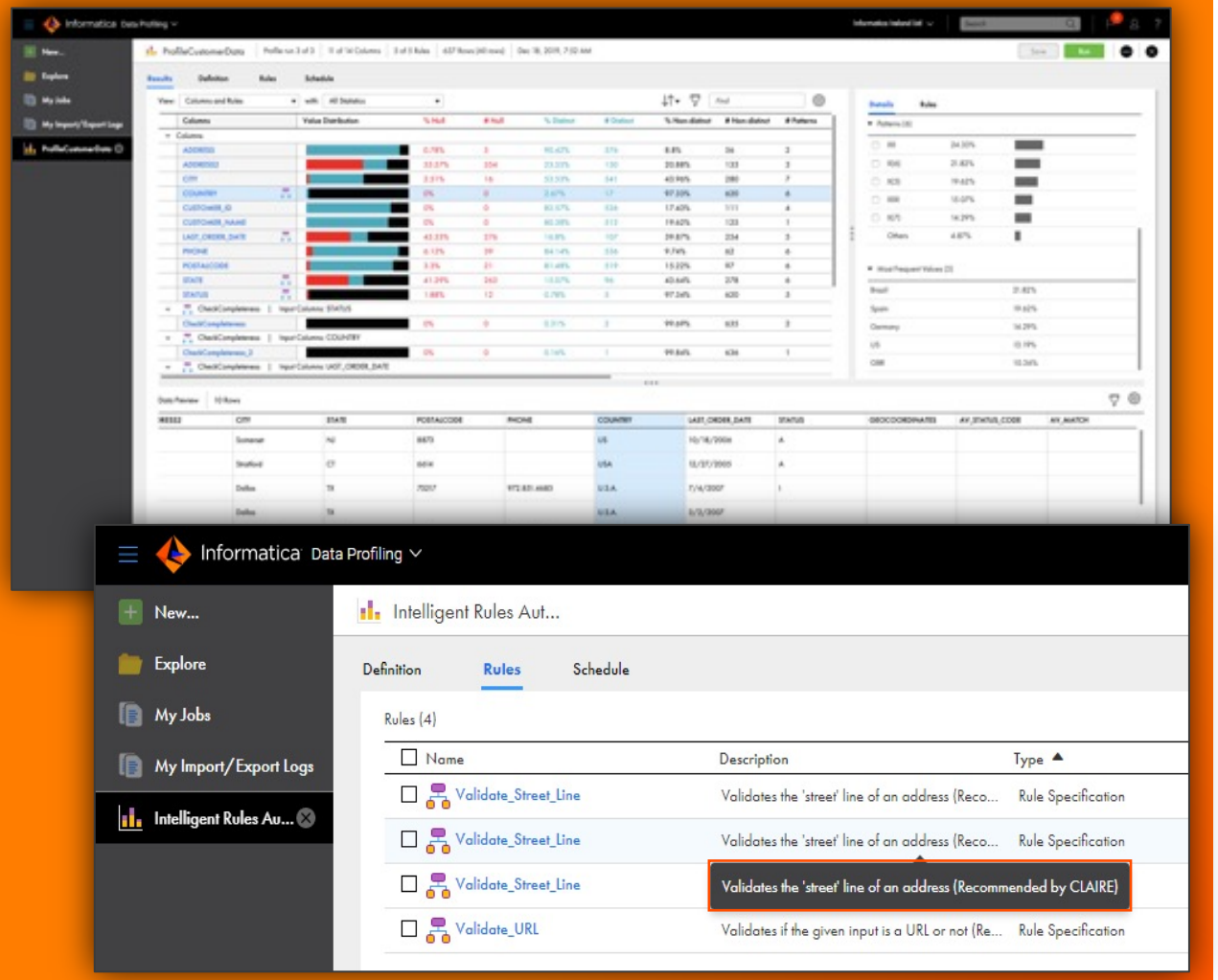
Enterprise Data Quality



DATA QUALITY

Profile, Cleanse, Monitor, Trust Your Data

- Business user friendly Data Profiling and Discovery.
- AI-assisted Data Quality Rules Management
- Hundreds of pre-built DQ Rules
- Configurable workflow management for data remediation and stewardship
- Customizable and sharable Data Quality dashboards and scorecards

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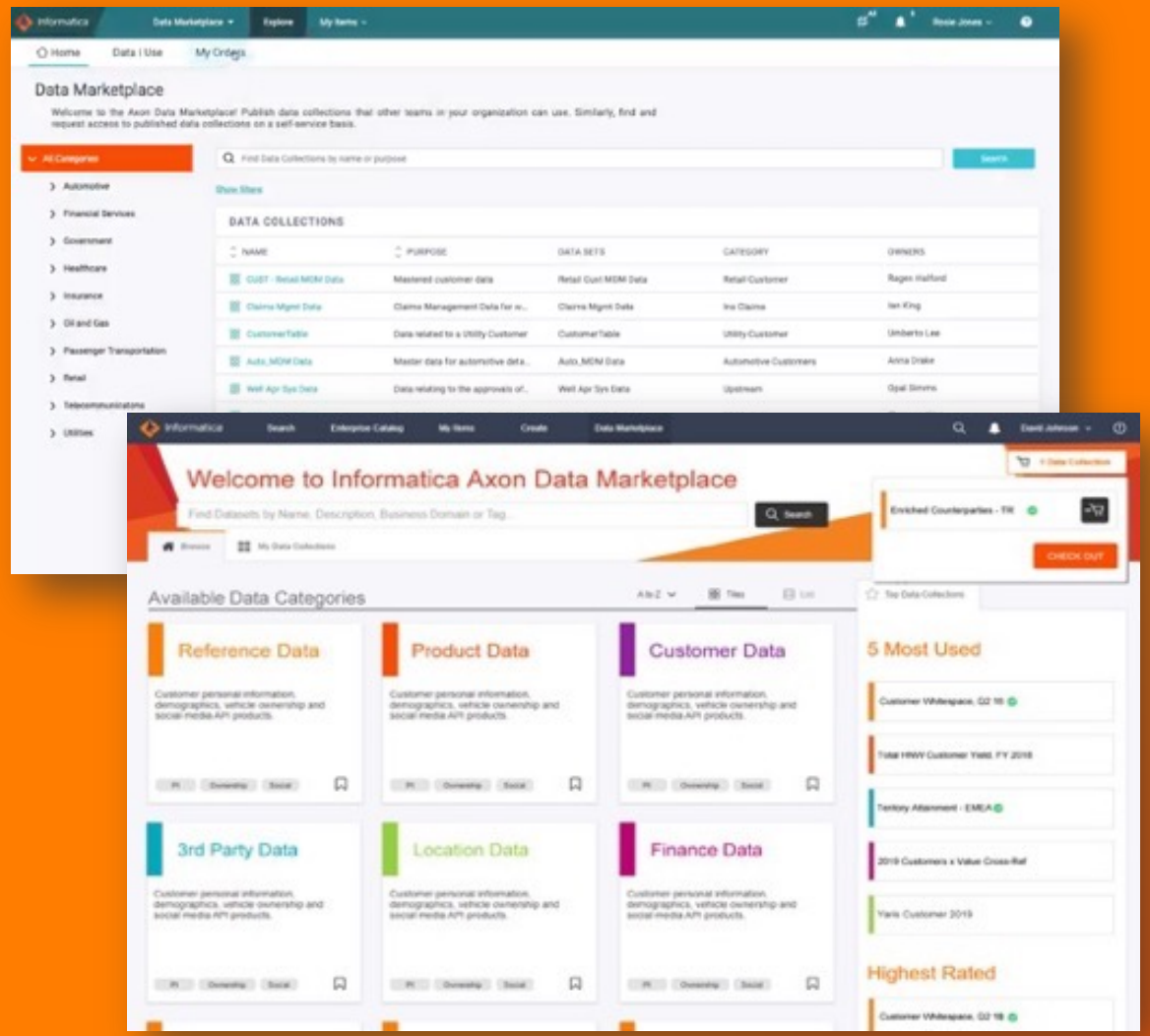
Data Governance



GOVERNANCE & PRIVACY

Making it easier for self service data governance for all

- For Data Governance Leaders & Stewards:
  - Define and manage business terms and definitions
  - Classify data, manage data policies and standards
  - Collaborate with fellow data stewards and business users
- For Business users:
  - Browse and search for relevant data assets, find data recommended by peers
  - Easily search, navigate and subscribe to relevant data topics
  - Request and access data without IT intervention

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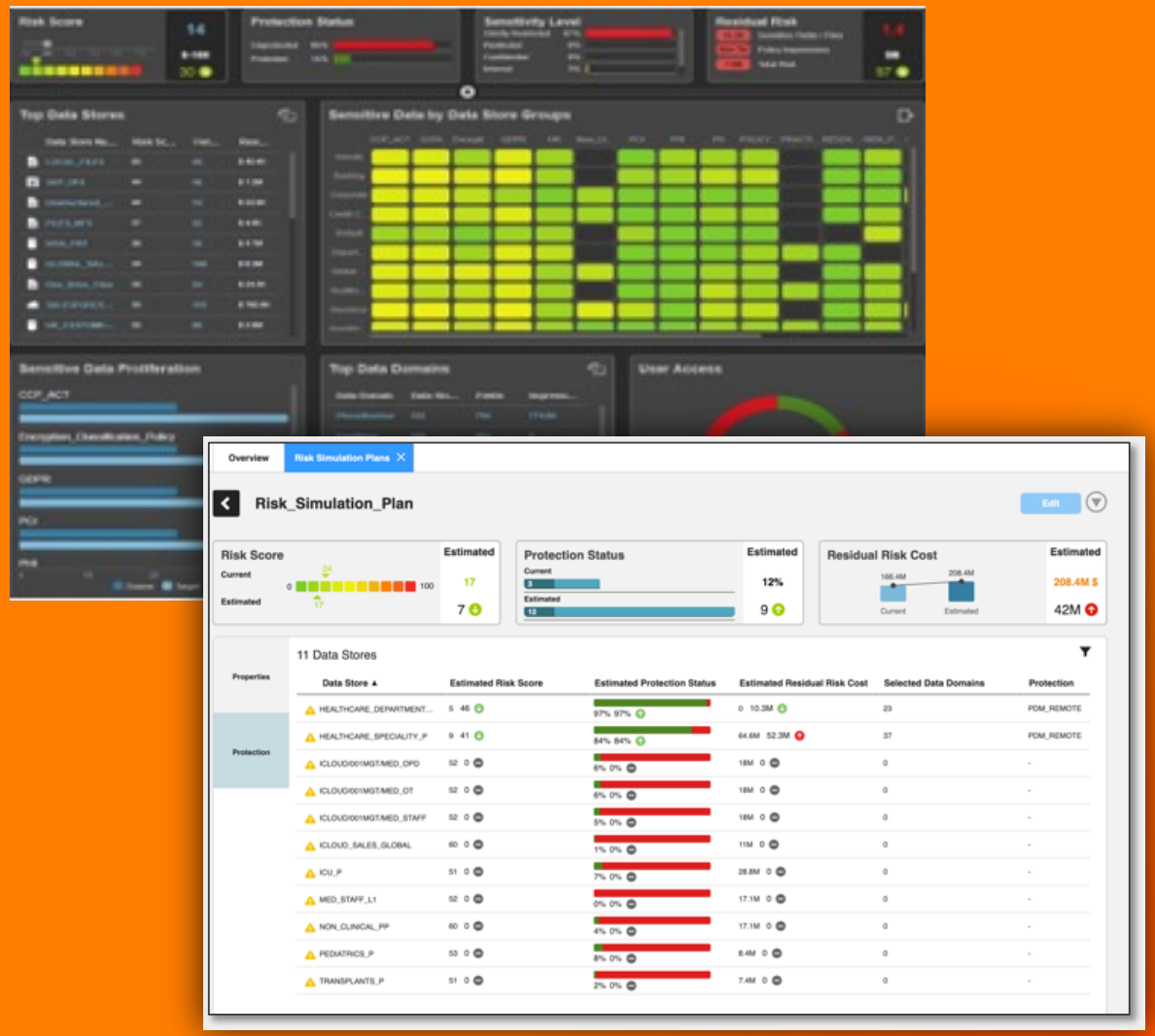
Data Privacy Management



GOVERNANCE & PRIVACY

Identify, Classify, Monitor, and Govern Sensitive Data

- Discover data and map to subjects to automate insights into data access and use
- Assess risks using AI to determine exposure and prioritize critical remediation
- Orchestrate protection and transparency, including DSAR reporting, masking, archiving

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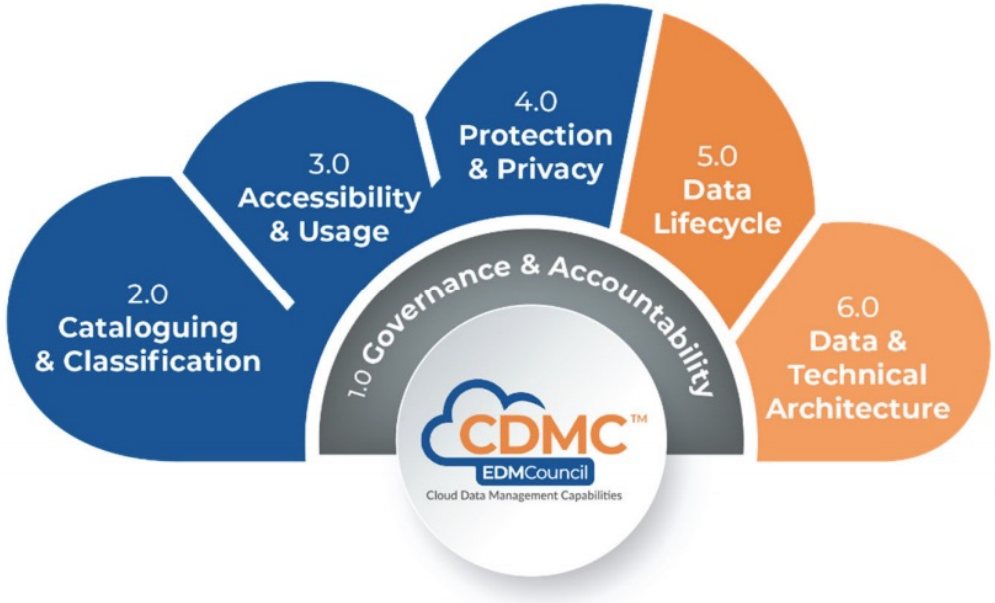
Informatica is a PROUD member of the EDM Council's Cloud Data Management Capabilities Work Group!



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Power of the Platform!

Data in the Cloud

Advantages of cloud computing…

- Cost Savings
- Security
- Flexibility
- Mobility
- Insight
- Increased Collaboration
- Quality Control
- Disaster Recovery
- Loss Prevention
- Automatic Software Updates
- Competitive Edge
- Sustainability

https://www.salesforce.com/products/platform/best-practices/benefits-of-cloud-computing/

Problem Statement:

There is a lack of consistent industry best practices for applying data management capabilities while migrating data, applications and operations to cloud environments.

Challenges of Cloud:

Cloud implementations face a variety of challenges (data, technology and resources, etc.), but they are **repeatedly revisited** on nearly every implementation

Goal:

Launch an Industry Workgroup to establish industry Best Practice Guidelines in implementing data management in the era of cloud computing

Objectives:

Propose best practice guidelines to cover the core capabilities for cloud data management. Topics including:

- ❑ **Cataloguing & Classification**
- ❑ **Data Accountability & Governance**
- ❑ **Data Access & Usage Tracking**
- ❑ **Lifecycle Management**
- ❑ **Data Security & Privacy**
- ❑ **Commercial Best Practices**

CDMC: Industry Engagement

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

CDMC™ EDMCouncil
Cloud Data Management Capabilities

CDMC Working Group

LSEG, Morgan Stanley, J.P.Morgan, CAPCO, Standard Chartered, KPMG, UBS, HSBC, citi, Goldman Sachs, PayPal, Freddie Mac (We make home possible®), WELLS FARGO, TP ICAP, NORTHERN TRUST, BARCLAYS, Deutsche Bank, LLOYDS BANK, Tradeweb, TD Bank, BNP PARIBAS, CREDIT SUISSE, Nasdaq, SOCIETE GENERALE

Cloud & Technology Provider Certification

aws, Microsoft Azure, Google Cloud, IBM Cloud, snowflake, collibra, Informatica, BigID, data.world, PRIVITAR

Regulatory Engagement

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- **US:** Federal Reserve, OCC, FDIC, NCUA, NAIC
- **Canada:** OSFI, BoC, CDIC
- **UK:** BoE, FCA, IOC
- **EU:** EBA, ECB, DORA Act
- **Germany:** BaFin
- **Swiss:** FinMA
- **Japan:** FSA
- **Australia:** APRA
- **Singapore:** MAS
- **India:** RBI, SEBI
- **Africa/Middle East** regulators
- Others

Go-to-market Support

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- Training Courses
- Cloud Service Certification
- Open Source Tools
- CDMC Authorized Partner Program

2H 2021 – 1H 2022 Other Industries

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- **Life Sciences**
- **Telecommunications**
- **Manufacturing**
- **Retail / Services**
- **Consumer Tech**
- **Government / Defense**
- **Others**

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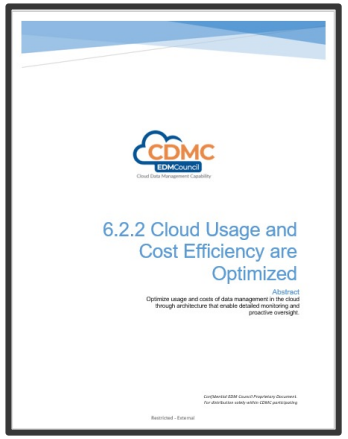
CDMC Capabilities: Requirements & Automated Controls

Component	Capability	Sub-Capability	CDMC Controls & Automations
1. Governance & Accountability	**1.1 The Cloud Data Management business case** 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	Data Control Compliance Metric – calculated from extent of implementation of controls
	1.2 Data ownership 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	Ownership Field – populated or reported to a defined workflow
	1.3 Data sourcing and consumption 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	Authoritative Sources & Authorized Distributors – register populated or reported to a defined workflow
	1.4 Data Sovereignty and Cross-Border Data Movement are actively managed	1.4.1 Sovereignty of data is tracked 1.4.2 Data Sovereignty and Cross-Border Data movement risks are mitigated	Data Sovereignty & Cross-Border Data Movement – recorded, auditable and controlled
2. Data Cataloguing & Classification	**2.1 Data catalogues** 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	Cataloguing – automated at point of creation / ingestion
	2.2 Data classifications are defined and used	2.2.1 Data classifications are defined and approved 2.2.2 Data classifications are applied and actively used	Classification – automated at point of creation / ingestion
3. Accessibility & Usage	**3.1 Data entitlements** 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	Entitlements and Access – defaulted to owner and creator and tracked
	3.2 Ethical access, use, and outcomes of data are managed	3.2.1 Data Ethics organization structures are established 3.2.2 Data Ethics processes are operational	Data Consumption Purpose – provided for all Data Sharing Agreements
4. Protection & Privacy	**4.1 Data is secured,** 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	Security Controls – enabled and evidenced
	4.2 A data privacy 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	Data Privacy Impact Assessments – automatically triggered
5. Data Lifecycle	**5.1 The data lifecycle** 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	Data Retention, Archiving & Purging – managed to a defined schedule
	5.2 Data quality 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	Data Quality Measurement – enabled and metrics distributed
6. Data & Technical Architecture	**6.1 Technical design principles** 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	Cost Metrics – available in the catalogue
	6.2 Data provenance and lineage 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	Data Lineage – information available

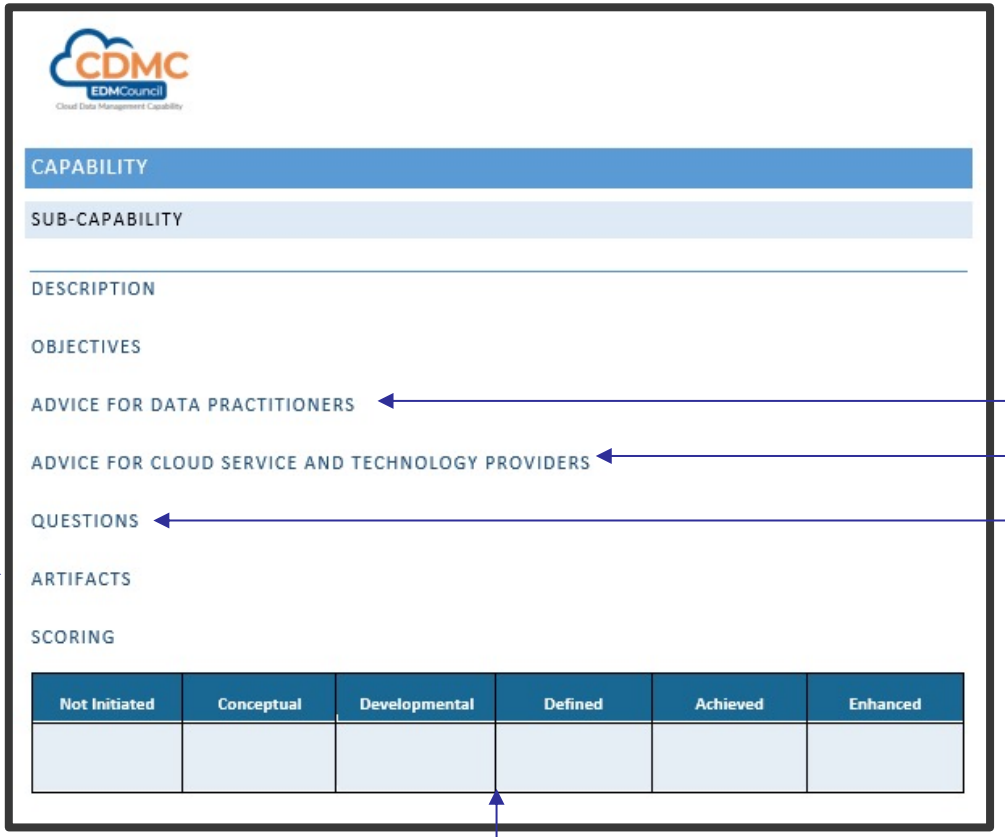
CDMC Framework – Structure



Sub-Capability Description

Objectives of the Best Practice

Auditable "Artifacts of Evidence"



Advice for the Data Professional

Advice for the CSPs and technology providers

Questions that need to be answered

Scoring Guidance to measure compliance

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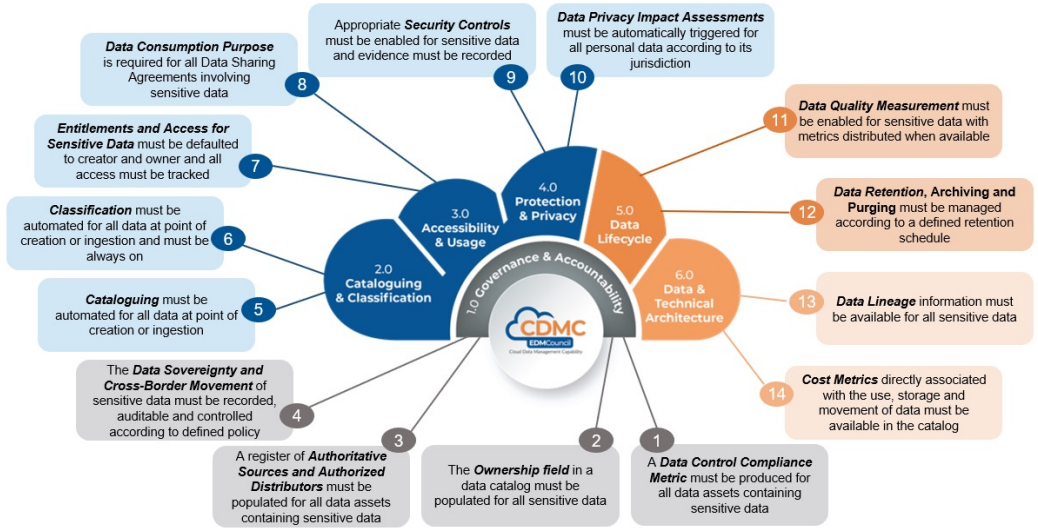
Release Schedule

July 2021: 14 CDMC Key Controls & Automations

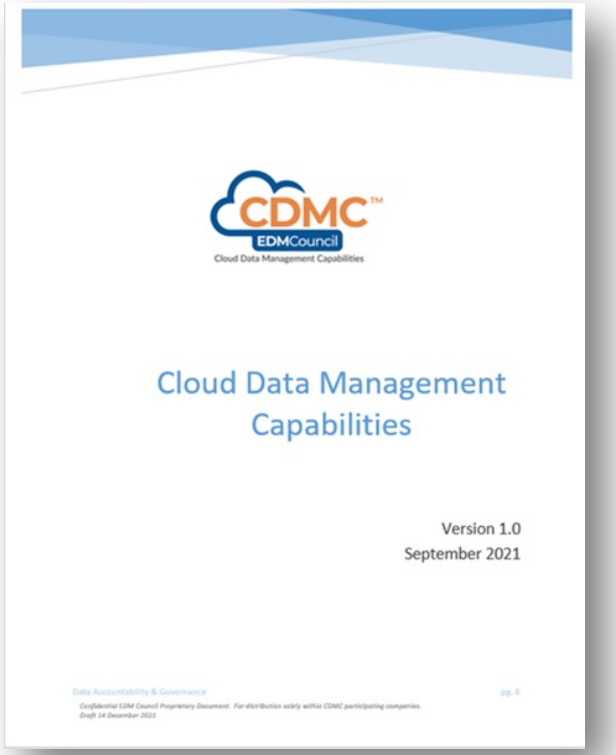
- First CDMC Industry Deliverable published 7 July 2021
- Auditable, evidence-based Key CDMC Controls & Automations for managing and protecting sensitive data
- 20-page document
- Summarizes and elaborates on key controls in Framework

DOWNLOAD 14 CMDC KEY CONTROLS:
https://edmcouncil.org/page/cdmc-14-key-controls-and-automation



Sept 28, 2021: CDMC Framework Release

- Comprehensive 150+ page document
  - 6 Components
  - 14 capabilities
  - 37 sub-capabilities
- Complete 14 Key Controls & Automations integration



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Expert Panel + Audience Q&A

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Questions?

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Panel Questions

- **What should companies be doing to ensure they can adequately manage and govern data in today's cloud/hybrid world?**
- **How are local data privacy and retentions laws impacting cloud adoption across the globe?**
  - **How are companies like Microsoft and Informatica dealing with these realities?**
- **How is the EDM Council helping the FS industry with these requirements? E.g. CDMC!**
- **How does one become a member and access the CDMC content?**
- **What is Informatica and Microsoft doing to support CDMC?**
- **How are the regulators adapting to the rise in Cloud computing across FSI?**