EDM Council and CDMC Overview

Q4 2021

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EDM Council Overview

Mission: *Elevate the practice of data and analytics management and support the role of the data professional*

Principles:

We believe in a **responsible data-driven** organization and establishing **data literacy for all**.

We advocate **industry collaboration** to provide data management and analytics research, best practices, standards, training and education.

We are the **neutral, non-profit** industry forum for companies and their data & analytics professionals.

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**Established**

2005

**Worldwide**

Americas, Europe, Africa, Asia, Australia

**250+ Member Firms**

Cross-industry, including Regulators

**10,000+ Professionals**
EDM Council’s Areas of Advocacy

Best Practices
- DCAM & Cloud CDMC
- ESG Data
- Data ROI

Driving Standards
- Knowledge Graph
- Industry Ontologies
- Shared Lab

Research & Benchmarking
- Global Industry Study
- Life Sciences
- Data Sharing

Regulatory Engagement
- Regulators participate in the agenda
- Many regulators are members

Training & Certification
- Virtual & eLearning Courses
- EDMWebinars & Events

Networking
- EDMConnect Community
- DataVision, CDO Summit
- Workgroups & Forums
Cloud Challenges

- **Inefficiency**: data, technology, regulatory and planning challenges on nearly every cloud implementation
- **93% of firms** use 2 or more cloud providers*

CDMC Group Objectives

1. Define consistent best practices for a hybrid-cloud world
2. Align key cloud data controls to meet regulatory obligations for Sensitive Data
3. Accelerate Cloud Adoption with comprehensive framework modeled after the DCAM Framework

* Source: Flexera, 2020 State of the Cloud
DATA MANAGEMENT CAPABILITY ASSESSMENT MODEL - DCAM

- DCAM was developed in 2015 by the EDM Council as a formal framework to assess data management capabilities using a consistent scoring model.
- DCAM has been adopted by 60% of organizations globally including regulators that utilize maturity models

- DCAM is a principles-based capabilities framework – the “what to do” for comprehensive data management best practice.
- Provides a scoring/benchmark guide usable by companies to assess their capability maturity
- A capability framework gives the flexibility for all companies on “how to” meet these requirements with their own approach and innovation.

- EDMC leveraged the DCAM Framework to build the CDMC Best Practice Framework.
- CDMC Framework is maintained by EDMC and made available as a Free License to industry
CDMC: Industry Engagement

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

CDMC Working Group

Cloud & Technology Provider Certification

Regulatory Engagement

Go-to-market Support

CDMC Working Group Publication on track for Q3 2021
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<thead>
<tr>
<th>Component</th>
<th>Capability</th>
<th>Sub-Capability</th>
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<tbody>
<tr>
<td>1. Governance &amp; Accountability</td>
<td>1.1 The Cloud Data Management business case is defined and measurable</td>
<td>1.1.1 Cloud data management business cases are defined</td>
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<td>1.2 Data ownership established for both migrated &amp; cloud-generated data</td>
<td>1.2.1 Data Owner roles and responsibilities are defined and agreed</td>
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<td>1.3 Data sourcing and consumption are governed and supported by automation</td>
<td>1.3.1 Data sourcing is managed and authorized</td>
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<td>1.4 Data Sovereignty and Cross-Border Data Movement are actively managed</td>
<td>1.4.1 Sovereignty of data is tracked</td>
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<td>2.1 Data catalogues are implemented, used and interoperable</td>
<td>2.1.1 Data cataloguing is defined, scoped and actively used</td>
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<td>2.2 Data classifications are defined and used</td>
<td>2.1.2 Metadata is discoverable, enriched, managed and exposed in Data Catalogues</td>
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<td>3.1 Data entitlements are managed, enforced and tracked</td>
<td>3.1.1 Data entitlement rights and obligations are captured as metadata</td>
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<td>3.2 Ethical access, use, and outcomes of data are managed</td>
<td>3.1.2 Data entitlement rights are enforced</td>
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<td>4.1 Data is secured, and controls are evidenced</td>
<td>4.1.1 Encryption policies are defined and enforced for data at rest, in motion, and in use</td>
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<td>4.2 A data privacy framework is defined and operational</td>
<td>4.1.2 Implementation of data security controls is evidenced</td>
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<td>5.1 The data lifecycle is planned and managed</td>
<td>4.1.3 Data obfuscation techniques are defined, scoped and applied</td>
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<td>5.2 Data quality is managed</td>
<td>4.1.4 A Data Loss Prevention program is in place</td>
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<td>6.1 Technical design principles are established and applied</td>
<td>4.2.1 A data privacy framework is defined and agreed</td>
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<td>6.2 Data provenance and lineage are understood</td>
<td>4.2.2 The data privacy framework is operational</td>
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Data Consumption Purpose is required for all Data Sharing Agreements involving sensitive data.

Entitlements and Access for Sensitive Data must be defaulted to creator and owner and all access must be tracked.

Classification must be automated for all data at point of creation or ingestion and must be always on.

Cataloguing must be automated for all data at point of creation or ingestion.

The Data Sovereignty and Cross-Border Movement of sensitive data must be recorded, auditable and controlled according to defined policy.

A register of Authoritative Sources and Authorized Distributors must be populated for all data assets containing sensitive data.

The Ownership field in a data catalog must be populated for all sensitive data.

A Data Control Compliance Metric must be produced for all data assets containing sensitive data.

Data Quality Measurement must be enabled for sensitive data with metrics distributed when available.

Data Retention, Archiving and Purging must be managed according to a defined retention schedule.

Data Lineage information must be available for all sensitive data.

Cost Metrics directly associated with the use, storage and movement of data must be available in the catalog.

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 Regulatory Engagement Update

**Objective**
- Engage Global Regulators for CDMC awareness, engagement and feedback

**Key Regulatory Updates**
- Formed CDMC Regulatory Engagement Committee
- Significant Momentum in Engaging Regulators Globally

**Completed CDMC Regulatory Briefings**
- SEC, FDIC, CFTC
- US Federal Reserve & Federal Reserve Board
- DTCC (Trust & Custody industry utility)
- Bank of England, FCA (Financial Conduct Authority)
- ICO (Information Commissions Office UK)
- APRA (Australia)
- OSFI (Canada)
- FinMA (Switzerland)
- MAS (Monetary Authority of Singapore)
- African Continental Cloud Regulatory Symposium
- BaFin (Federal Financial Supervisory Authority)

**October 14, 2021: CDMC Global Regulatory Update**
CDMC Framework – Structure

Sub-Capability Description

Objectives of the Best Practice

Auditble “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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<td>DESCRIPTION</td>
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<td>ADVICE FOR DATA PRACTITIONERS</td>
<td>ADVICE FOR CLOUD SERVICE AND TECHNOLOGY PROVIDERS</td>
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<td>QUESTIONS</td>
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<tr>
<th>Not Initiated</th>
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CDMC Framework – Structure

- **Component**
  - Component 1
  - Component 2
  - Component …

- **Capability**
  - Capability 1.1
  - Capability 1.2
  - Capability 1….

- **Sub-Capability**
  - Sub-Capability 1.1.1
  - Sub-Capability 1.1.2
  - Sub-Capability 1.1….

- **Objectives**
- **Advice for Data Practitioners**
- **Advice for Cloud Service & Technology Providers**
- **Questions**
- **Artifacts**
- **Scoring Guidance**
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
  o 6 Components
  o 14 capabilities
  o 37 sub-capabilities
➢ Complete 14 Key Controls & Automations integration
CDMC ASSESSMENT & CERTIFICATION USE CASES

For Cloud Service & Cloud Solution Providers:
- Certification based on the CDMC 14 Key Controls & Automations
  - CDMC Certified Solutions
    - Based on CDMC 14 Key Controls & Automations
    - Conducted by independent CAP Partner executing specific or all 14 key controls & automations
    - EDMC issues a digital “CDMC Certified Solution” Digital Badge valid for 12 months

For End Companies:
- Certification based on the CDMC Framework
  - CDMC Readiness Assessments
    - Determine gap areas in CDMC Framework Capabilities & Key Controls
    - Companies can self-assess or engage CAP Partner
    - Companies can leverage available CDMC Certified Solutions to accelerate CDMC Certification
  - Certification Assessments
    - Conducted by independent CAP Partners reviewing comprehensive CDMC Framework for specific scope of business
    - Upon successful completion of assessment evidencing achieving a score of 5 or 6 on all CDMC Framework sub-capabilities
    - EDMC issues a digital “CDMC Certified” Digital Badge valid for 12 months
CDMC AUTHORIZED PARTNER PROGRAM

CDMC Authorized Partner Program ("CAP"):
- **Permits any of these services:**
  1. Training (Internal & External)
  2. Assessments & Certifications for customer and prospects
  3. Use of CDMC Branding & Logo / Marketing / Client/Prospect Surveys
- **CDMC Partners can be:**
  - Advisory Firms
  - Cloud Service Providers
  - Cloud Tech / Platform Providers
  - Application Solution Providers Firms
  - Data Services Providers
- **CAP Fees only due:** For conducting CDMC Training or CDMC Assessment & Certification Engagements with End-clients

14 CDMC Authorized Partners (see EDMC website for latest list of CDMC Partners)
CDMC Upcoming Training Classes

• CDMC Pilot Class 12 & 13 October – Registered Companies:
  • Arrayo / Capco / Credera / DTSQUARED / Element22 / FIT Strategy
  • Google / KPMG / Ortecha / TietoEVRY
    ➢ 12/13 Oct CDMC Pilot Training Registration Link

• CDMC Open Training Classes:
  • 1 & 2 November (AMER & UK/EMEA)
  • 10 & 11 November (APAC)
    ➢ CDMC Open Training Classes - Registration Link
## CDMC: Accelerating Trusted Cloud Adoption

### CDMC Industry Objective:
*Build Trust, Confidence, and Dependability for Cloud Adoption*

### Companies
CDMC structured framework of auditable Cloud processes and controls – especially for sensitive data

### Cloud Service Providers (CSP)
CDMC requirements and controls can be automated into CSP platforms which accelerates adoption and provides market confidence

### Application, Technology & Data Providers
Incorporates certified CDMC capabilities and controls into services and solutions to ensure high degree of reliability and operational effectiveness

### Consultants & Systems Integrators (SI)
CDMC enables training & assessments, gap analysis, strategy development, and execution services for end clients adopting cloud

### Regulators
CDMC provides industry guidance for auditing and validating key cloud controls, especially for sensitive data