



Data Management Maturity Assessment Outcomes

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Agenda

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3 Data Maturity Framework

4 A summary of observations

5 What needs to change?

6 The Initiatives and Priorities identified



Background



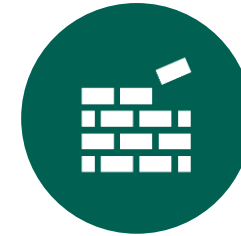
Why we did this...

The core initiatives for integrated care, fulfilling the Sláintecare policy and in preparation for the digitisation programme ahead, all have a **sentinel requirement** of a **mature data management** in HSE.



Our approach...

Considered various data management frameworks to **baseline** our existing capabilities, determine **capability gaps**, and define objectives to accelerate the development of the **data management initiative** and make it operational.

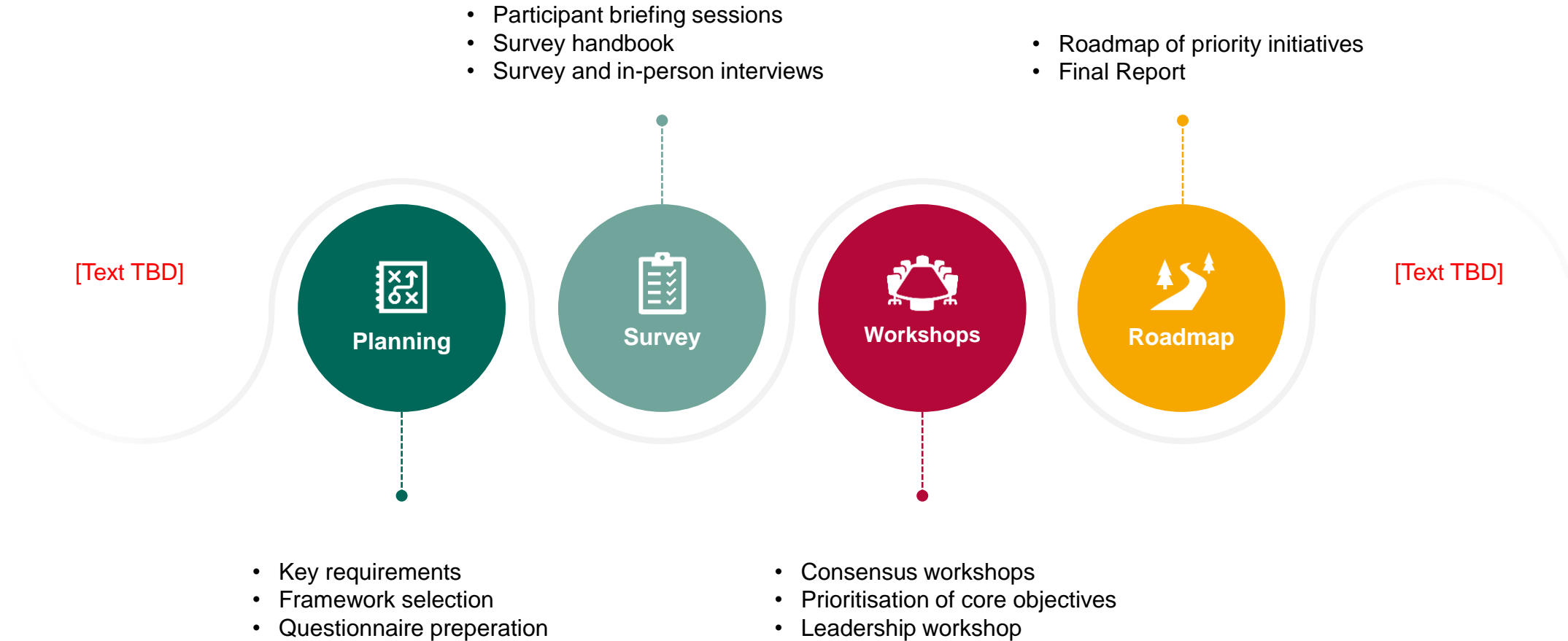


Required outcomes...

A set of priority objectives and **initiatives** based on our most critical gaps to **build** and scale capabilities including an overarching **data management practice** to guide the operating units.



Our Approach





Data Management Capability Assessment Model (DCAM)

The DCAM framework consists of data management 38 capabilities organised under **eight** components, grouped into **four** categories:

Foundational Components

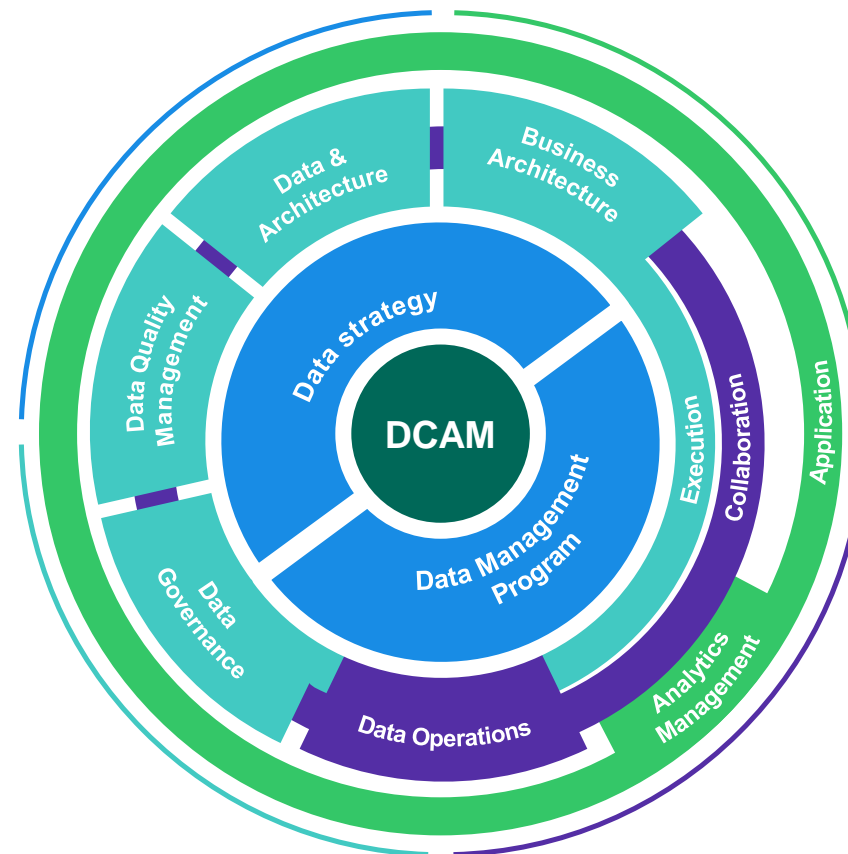
Defines the strategy and vision to build the team and put the data management roadmap in place.

- An overarching data strategy
- Data management program

Execution Components

Capabilities and initiatives to execute and deliver the data management strategy.

- Data Architecture
- Data Quality Management
- Data Governance



Application Component

Capabilities to build data driven solutions, robust advanced analytics for planning and optimisation, and futuristic AI

- Enable trustable insights
- Advanced data-driven solutions

Collaboration Component

Guide and mobilise teams across the organisation to work together to manage, protect and leverage data.

- Data Operations
- Controls and risk management



Survey participation statistics and combined scores

160

Survey Participants

56%

Completion rate

9

Workshops

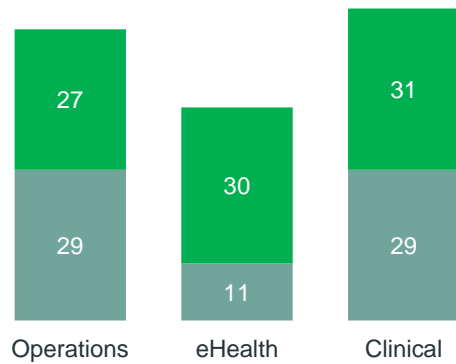
2.28/6.0

Maturity score

15

Proposed initiatives

Assessment status by Groups

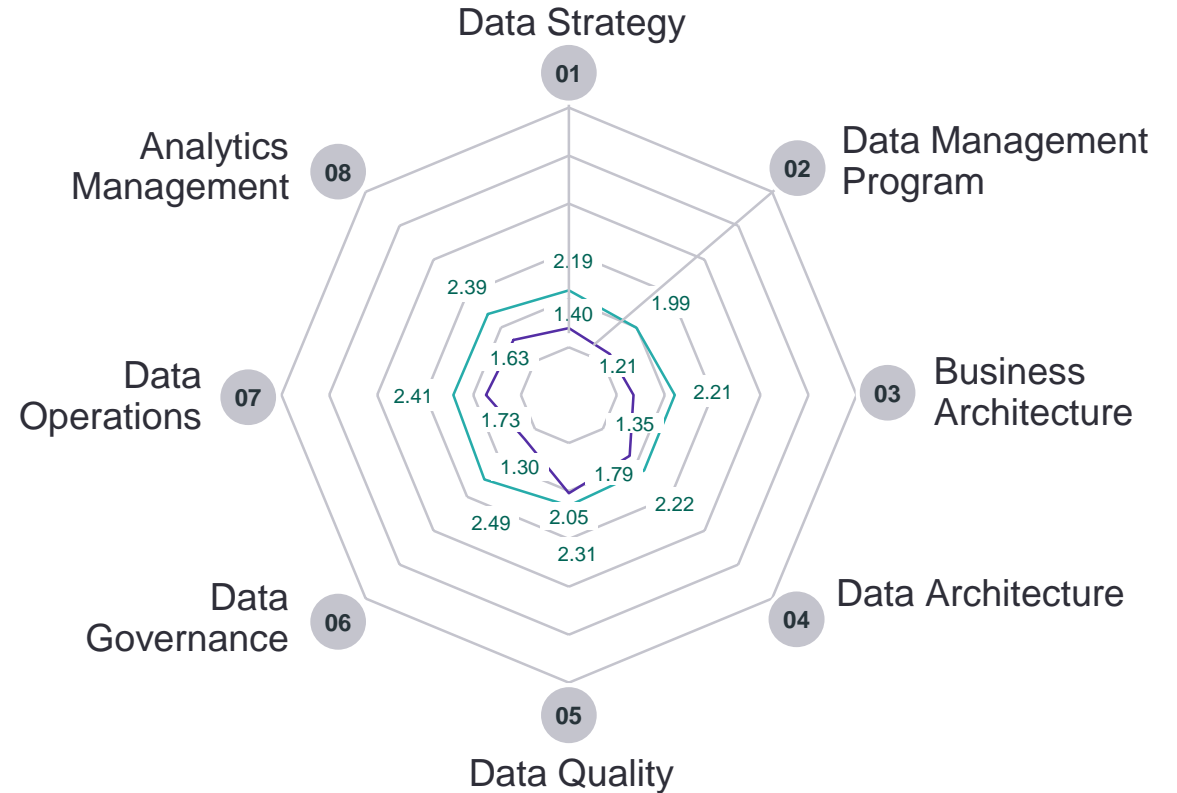
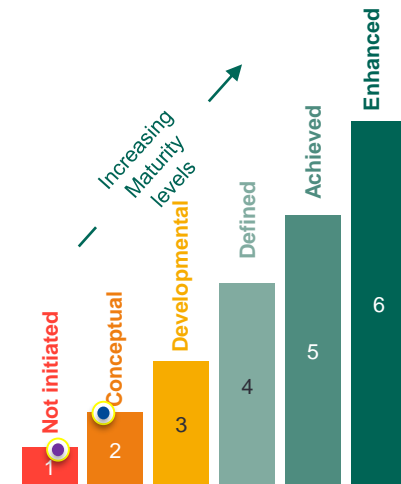


Completion status

■ No ■ Yes

Combined Maturity Score: 2.28

Combined Consensus Score: 1.56





Summary observations from the survey and workshops



Survey

- ▶ Most services have no DM initiatives in place or in the early 'conceptual' stages.
- ▶ There are some services where efforts are in the 'developmental' stage for some key areas.
- ▶ Most of the survey comments indicate critical data management gaps and its impacts and risks for the HSE.



Consensus Workshops

- ▶ Participants agreed that the absence of centrally driven DM efforts is a significant gap.
- ▶ The survey scores have been consistently seen high, when considering organisation level maturity for capabilities.
- ▶ There is a need for joined up thinking and efforts to initiate DM across the organisation.



High-level observations



Foundational Components:

- ▶ Organisation needs an overarching data strategy.
- ▶ A business case needs to be prepared for data management, and a program must be stood up.
- ▶ Joined-up thinking and management required across divisions/services.
- ▶ The organisation needs an executive data leader role to drive this change.



Execution Components:

- ▶ Need to establish processes and roles to document data needs of services and operations.
- ▶ Data must be standardised and made interoperable across the system.
- ▶ Clinical and operational users want to see consistency and expect DM to resolve this challenge.
- ▶ Data quality management must be established, including clear ownership for issue remediations.
- ▶ Organisation requires mature data governance across all our data assets.



Collaboration Component:

- ▶ We need joined efforts across the organisation to build collaborative data management.
- ▶ Data risk could become an organisational risk, unless we take the right action at this time.



Application Component:

- ▶ Our analytics strategy and infrastructure must be standardised and scaled for everyone's reach.
- ▶ We need a coherent plan to prepare the organisation for the next level of advanced analytics/AI.



Transforming data management across the organisation

What needs to change

Data Strategy

Our current state

- ▶ In the early stages of documenting a data strategy
- ▶ Data management as a practice is being conceptually discussed

What needs to change

- ▶ Publish HSE's overarching data strategy
- ▶ Prepare business case, secure funding and agree on a DM roadmap

Data Management Program

- ▶ DM maturity is limited to a small fraction of data
- ▶ Small pockets mature data management practice exist

- ▶ Joined-up thinking needed to set up organisation-wide DMP
- ▶ All our critical data sets across the system must have mature DM

Business Architecture

- ▶ Data requirements of processes are part of system designs
- ▶ We do not have a Business Architecture practice

- ▶ DA is an imperative to ensure standardisation and interoperability
- ▶ DA processes must be defined and enforced across value flow

Data Architecture

- ▶ There are some tools in place for data management
- ▶ An organisation-wide data DM tool ecosystem does not exist

- ▶ The T&T and DM must be aligned via policies
- ▶ Integrated DM technology tool strategy. (e.g. Data catalogue)

Data Quality Management

- ▶ Data quality varies across systems and divisions
- ▶ An organisation-wide DQ efforts does not exist

- ▶ An organisation-wide DQ management framework is required.
- ▶ Critical data elements must be identified, prioritised & QA ensured

Data Governance

- ▶ Elements of mature data governance beginning to emerge
- ▶ Lack of organisation-wide DG is a critical gap

- ▶ Organisation-wide DG office is an imperative
- ▶ DM policies and standard must be developed and enforced

Data Operations

- ▶ Mature in some initiatives covering smaller functional needs
- ▶ Domain / control function collaboration is not structured

- ▶ Establish DM stakeholder alignment and collaboration
- ▶ Establish cross-control function DM collaboration

Analytics management

- ▶ Some excellent solutions exist but siloed
- ▶ Efforts are fragmented without a coherent strategy

- ▶ A coherent strategy is required to widen the scope
- ▶ Standardisation of Analytics and Artificial Intelligence
- ▶ Cross-organisation access to analytics technology and platform.



Planned Data Management Initiatives

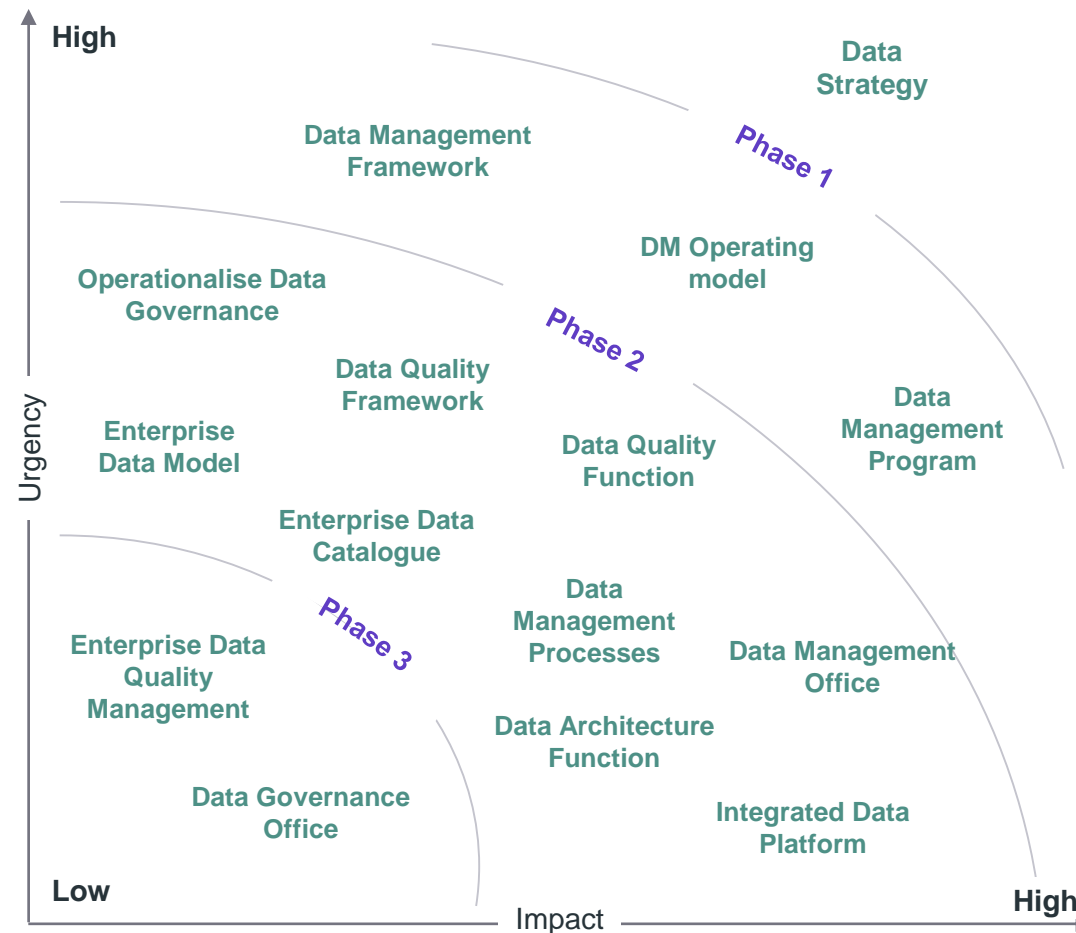
15 initiatives have been identified for implementation based on a collaborative prioritisation approach.

Planned Initiatives

1. Data strategy

2. DM operating model
3. Data Management Program
4. Data Management Framework
5. Establish the Data Management Office
6. Establish a Data Architecture function
7. Enterprise Data Model
8. Enterprise Data Catalogue
9. Integrated data platform
10. DM Policy and processes
11. Data Quality function
12. Establish Data Quality framework
13. Enterprise Data Quality
14. Data Governance Office
15. Operationalise Data Governance

Prioritisation





Thank You