



An Roinn Caiteachais
Phoiblí agus Athchóirithe
Department of Public
Expenditure and Reform

Data Management Maturity Assessment

SELF-ASSESSMENT GUIDE

Prepared by the Office of the Government Chief Information Officer

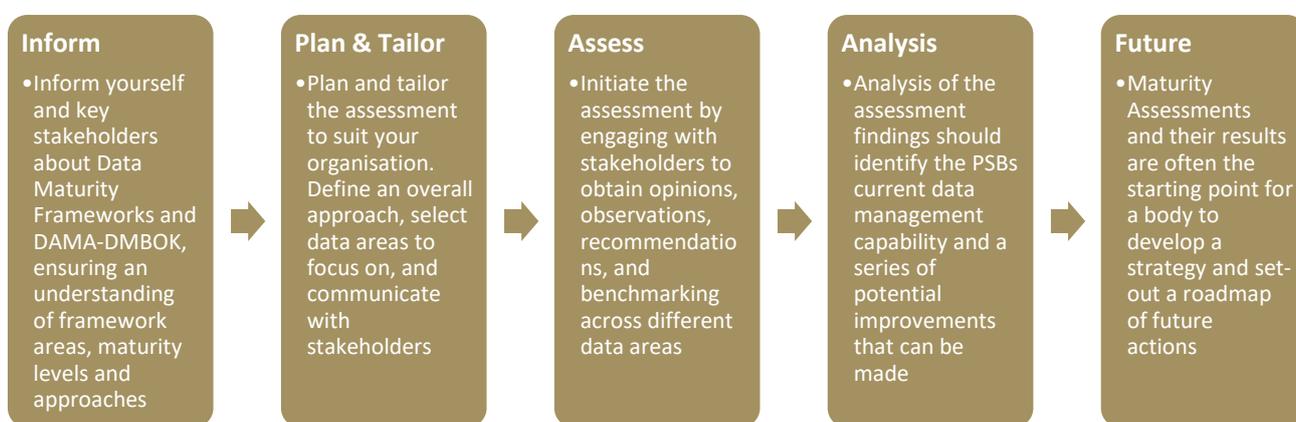
INTRODUCTION

This guidance document has been developed to provide a Public Service Bodies (PSBs) with direction in terms of how to approach the assessment, and a detailed step-by-step methodology to undertake the assessment. This approach, which can be tailored to suit specific needs and requirements, is based on the DAMA-DMBoK data maturity framework. There is no “one model fits all” for data maturity assessments, and as such PSBs must tailor and scale their assessment and approach to fit their needs.

PHASES

Data Maturity Assessments require planning. In order to ensure practical, actionable results, PSBs must ensure both resources and time are dedicated to the assessment. Assessments should be conducted over a short and defined period of time with the aim of the assessment to solicit knowledge, insights and observations from different business areas within your organisation.

A Data Maturity self-assessment can be grouped into several distinct phases, as outlined below.



PHASES (DETAILED)

The following provides details of the various phases and steps to be undertaken by PSBs as part of their data maturity self-assessment. These steps are derived from the activities outlined in the DAMA-DMBoK approach, which outline how best to carry out a data maturity assessment.

It is important to bear-in-mind that a data maturity self-assessment must be tailored to suit the specific needs and interests of each PSB. This step-by-step guide is flexible and PSBs are encouraged to adapt the steps below in whatever manner is deemed optimal to suit their requirements.

INFORM

1. FAMILIARISE YOURSELF WITH DAMA-DMBoK 2.0

Obtain an understanding of data management maturity frameworks, learning what they are, their purpose and the benefits of carrying out a maturity assessment. It is recommended that staff conducting the assessment for a PSB read the advice note and *Chapter 15 Data Management Maturity Assessment* in the *DAMA-DMBoK 2.0*. This should provide brief introduction of the data maturity assessment, its purposes and benefits.

2. IDENTIFY AND ENGAGE RELEVANT STAKEHOLDERS

Stakeholder analysis and identification is a key step in data maturity assessments due to the breadth and depth of perspectives that can be gathered from stakeholders. Junior stakeholders can often provide in-depth knowledge of data in a specific area, while more senior stakeholders will often have a wider perspective on the organisation's interaction with data. Stakeholders must be identified early in assessment and engagement should take place to inform and outline the benefits of a data maturity assessment.

PLAN & TAILOR ASSESSMENT

3. DEFINE GOALS OF AN ASSESSMENT

It is important to set out the goals of the assessment, which will help determine the assessment's scope and focus. Often there are specific drivers for an assessment, which may help define the goals. The goals should be clearly understood by decision makers and business areas in the organisation. As part of this goal setting, it should be decided whether that assessment will be aligned with any other data initiatives, as often times a data maturity assessment is a precursor to the development of a data strategy. Some high level goals may include:

- Demonstrate a commitment within PSB to improving its data management capability.
- Enable PSB to evaluate and benchmark current data processes and procedures and policies
- Identify gaps and opportunities in the area of data management and governance
- To provide greater awareness and knowledge of PSBs data holdings and capability.
- To assist with a roadmap of actionable items for a data strategy

In defining its goals, a PSB can better decide on an assessment approach and scope in terms of both areas to focus and stakeholders to engage, and the resulting final output.

4. CHOOSE DATA MANAGEMENT AREAS

DAMA-DMBoK 2.0 provides comprehensive coverage of all aspects of data managements through its 11 data management areas, these are listed below. However, a PSB may not wish to assess itself across all these areas, as this can be onerous with some areas being of less relevance to the PSB. If a PSB chooses to exclude certain knowledge areas as part of its assessment, it should provide a rationale for its exclusion.

- Data Governance
- Data Architecture
- Data Modelling & Design
- Data Storage & Operations
- Data Security
- Data Integration & Interoperability
- Document & Content Management
- Data Warehousing & Business Intelligence
- Metadata
- Data Quality
- Reference & Master Data

5. DEFINE ORGANISATIONAL SCOPE

While many PSBs will undertake a whole of organisation assessment, a data maturity assessment may focus on a particular business area or program. The areas chosen should represent a meaningful subset of the organisation and participants should be able to influence key business processes that affects the data assets within scope.

PSBs should consider the scope that best serves the goals of its assessment. There are trade-offs between local and organisational assessments:

- **Localised assessments** can delve into much greater detail and can be conducted quickly when focused in on a specific area. Well-planned localised assessments can often be aggregated and weighted to form an enterprise or organisational assessment.
- **Organisation assessments** focus on the broad and sometimes disconnected parts of a body, evaluating the different areas and their processes against a standard criteria. This can be done via one single overall assessment or the grouping together of smaller assessments.

6. DEFINE ASSESSMENT APPROACH

Based on the goals defined for the data maturity assessment and the level of commitment from stakeholders, a PSB should decide on how it will engage with key stakeholders. This may include workshops, interviews and surveys amongst other methods in order to solicit the knowledge, insights and observations required.

A key factor in the approach is the level of engagement from stakeholders. If stakeholder time and investment is limited, it might be better to use a lightweight option for the assessment such as online assessments with follow-ups. Otherwise, it may be better to have physical workshops and one-to-one meetings in order to obtain the necessary information as well as buy-in for certain recommendations and improvements.

7. COMMUNICATIONS

Clear communications are a critical factor in the success of an assessment and the actions coming out of it. It is important to communicate with stakeholders throughout the assessment process to ensure full engagement and buy-in at all stages. As part of any communications activity, it is valuable to reiterate the goals of the assessment and benefits of carrying out.

As a data maturity assessment can lead to significant actions or changes for a PSB, it is important to communicate this clearly to stakeholders. A communications plan should be put in place leveraging the stakeholder identification and analysis step above.

ASSESSMENT

8. PLAN ASSESSMENT

Data Maturity Assessments require appropriate planning. In order to ensure practical and actionable results, PSBs must plan, and ensure sufficient resources and time are dedicated to the assessment. Assessments should be conducted over a short and defined period of time.

Key to all assessment approaches is the need to solicit knowledge, insights and observations from different business areas in order to better identify strengths and weaknesses of a PSB data management practices. A combination of activities including interviews, workshops, surveys, emails, and the review of documentation and standards can be considered.

In general terms, it is recommended that PSBs pose a series of questions for each of DAMA-DMBoK areas within scope of the assessment. These questions should cover the people, processes and technology across each of these areas and should be a mix of open-ended and sentiment questions.

- Open-ended questions allow for qualitative responses, commentary and suggestions from PSB staff.
- Sentiment questions can give a quantitative indication of a PSBs performance in a given area.

A sample set of assessment questions has been provided as part of this guide. These questions, which should be tailored to suit needs, cover the 11 DAMA-DMBoK areas and are designed to be flexible. They can be used as part of workshops, surveys, interviews etc.

9. CARRY OUT THE ASSESSMENT

Utilising the selected assessment approach and the plan for the assessment – Begin the data maturity assessment.

Regular engagement with stakeholders throughout the assessment is vital, not only to ensure quality responses, and to clarify and further delve into those responses, but also to ensure momentum with the data maturity assessment.

ANALYSIS & REPORT

10. ANALYSIS OF THE FINDINGS

There are two primary tasks in the analysis of the assessment findings.

- Through analysis of the quantitative information obtained via the assessment, an overall sentiment of the PSBs data maturity can be identified for each DAMA-DMBoK areas. This can then be matched against the 5 levels of data maturity to give a sense of the PSBs data maturity in a given area. Subsequently, an overall maturity level could be gauged for the PSBs overall data maturity.
- The analysis of the qualitative information obtained via the assessment can enable the identification of common areas of strength or weakness in a PSB, as perceived by stakeholders. Crucially, this can lead to the identification of gaps and opportunities, and therefore - actions that can be taken to close these gaps and opportunities to make improvements in the PSB's data management. Often times, these recommendations will be drawn directly from recurring suggestions made by stakeholders based on their own experience around data management.

Considering the wide range of perspectives that are often present in a PSB, it can be expected that there will be a broad range of different ratings for a PSBs performance across the data management areas. As such, there will need to be discussion of the best way to reconcile these varying views and establish a consensus mechanism by which a collective understanding of PSB's views can be established.

11. REPORT THE ASSESSMENT FINDINGS

Based on analysis of the assessment findings, an assessment report should be produced which outlines both the findings and analysis. The report should reiterate the context of the assessment outlining the goals and drivers, the data management areas being examined and the meaning of the maturity levels against which the PSBs is being assessed. The report should present the PSBs performance across the different data management areas, before outlining actionable recommendations for how the PSB can improve its data management performance.

It is up to senior stakeholders to decide on whether to make the report and related briefing material available to staff. It can be beneficial to do as this will better inform staff in the organisation around data management and provide them with a tangible outcome for the assessment they participated in.

FUTURE

12. CREATE A ROADMAP OF ACTIONS

Utilising the findings of the assessment, it is often possible to develop a roadmap of actionable items that seek to improve the PSBs data capability. Such a roadmap of actions can be linked to a PSB's data strategy or can simply aim to improve a PSB's data management capability.

It is up to a PSB both whether or not it wishes to develop a roadmap of actions, and how formal or rigid it wants the roadmap to be. The roadmap can be very informal such as a loose list of recommendations or it can be much more formal with clearly defined actions, timelines and dependencies. It is crucial to the success of any roadmap for there to be clear stakeholder engagement and buy-in both in the identification of actions and their implementation.

13. RE-ASSESS MATURITY

A PSB may wish to regularly re-assess its data management maturity, especially following the implementation of actions to improve its data management capability. If a PSB chooses to do so, it is important to keep a common criteria between these assessments, as this will both maintain an organisational focus on achieving a higher level of maturity across the chosen data management areas and the actions being undertaken to improve the capability of the body in these areas. A re-assessment allows a PSB to compare itself against the baseline performance benchmark established in the first assessment and track progress towards the target state for the organisation. These re-assessment can restart or maintain momentum for data management improvements through the identification of new recommendations and actions.

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