Australian Government
Department of Finance

Data Maturity Assessment Tool Guide

Department of Finance
2024

Contents

Introduction

The Data and Digital Government Strategy (the Strategy) envisions an APS that provides simple, secure, and connected public services through world-class data and digital capabilities by 2030. To support this vision, the Data Maturity Assessment Tool (the Tool) is designed to help agencies periodically assess their data maturity and track their progress over time, to support implementation of the Strategy and agencies own data strategies.

Purpose of the Tool

The Tool's primary purpose is to provide agencies with a consistent approach to measuring and understanding their organisation's data maturity. The Tool will also help agencies implement the Government's data agenda as outlined in the Strategy, by providing a consistent, longitudinal evidence-based means of measuring APS data maturity and capability. The Tool touches on elements of Strategy missions and its annual results will help target progress of other APS Reform initiatives focused on partnerships, citizen centric approaches, and integrity.

The Tool will provide a baseline assessment across the whole of the data lifecycle, helping inform agencies' future development needs as the data ecosystem evolves. Agencies will also be able to track their progress and compare their results and trends to similar APS agencies, industry standards and international benchmarks.

By objectively measuring and tracking whole-of-APS data maturity, the Tool aids the Government in identifying areas for improvement and where to target investment and resources into systems, processes and infrastructure that need to mature, ensuring the APS can operate effectively in a seamless, scalable, and interoperable environment.

The Tool complements other assessments like the NAA's Check-up Survey and the ONDC's DATA Scheme user accreditation to provide the Government with a comprehensive picture of the data landscape.

In your agency

The Tool is designed to help agencies of all sizes consistently identify capability strengths and areas for improvement in data risk management, integration, strategy, governance, architecture, and use practices, and guide data management and investment decisions. The Tool has been developed to provide a common approach to assessing data maturity across the APS, reducing the need for agencies to create or purchase their own tools.

Each agency will be at a different point in its data maturity journey. It will not be appropriate nor necessary for all agencies to aim for the highest level of data maturity in all focus areas. Agencies are encouraged to use the initial data maturity assessment to establish a baseline and then determine their own realistic target state based on the agency's vision, purpose, strategic goals, structure, resourcing, and current maturity level. As more agencies complete the data maturity assessment, case studies will be developed to examples of success and good practice, supporting agencies in identifying their own realistic endpoints or success criteria.

Agencies must also decide how best to complete the assessment internally, with further guidance on how to complete the Tool provided in **Part 2** of this guide. It is recommended that agencies submit their data maturity assessment through their Chief Data Officer or equivalent to support the development of the data ecosystem and strengthen both the internal agency ecosystem and the wider APS.

Advice on how agencies can respond to the annual self-assessment results is set out in **Part 3** of this guide.

Across the APS

The Tool will help agencies understand the data maturity levels of APS data partners and facilitate improved data sharing agreements. APS-wide use of the Tool will support management and development of, and build trust in, the Australian Government data ecosystem and enable APS-wide reporting through the Strategy.

Completing the Tool

Background

The Government has agreed to mandate use of the Tool by all Government agencies to self-assess data maturity. Initially the Tool will be provided by e-mail to each in-scope agency as part of an annual process run by the Department of Finance. Each agency will have 2 months to complete their assessment, from May to July.

How does the assessment work?

The data maturity assessment is structured to enable a systematic review of your agency's data governance, systems, and processes. It is a self-assessment framework organised around seven focus areas relevant to understanding your agency's data maturity. Your assessment will give you maturity scores for the overall state and for each focus area. This will give your agency an understanding of its current data environment and will inform prioritisation of areas for potential improvement.

For each question there are six levels of maturity from which you need to choose the answer that most accurately describes the features or behaviours associated with progression from low to high maturity.

Assessment responses should be made with reference to the date of the end of the most recent financial year. For example, for the first self-assessment, scheduled for completion between 1 May 2024 and 31 July 2024, agencies' responses should be based on the situation as at 30 June 2024, for example:

> **Q2.** [*As of 30 June 2024*], are data strategies are in place to glean insights and inform your agency's decision-making?
>
> **Answer:** [*As of 30 June 2024*], the agency does not have a data strategy in place to inform agency decision-making.

Who should complete the assessment?

An entity is considered 'in-scope' and required to annually complete the Tool if it:

- is a non-corporate Commonwealth entity; and
- has primary responsibility for its data management regime; and
- is not a National Intelligence Community agency.

The assessment can only be signed off (approved) by the agency head, unless otherwise agreed with the Department of Finance. The Department of Finance regards sign off for the assessment by the recognised agency head as assurance that the Tool has been completed accurately and accountably by the agency in accordance with governance responsibilities including the Public Governance, Performance and Accountability Act 2013. However, completion of the assessment will be overseen by the Chief Data Officer or equivalent. The assessment should be completed with input from the person (or people) with responsibility for data management within your agency, with assistance from other areas as appropriate.

Agencies should consider whether it would be more effective to complete the Tool through interviews with the relevant expert areas, rather than a single area/person completing it on behalf of the entire organisation. This may be particularly appropriate for larger agencies with responsibility for data distributed over multiple areas. If this method is used, the officer completing the assessment should provide all interviewed areas a chance to review the final answers provided to ensure accuracy and place responsibility for the final responses on the responsible area.

Agencies must respond to all relevant questions prior to submitting results each assessment period.

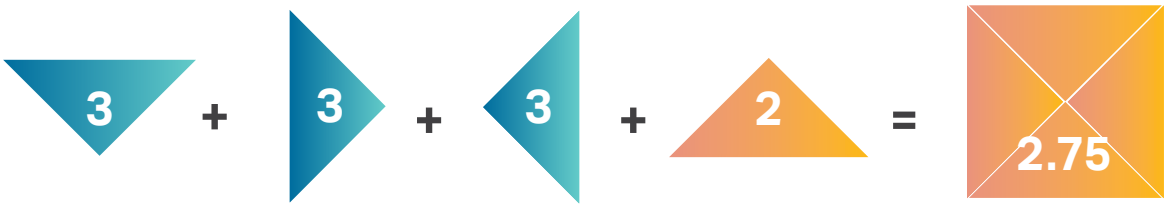
How long should the assessment take?

The time to enter the answers to the assessment should be around 1–2 hours on average. However, agencies are expected to spend additional time gathering information to complete the assessment. A comprehensive assessment will most likely include coordination and input from a range of stakeholders across your agency. You will need to find subject matter experts for the fields the questions relate to, and provide answers and evidence such as relevant documentation, to identify your current maturity level for each question. To identify appropriate contributors you may need to consult with your data management and information and records management teams, use your information asset register, and consider any agency-wide governance mechanisms, e.g. an agency's Executive Board, or a Data Governance Committee (or similar).

The assessment does not need to be completed in one session.

How to assess for multiple business units?

In situations where multiple business units in an agency complete the assessment, the scores can be averaged to achieve an organisation wide maturity score. The following calculation methodology can be utilised:



In the above image there are 4 business units in the agency, 3 with a maturity rating of Defined and the last with a maturity rating of Developing. Scores throughout the assessment are rounded down to reach a conservative maturity level (i.e. a score of 2.75 would denote a maturity level of Developing). If agencies use an alternative method for calculating the average score for multiple business units, they should let Finance know this when providing their results.

What level of detail should agencies use when completing the Tool?

The Department of Finance expects agencies to complete the assessment accurately based on the best available sources and current understanding of information management within their agency. Agencies should keep a record of sources used in the completion of the assessment, where practical. This may include references to:

- governance frameworks, policies and strategies
- registers
- guidance and advice for staff
- reports
- contracts
- approvals and audit documentation
- training programs or capability skill assessments
- system procurement
- specification and assessment documents
- system performance monitoring documentation
- business rules
- metadata documentation and any other sources used.

It is vital that agencies are realistic and accurate when completing the assessment to ensure the results are useful and meaningful.

Is the assessment confidential?

Information gathered in the assessment will be treated as confidential. Outside of the completing agency, individual responses will only be viewed by staff at the Department of Finance conducting analysis and aggregation into agency sector and whole-of-APS results.

Subject to Government agreement, aggregated data maturity scores for the whole-of-APS and for agencies or agency cohorts will be published and used for monitoring progress in implementing the Data and Digital Government Strategy.

Aggregated results from assessments may also be provided to relevant APS agencies or APS Networks (for example, Data Champions Network) for the purpose of describing current APS data management and information management practices. No individual agency's non-aggregated results will be shared without consent.

Department of Finance will also analyse the data collected through the Tool to measure whole-of-government data maturity levels.

Benefits of accurate assessment responses

These reporting obligations promote accountability and public trust, and agencies stand to gain considerable benefits themselves from completing the Tool. Collecting and coordinating assessment responses will help agencies understand their current level of data maturity, identify existing strengths and seeing where improvements can be made. Being able to pinpoint areas where specific improvements are needed will assist each agency in creating a roadmap to enhance data-related strategies, policies, and practices. In addition, the opportunity to complete the Tool each year acts as an effective performance measure – using the initial ratings as a baseline to track progress over time. Government data is valuable, and it needs to be managed effectively to realise its value.

Outcomes

By completing the Tool, an agency will receive valuable information about its data maturity level which can be used for continuous improvement to measure and monitor progress and invest strategically in its data maturity practices. Agencies could use their results to improve how they structure their data programs and initiatives, improve their development and prioritisation of solutions to bridge data capability gaps, and promote awareness and accountability for data practices across the agency.

How do agencies interpret the results?

Once the assessment is completed, agencies will receive a report outlining their areas of strength, areas for improvement, and an overall mean and median score for each focus area. There is no one-size-fits-all level of data maturity. Some agencies, for a variety of reasons, may require a higher level of data maturity than others. This will depend on factors including agency outcomes, risks, and the operating environment. The following examples illustrate some of the factors that may be relevant.

Example 1

Services Australia might collect, hold, and share personal information that has not been de-identified. This would mean the security protocols that agency applies to data that is in motion (see question 31 of the assessment) will need to be higher than for an agency that does not do this. A rating of 3, indicating that they have only nominal compliance checks, would be unlikely to be sufficient to meet the intended agency outcomes for security protocols.

Example 2

An agency may also find that a lower rating than 5 is still sufficient to deliver the intended agency outcomes. Question 27 of the assessment provides that to achieve a rating of 5 an agency must be 'involved in the... DATA Scheme'. The Professional Services Review (PSR) is barred from sharing data under the DATA Scheme under section 10 of the *Data Availability and Transparency Regulations 2022*. Additionally, the PSR may determine that they have no need to request data as an accredited entity under the Scheme. In this case a rating of 5 may not be appropriate to support the delivery of their agency outcomes.

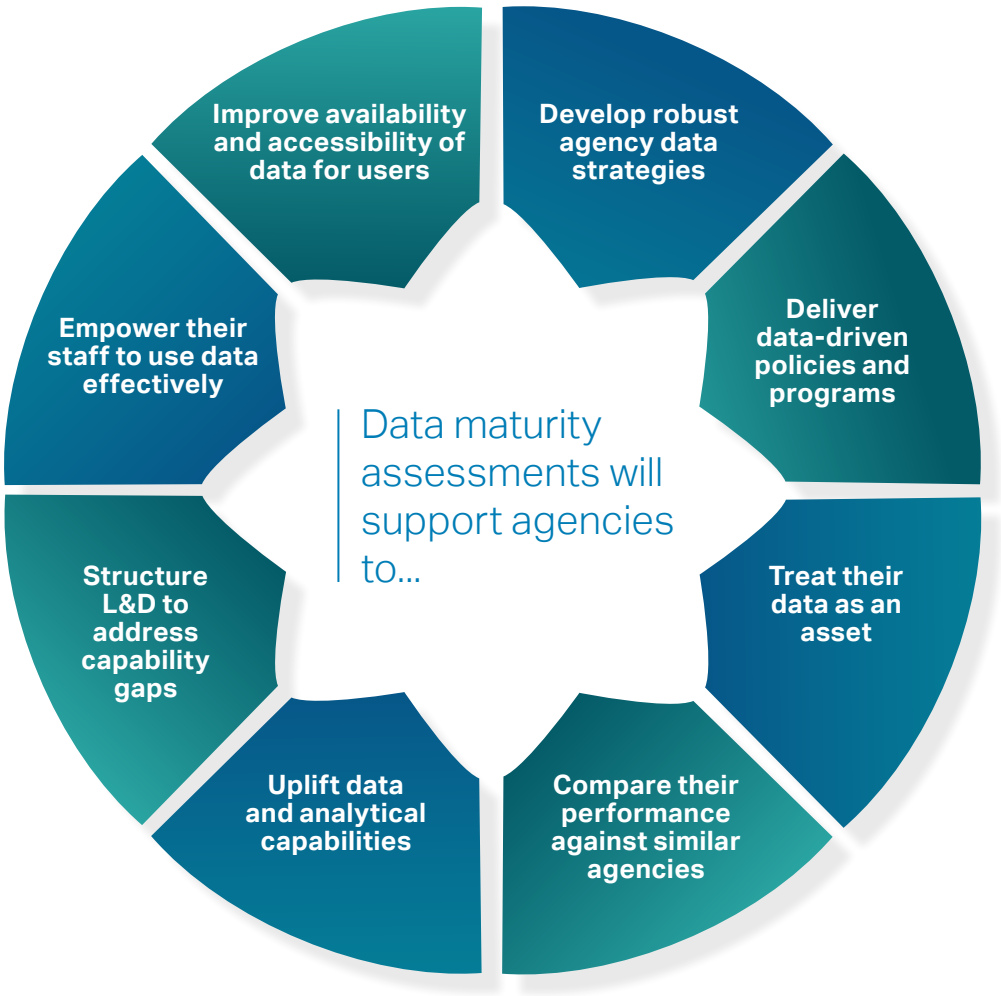
More information about what the ratings mean can be found in **Appendix A.**

What action should agencies take in response to the results?

Agencies should use the results of the assessment to determine how their results compare to similar agencies, and whether the results reflect the desired data maturity level required to effectively deliver the organisation's strategic goals and outcomes.

Agencies should use their results to identify the organisation's data capability gaps and strengths, and ensure the senior executive cohort is aware of the insights and actively considers how they can be used to design their corporate and governance mechanisms and improve decision making. This could include initiatives such as data governance mechanisms, learning and development programs that address capability gaps, or measures to uplift their data capabilities.

Agencies are also encouraged to discuss their results and actions with each other, building an active community of practise to improve the consistency of APS data management, track whole-of-APS data maturity levels over time, and identify patterns and trends. A community of practise will help improve awareness of what 'best-practice' data maturity looks like. It will also create a forum for idea shopping solutions to data maturity gaps and create a common language and common frameworks across the APS data maturity landscape. This will help agencies know what questions to ask, who to ask, what benchmarks to use, and what steps other agencies have taken to measure, track and improve their own data maturity.



How can agencies improve their rating across the different focus areas?

Data maturity involves considering a range of factors, including data strategy and governance, data technologies, data management components (e.g., risks management, operations management, architecture, etc.), quality assurance, data analytics and data integration. The factors and their relative importance can vary between different agencies.

Although the progression to higher stages of maturity is dependent on acquiring the required capabilities needed for that stage, it might be useful to assess what capabilities are considered essential for generating the value from data based on your agency's needs. An agency can advance their maturity by:

1. progressing through each maturity level and acquiring all the relevant capabilities
2. advancing in one or more capabilities more rapidly depending on the agency's goals, desirable outcomes, risks, and operating environment.

If agencies determine they need to make improvements in some of the different focus areas, then they can use the results to enable further improvement programs including:

- using the results of evaluations to make changes to practices, procedures, and systems to improve data management and data governance processes and procedures
- having their data management and governance processes externally assessed/audited to develop a targeted program of improvement
- keeping informed with issues and developments in data management, data governance practices and changing legal obligations by engaging with the Department of Finance
- helping to monitor and address new security risks and threats

- helping examine and address the data and information, and risks and benefits, of new technologies. Agencies can consider implementing enhancing technologies like data lineage tools that allow them to minimise and track and better manage the data and information they handle
- introduce educational initiatives that promote the value data management and data governance in agencies business practices
- agencies may look to solutions which enable them to lift their data maturity over time. In this instance, it may be helpful to explore the Australian Government Architecture based on the needs of the individual agency, in the broader scheme of the whole-of-government data and digital landscape.

Agencies can reach out to the Department of Finance at **DataPolicy2@finance.gov.au** to get advice on further steps they may be able to take, or working groups and communities of practise that are able to help agencies improve different elements of their data maturity.

As part of the annual review of the implementation of the Strategy the Department of Finance will also consider and advise on what steps Government should take to help agencies continue to have the necessary data maturity to support the Strategy. Programs and projects to target data maturity could form part of the Strategy moving forward.

Appendices

Appendix A: Data Maturity Assessment Tool Likert Scale Descriptors

What the ratings mean

The maturity scale will mean different things depending on each question or area of focus. A general summary of what the ratings indicate is set out below.

Rating	What that rating indicates
0. Unmanaged	There are no clearly defined processes for handling data use across any part of the agency.
1. Initial/Ad hoc	The organisation's approach to effective data use is ad hoc and reactive and tends to focus on identifying what is needed for effective data usage and management, rather than having a more structured and forward-thinking approach across the agency. Data analytics may be used to justify actions and decisions that have already been made, diagnosing what drives outcomes but it is not used to optimise decisions.
2. Developing	The organisation understands the importance of using and managing data effectively at the enterprise level, and has some initiatives for improving data capability, but this is still a work in progress. The organisation has started using data to improve selected areas which has led to some advances in operational efficiency.
3. Defined	The organisation has successfully implemented some planning initiatives to improve data usage and management which focus on improving and optimising established capabilities at the enterprise level. Data is included in the organisations vision and strategy.
4. Measured & managed	The organisation has operationalised and consistently applied data usage and management practises across all areas, with a focus on improving and optimising established capabilities through defined metrics. Data is used for strategy formulation, for operational and mission critical processes, and for decision making predictive analytics are applied.
5. Optimised	The organisation is committed to optimising data usage and management through continuous innovation and learning based on ongoing monitoring and review, ensuring alignment with industry best practises. Data is deeply embedded within the operations and used for continuous process improvement, to support decisions at all levels of the organisation.

What does good data maturity look like for each of the 7 focus areas?

1. Data Management – Strategy and Governance

An optimised level of data maturity in relation to strategy and governance would likely include the following elements:

- A data strategy has been developed that aligns with the organisation's strategic objectives and goals.
- The data strategy supports the acquisition, organisation and delivery of data in support of the business' objectives.
- The data strategy includes attainable goals as well as articulates the current and future state clearly, with a high-level roadmap to support execution.
- The data strategy is communicated and accessible to all staff within the organisation.
- The data strategy is owned by an executive governance group, which meets regularly to discuss progress, resolve issues and track metrics to assess and monitor achievement of key objectives.
- The data strategy is updated and maintained by the executive governance group.
- The data strategy highlights potential issues, data risks (and a detailed assessment of those risks), and desired outcomes.
- The data strategy is also in alignment with any existing government strategies, frameworks and requirements.
- An organisation wide data governance function (DGF) has been established with executive sponsorship.
- DGF has roles and responsibilities clearly defined and communicated, with representation from all business units.
- DGF policy, standards and processes are established, approved by executives, and operational.
- DGF operates with a clear line of authority and has the ability to reinforce policy through existing audit processes.
- Any issues that arise are able to be tracked and remediated.
- DGF policies and standards are aligned with other relevant organisation-wide control functions such as policies impacting data from legal and compliance, information security, and privacy.
- The DGF is reviewed periodically to ensure alignment with strategic objectives and changing business priorities.
- Training is provided in governance processes and best practise to new DGF members.

2. Data Management – Architecture

An optimised level of data maturity in relation to data architecture management would likely include the following elements:

- Appropriate stakeholders in the data leadership and governance structure are engaged in the definition and development of the organisation-wide platform, storage, network and distribution infrastructure.
- Data governance is aligned with technology architecture governance.
- Technology architecture is designed and implemented with consideration and alignment to the scalability and resilience of data management and analytics platforms.
- Technology architecture identifies and considers the requirements for integrating with new and existing business systems for the purposes of data management and usage, such as network restrictions.
- Technology architecture provides streamlined processes for tool selection and acquisition (e.g. buy v.s build).
- Technology architecture is regularly reviewed and improved through architecture review boards.

3. Data Management – Operations

An optimised level of data maturity in relation to data operations management would likely include the following elements:

- The organisation has the people and processes in place to identify, document and maintain business processes to data element mappings.
- Data dependencies and data flows across organisation-wide business processes are identified and documented.
- Authoritative data sources are defined and approved by the data governance function.
- Data sets stored in IT systems and modified by multiple business processes are identified, with the data lineage appropriately documented.
- Documentation of data lineage is aligned with the business's glossary and associated metadata.
- Standard processes and policies exist and are effective and operational in relation to the backing-up, archiving and retention of data.
- Historical data is retained, for example it is classified as online and accessible, or archived appropriately, and then disposed in line with regulatory and business requirements.
- Service level agreements, such as data delivery agreements, are monitored to ensure data quality and availability.
- Back-up restoration and disaster recovery tests are performed on a periodic basis to ensure business continuity in case of a disaster or loss of data.

4. Data Management – Risk

An optimised level of data maturity in relation to data risk management would likely include the following elements:

- There is a robust audit program undertaken regularly over data within the organisation, including in relation to source data, reporting, data outputs, data retention and deletion, and metadata.
- Internal audits performance at regular intervals over key processes to ensure they are operating effective and in compliance with processes and frameworks.
- Legislative requirements should be accurately documented, centrally stored with adequate training provided to all staff within the organisation.
- There is a regular review program over legislative and contractual obligations to ensure requirements, dates and thresholds are adhered to and data is adequately managed.
- Clear reporting and escalation channels exist to notify of any breaches, exceptions or process breakdowns.
- Any issues are included on a centralised register to be tracked until treatment has been administered.

5. Data Management – Quality, Reference and Metadata

An optimised level of data maturity in relation to data management for quality, reference and metadata would likely include the following elements:

- The organisation has identified and documented data critical to sustaining business functions.
- The critical data elements identified are validated by business stakeholders and approved by the data governance function.
- Criteria against data quality dimensions on which data quality is measured are defined. These dimensions include factors such as accuracy, completeness, coverage, conformity, consistency, duplication, integrity, and timeliness.
- Business requirements drive data quality requirements.
- Data profiling is performed on data sources, to understand data anomalies and to evaluate data quality.
- Metrics set for measuring data quality are tracked and reported.
- Data quality issues are identified, remediated, and documented, for future prevention.
- Criteria set for measuring data quality are monitored and updated to align with changing organisational objectives.

6. Data Management – Integration

An optimised level of data maturity in relation to data integration would likely include the following elements:

- The organisation has standard processes and guidelines for data integration and sharing, internally and externally, between systems and applications such as data migration and conversion guidelines. Business use cases exist for data integration and sharing.
- Data is shared with external organisations through formal agreements and in accordance with regulatory and business requirements, including the ones that apply to privacy, ethics and data security. Data sources and targets are well mapped and documented. Data lineage is well documented to understand the source and potential transformation during integration.
- Data quality checks such as data profiling are defined and performed as part of the integration process.
- Development, deployment, and management of data integration interfaces are in accordance with organisational systems and technology architecture.
- Data transformation rules and changes to data sources or targets, metadata, and business glossaries are managed and approved by the data governance function.
- Data integration and sharing processes are periodically reviewed and updated to align with changing organisational objectives.

7. Data Analytics

An optimised level of data maturity in relation to data analytics would likely include the following elements:

- The organisation has an advanced analytics methodology or framework that considers the business requirements, and provides a standard way of enabling advanced analytics models that allow things like consistent documentation of model lineage, input, output, parameters and limitations.
- A categorisation system for the spectrum of analytics available is defined to ensure relevant staff understands the use cases, benefits, and limitations of different analytics categories. These analytics could include things like business intelligence, descriptive, diagnostic, predictive, and prescriptive.
- Data used in the advanced analytics solutions is high quality and acquired from authoritative data sources, referencing the organisation's business glossary and following metadata standards with well-defined data lineage.
- Data classification and privacy guidelines are followed when using data for advanced analytics.
- Model development phase includes robust testing, approval, release, and regular review processes to ensure that it performs as expected.
- Models are approved and operated in alignment with the organisation's data ethics and privacy governance guidelines.
- Procedures exist to ensure that input data sets do not introduce model bias and processes exist to identify and address model bias.
- There are clear requirements for stakeholders to understand how a model works and what decisions are automatically made at each step.
- The organisation can attract capable data professionals, such as data scientists and data engineers, to build advanced analytics models for predicting and optimising outcomes.
- Data Professionals are well trained to handle and maintain advanced analytics models.
- Models are continuously optimised and tested to align with changing regulatory requirements and organisational objectives.

Appendix B: Glossary

Term	Meaning
Business intelligence and analytics strategy	A business intelligence and analytics strategy is an organisations blueprint for deciding how they will use data. A strategy is important because merely choosing the right technology, and implementing a software platform, is not enough to realize a return on investment. Business intelligence strategy uses the collective infrastructure, tools, applications, and other resources that generate data and insights, to inform how businesses make decisions, uncover revenue opportunities, and evaluate performance.
Commercial off-the-shelf (COTS) solutions	These products are ready-to-use upon installation and are designed (usually by a 3rd party vendor) to easily integrate with an existing system.
Data	Data is a collection of discrete or continuous values that convey information. Data differs from 'information', in that data is the raw material of information, while information is data in context. For instance, a sales report from the last quarter is information, whereas the numbers from the warehouse which informed the sales report is data. **Note:** The DAT Act defines data as meaning any information in a form capable of being communicated, analysed or processed (whether by an individual or by computer or other automated means).
Data assessment	Data Assessment is the process of evaluating an organization's data landscape to determine whether it aligns with organisation's growth vision and strategies, identify areas of improvement, and build a data strategy roadmap to address them.
Data analytics	Data and analytics refers to the ways organizations manage data to support all its uses, and analyse data to improve decisions, business processes and outcomes, such as discovering new business risks, challenges and opportunities.
Data cleansing	The process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabelled.
Data custodian	A data custodian is an employee with appropriate delegation from the agency's senior leaders to exercise overall responsibility for a specific data collection, in accordance with legislation, policies, guidelines and any specific conditions for use applicable to that data collection.
Data management dimensions	Data management is a methodical approach to managing and making use of data within an organization. This involves planning and governing data strategically, organizing processes and resources, and utilizing technologies for effective data collection, storage, analysis, and visualization. It is measured by number of different vectors, including: Standards, Governance, Quality, Deployment, and Architecture

Term	Meaning
Data mesh	A data mesh is a concept for creating decentralized data teams that operate within each business department (or domain), whereby data is treated as a product that is owned by the teams the most intimately know and consume the data.
DataOps	DataOps is a process that focuses on building high quality data products in an Agile environment with a continuous improvement mindset. DataOps workflow inherits best practices from software development and treats data workload as development. It encourages data users to source control their code so that there is single source of truth. The source code is then built and packaged to artifacts to keep a trace record of what's deployed which also enables roll back to a previous release.
Data specialists	A data specialist possesses and deploys the necessary skills to gather raw data and convert it into a more accessible and cohesive format for clients. Their tasks include designing databases to help clients access and use databases and data storage systems.
Data steward	Data stewards help organizations achieve data quality improvement goals. Stewards act as trustees of data, are intimately knowledgeable with business process and data usage and are ultimately responsible for the outcome of a data quality at an agency.
Data warehouse architecture	A data warehouse is a collection of databases that stores and organizes data in a systematic way. A data warehouse architecture consists of three main components: a data warehouse, an analytical framework, and an integration layer. The data warehouse is the central repository for all the data.
Enterprise architecture principles	Enterprise Architect Principles defines the rules across the business, information, technology, application, security, governance, etc., to enforce strict discipline and provide guidance on how IT resources can be deployed to achieve the organisation's business vision. Enterprise Architecture principles guide the direction of IT architecture and also enable the standardization of diverse business processes. One of the main objectives of the Enterprise Architecture principles are to lower the total cost of ownership by consolidating the processes and reuse IT assets optimally.
ModelOps	ModelOps is focused primarily on the governance and life cycle management of a wide range of operationalised AI and decision models, including machine learning, knowledge graphs, rules, optimization, linguistic and agent-based models.
Self-service business intelligence tools	Self-service business intelligence (BI) is an approach to data analytics that enables business users to access and explore data sets even if they don't have a background in BI or related functions like data mining and statistical analysis. Self-service BI tools allow users to filter, sort, analyse and visualize data without involving an organization's BI and IT teams.

Term	Meaning
Software Development Lifecycle (SDLC) principles	The software development life cycle (SDLC) principles are a methodology used to determine the steps involved in producing software. It involves the preparation of the phases involved in developing software from scratch. They try to optimize the available resources and time such that the product that is to be produced is made possible in the shortest time and with the lowest cost. There are several types of Software Development Life Cycle models. Some of these include the waterfall model, agile model, spiral model, etc.
Master data domains	A master data domain is a logical grouping of master data entities that share common characteristics, rules, and policies. For example, a customer domain may include entities such as name, address, contact details, preferences, and transactions.