The Framework by Category

The following tables show the capabilities in one the 7 possible categories (i.e., capabilities get repeated across the categories as applicable). This view is useful if you want to focus in on a particular category to assess an individual or a team.

Category: Use

In this part of the lifecycle, the data is used for the purpose for which it was collected/generated and re-used for additional value.

The levels:

- New: has a basic understanding of the subject or process.
- Proficient: has enough experience to work independently and source additional expertise as needed.
- Expert: can innovate in the subject or process and guide others via mentoring or training.

Capability	Levels	
Employ data coding and classification principles	New	• Is aware of relevant data classifications and coding protocols, and their proper application to data in general. • Knows who to consult for expert knowledge.
	Proficient	• Has a comprehensive knowledge of data classifications and coding protocols. • Knows where to obtain expert advice about coding and classifications as needed.
	Expert	• Is consulted regularly by others about data classifications and coding protocols. • Can employ conceptual frameworks in support of data classification and coding.
Integrate data	New	• Has a basic understanding of how data can be linked with other data and the value of that operation.

Capability		Levels	
		Proficient	• Can perform data integration using standard tools and can implement quality controls. • Knows where to obtain expert advice on data integration as needed.
		Expert	• Can perform and provide expert advice on data integration.
Conduct business intelligence data analysis		New	• Can use common applications to generate basic analysis outputs like tables with calculations and static charts. • Understands reports and dashboards created with business intelligence tools.
		Proficient	• Can use business intelligence applications to create complex reports and dashboards.
		Expert	• Exhibits expertise in multiple business intelligence applications. • Can train others in developing outputs using those applications.
Conduct statistical data analysis		New	• Understands basic statistical measures and their application to data.
		Proficient	• Can use specialist statistical applications for statistical models. • Can write custom scripts and code in a statistical computing language to conduct complex analytical tasks.
		Expert	• Contributes to the development of new functionality for statistical analysis applications, which enables new ways of doing analysis.

Capability	Levels	
Conduct specialist data analysis	New	• Understands the need for special data analysis methods and tools in some situations (e.g., time series forecasting or spatial).
	Proficient	• Can develop, fit, diagnose, and troubleshoot a model in a new data analysis scenario that requires a specialist method (e.g., time series forecasting or spatial statistics).
	Expert	• Innovates in developing new methods in a specialist data area (e.g., new approaches to time series forecasting).
Contribute to the sourcing and use of administrative data	New	• Is aware of what data is obtained from administrative sources and how that administrative data is used. • Knows where to obtain advice about administrative data sources and use when required.
	Proficient	• Is knowledgeable about various sources of administrative data and can explain their limitations. • Understands the advantages and disadvantages of using administrative data, including in relation to survey data. • Can assess the utility of different sources for a particular purpose.
	Expert	• Is knowledgeable about multiple sources of administrative data and helps maintain a good working relationship with the suppliers. • Can advise on how the data has been used to produce new insights. • Provides expertise to identify new sources of administrative data as well as uses for that data.

Capability		Levels	
Use data quality assurance measures		New	• Understands the concept of data quality and its importance. • Knows where to access data quality measures for the data they use.
		Proficient	• Can describe and produce data quality measures for the outputs they produce. • Has a comprehensive knowledge of relevant data quality measures and can use them to make accurate assessments of data fitness-for-purpose.
		Expert	• Is an expert resource in the use of measures for data quality assurance, the interaction of those measures, and their application in conjunction with one another. • Can advise others on the use of data quality measures to make accurate assessments of data fitness-for-purpose.
Identify and evaluate data intelligence		New	• Has a general understanding of the subject matter area associated with data use (e.g., small business, healthcare, rural sector, etc.).
		Proficient	• Has a comprehensive knowledge of the subject matter area associated with the data use and can readily identify the parameters of the subject matter that influence the use of the data. • Can effectively communicate the relationship between the data and the context in which it is used.
		Expert	• Is an expert resource on the subject matter area associated with data use, including understanding and influencing the effective use of the data within that subject matter area and the relationship between that use and other data use contexts.

Capability		Levels	
Improve data processes/systems/products		New	• Can identify a successful process/system/ product. • Can identify deficiencies in current processes/systems/ products.
		Proficient	• Can identify deficiencies in current processes/systems/ products, gain the required approval to make changes, and lead the implementation of those changes.
		Expert	• Thinks strategically to assess current processes/systems/ products across a broad context. • Develops improvements where needed and encourages others to think critically about processes/systems/products relevant to them. • Advises those leading changes to processes/ systems/products, measures resultant benefits, and makes recommendations.
Identify research questions		New	• Can formulate research questions with guidance and consider the appropriate approaches and measures to resolve those questions.
		Proficient	• Can identify and structure relevant research questions for specific needs, and develop the approach and specific measures to resolve those questions.
		Expert	• Uses a range of techniques to assess data needs and identify gaps, towards the formulation of appropriate research questions. • Can communicate research questions to a range of audiences. • Can collaborate with stakeholders and users to develop approaches to resolve those questions.

Capability		Levels	
Employ statistical concepts and methodologies		New	• Is familiar with statistical methodologies relevant for their work. • Maintains a basic understanding of the concepts underpinning those methodologies.
		Proficient	• Has a comprehensive understanding of a wide range of statistical concepts, methodologies, and their appropriate application. • Can explain their proper use to others.
		Expert	• Is consulted regularly by others for their understanding of statistical concepts and their advice on the proper use of statistical methods. • Leads efforts to apply good statistical practice. • Can develop statistical training for others.
Enable others to use and re-use data		New	• Understands that the data they work with can be used more widely. • Is familiar with basic open data measures to support the re-use of their data by others.
		Proficient	• Understands and can articulate the value of data in terms of use and re-use. • Implements a variety of techniques to ensure data is open and can be used beyond the specific purpose for which it was collected. • Can advise others on approaches to make data re-usable.
		Expert	• Is consulted regularly as a leading strategic adviser on the use of organisational data assets. • Is consulted on the design and management of those assets as open data, to promote re-use and ongoing value across wider contexts.

Capability		Levels	
Employ data and information management concepts		New	• Can access data and information management principles and associated guidelines. • Knows where to obtain advice on the application of good data and information management practice.
		Proficient	• Has a comprehensive knowledge of the organisation's data and information management principles and guidelines and can apply them to support good data practice. • Can advise others on the proper application of data and information management concepts.
		Expert	• Is an expert resource for implementing and shaping the organisation's strategic use of data and information management good practice, and can advise others. • Represents a point of contact for data and information management leads in other organisations.
Visualise data		New	• Can interpret basic data visualisations like standard charts and explain them to others.
		Proficient	• Can readily produce a range of data visualisation outputs and can critically assess and enhance those produced by others. • Can advise others on data visualisation options and the best options to present data results.
		Expert	• Innovates the development of new approaches to, and options for, data visualisation, and can incorporate a range of techniques, including automation, interactivity, and animation. • Can train others in data visualisation.