



DATA QUALITY MANAGEMENT PROCEDURE

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First Approved by:	Chief Operating Officer		
Custodian title & e-mail address:	Senior Manager, Information Management Unit – IMTS data-governance@uow.edu.au		
Author:	Data Governance Coordinator, Information Management Unit		
Responsible Division & Unit:	Information Management & Technology Services – Information Management Unit		
Supporting documents, procedures & forms:	Cyber Security Policy Data Breach Response Plan Data Governance Procedure Data Handling Guidelines IT Acceptable Use Policy IT Server Security Policy IT User Account Management Procedure Learning Analytics Data Use Policy Privacy Impact Assessment Tool Privacy Policy Records Management Policy Research Data Management Policy Research Data Management Guidelines University Code of Conduct		
Relevant Legislation & External Documents:	Government Information (Public Access) Act 2009 (NSW) Health Records and Information Privacy Act 2002 (NSW) Privacy and Personal Information Protection Act 1998 (NSW) Privacy Act 1988 (Cth) Protected Disclosures Act 1994 (NSW) State Records Act 1998 (NSW)		



Audience:	Internal
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1 Information/Background

1. This procedure provides practical details for the implementation of the University's commitment to the continuous improvement of data quality, as stated in Data Governance Procedure.
2. This procedure should be read in conjunction with the Data Governance Procedure, the Data Handling Guidelines and the IT Acceptable Use Policy.

2 Purpose/Scope

1. The purpose of this procedure is to:
 - a. provide instructions on how to implement the University's commitment to continual improvement of the quality of its data;
 - b. provide a clear sequenced procedure for managing data quality issues; and
 - c. assign the roles and responsibilities throughout the process of managing data quality issues.
2. This procedure applies to:
 - a. Data Guardians, Data Stewards and the Information Management Unit;
 - b. all Staff when raising data quality Issues and implementing resolution work as prescribed in clause 6.1 of this procedure; and
 - c. all data stored by the University, with the exception of data referred to in clause 2.5(b).
3. This procedure does not apply to:
 - a. Research data defined in the Research Data Management Policy; and
 - b. Data of University controlled entities.

3 Definitions

Word/Term	Definition
Data quality issue	An identified issue which affects the quality of data which may result in the data incorrectly representing the real-world situation to which the data refers.

All other definitions relating to data are detailed in section 2 of the Data Governance Procedure.

4 Dimensions of data quality

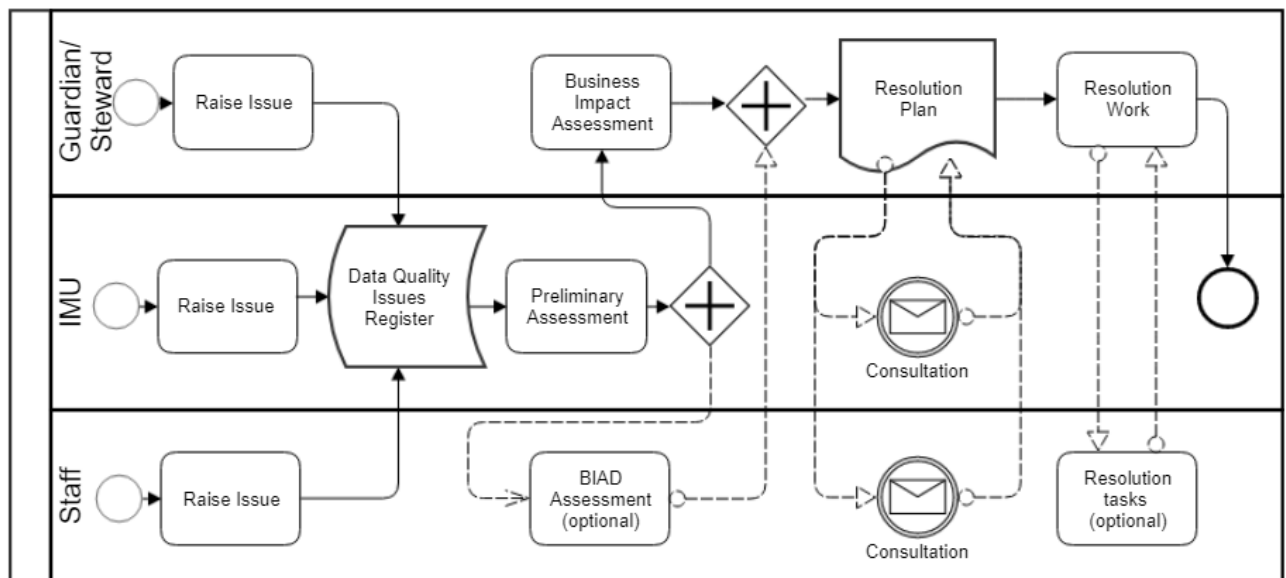
1. The main dimensions used to measure data quality are:
 - a. accuracy - degree to which data correctly describes the real-world object. It is measured as a percentage of data entries that pass the data accuracy rules;
 - b. completeness - proportion of stored data against the potential of "100% complete". It is based on business processes which define what "100% complete" represents;



- c. consistency - degree to which data across all systems reflects the same information and is in sync across the enterprise;
 - d. uniqueness - there should be no duplicates of the same data recorded; and
 - e. validity - confirmation that data conforms to the syntax (format, type, range) of its definition.
2. Detailed requirements for these dimensions (and others not mentioned in this document) are set up by Data Guardians for data within their respective domains.

5 Data quality issues management procedure

1. This section describes the standard approach to raising and resolving data quality issues.
2. The flowchart outlines the standard approach to addressing data quality issues at the University. For details on the stages in the flowchart refer to the further subsections.



Raising a data quality issue

3. It is the responsibility of all staff to raise any data quality issues they encounter during the course of their work for the University.
4. An issue is raised by recording it on the Data Quality Issues Register which is available on the IMTS Service Catalogue's Get Help section.

Data Quality Issues Register

5. The Data Quality Issues Register is a central repository where all new data quality issues are recorded and all (both active and resolved) data quality issues are stored.
6. The Data Quality Issues Register contains all the details of the issue collected during the processes of Preliminary Assessment, Business Impact Assessment, Resolution Plan and Resolution Work.
7. The Data Quality Issues Register is maintained and access to it is managed by Information Management Unit.



Preliminary Assessment

8. After an issue is recorded in the Data Quality Issues Register, the Information Management Unit provides a Preliminary Assessment that includes a preliminary root cause investigation, potential impact on the business, and possible proposed solutions, and qualifies an issue by giving it Impact and Complexity ratings. These ratings can be adjusted as more details become available during further investigation of an issue.
9. The Impact rating is an approximate indication of how big an impact an issue is having on the University. Impact can be classified as:
 - 9.1. Minor: the issue has a minor impact on the achievement of an affected business plan; does not impose penalties or other legal consequences besides a standard inquiry; can lead to no more than concerns expressed regarding teaching quality, student or staff satisfaction; does not incur any financial loss, or other non-significant effects on University business and operations.
 - 9.2. Moderate: the issue has a significant impact on the achievement of an affected business plan; can result in breach of policies and procedures with moderate impact, small fines or penalties but does not disrupt operations; can incur a moderate financial loss; can lead to significant concerns by accreditation bodies on course quality, decline in recruitment and/or retention of students, negative media coverage, or other similar effects on University business and operations.
 - 9.3. Major: the issue has a major impact on the achievement of at least one University strategic goal; can incur a major financial loss, result in the significant breach of policies and procedures, regulatory fine, or disruption to operations; can lead to the University's reputational decline and other significant effects on University business and operations.
10. The Complexity rating is an approximate indication of technical and business effort required to resolve the issue and prevent it from happening repeatedly. Complexity can be classified as:
 - 10.1. Low: a minor system fix/update and/or adjustment to business processes is required.
 - 10.2. Medium: a significant system fix/update and/or adjustment to business processes is required.
 - 10.3. High: a major system development effort is required and/or redesigning of business processes is required.
11. Preliminary Assessment must be completed within 10 working days of the issue appearing on the Register.
12. Once Preliminary Assessment is complete, the Information Management Unit assigns the issue to the relevant Data Guardian. Business Improvement and Assurance Division can also be consulted on potential organisational risks if deemed necessary.

Business Impact Assessment and Resolution Plan

13. Data Guardians must work with relevant Data Stewards to provide a Business Impact Assessment and develop a Resolution Plan. Other organisational unit(s) may be approached to assist in this step.
14. A Business Impact Assessment must contain, but is not limited to, identification of business processes and systems impacted by the issue and describing all previous communication regarding the issue.



15. A Business Impact Assessment must be provided within 15 working days of the issue being assigned to Data Guardian.
16. A Resolution Plan must state Data Steward(s) assigned to facilitating the Resolution, the organisational unit(s) responsible for resolving the issue, a detailed action plan and target date for the issue to be resolved.
17. A Resolution Plan must be developed in coordination with organisational unit(s) responsible for resolving the issue.
18. Based on the Impact rating of the issue, a Resolution Plan must be provided after the completion of the Business Impact Assessment within 20 working days.

Resolution Work

19. Resolution Work is the actual work required to resolve a data quality issue.
20. Updates on the progress of Resolution Work must be provided to the Information Management Unit by the Data Steward and recorded in the Register.
21. Once resolution work is complete, the Data Steward updates the Register with a resolution date, resolution method and any data quality routines that are to remain in place.
22. After the Information Management Unit confirms an issue to be resolved, it changes the status in the Register to “Resolved”.
23. An issue can be re-opened at any time by the Information Management Unit if it is found that Resolution Work did not resolve the issue completely.

Review

24. All the active data quality issues on the Register as well as issues resolved from the previous session are presented to the Information Governance Committee by the Information Management Unit.
25. The Information Governance Committee reviews, resolves or escalates data quality issues when required.

6 Roles & Responsibilities

All Staff

1. All staff are responsible for:
 - a. reporting data quality issues to the appropriate Data Steward or directly to the data quality issues Register; and
 - b. implementing prescribed issue resolution work.

Data Stewards

2. Data Stewards are responsible for:
 - a. monitoring data quality and resolving data quality issues;
 - b. providing a Resolution Plan and overseeing resolution of data quality issues; and
 - c. updating data quality issue details in the Data Quality Issue Register.



Data Guardians

3. Data Guardians are responsible for:
 - a. defining and maintaining acceptable levels of data quality;
 - b. assigning and engaging Data Steward(s) for the process of addressing data quality issues.

The Information Management Unit

4. The Information Management Unit is responsible for:
 - a. facilitating resolution of data quality issues;
 - b. maintaining the Data Quality Issues Register;
 - c. providing data quality training for Data Guardians and/or Data Stewards; and
 - d. presenting data quality issues to the Information Governance Committee.

The Information Governance Committee

5. The Information Governance Committee is responsible for:
 - a. reviewing data quality implementation efforts at the University; and
 - b. endorsing proposals to resolve complicated or stalled issues and escalating issues when required.



7 Version Control and Change History

Version Control	Date Effective	Approved By	Amendment
1	9 February 2021	Chief Operating Officer	First Version