Governance

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EDUCAUSE



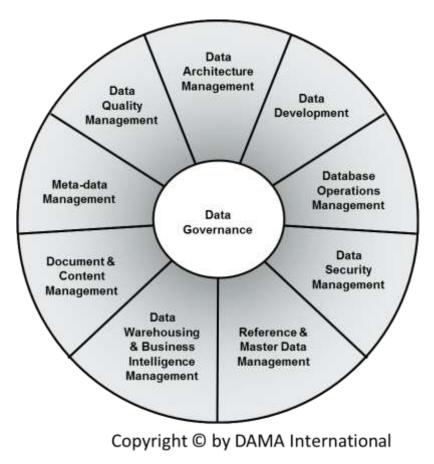
Agenda

- Why organisations need data governance
- Steps to get started with data governance
- Some issues you might encounter
- UNSW's data governance journey
- Some handy resources

Why organisations need data governance

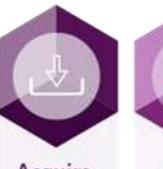
"Complexity is a defining feature of the digital era, & we are not adjusting our governance structures to manage it." Kent Aiken, Prime Minister's Fellow, Public Policy Forum Canada, 2017

To **protect** our data, we need to understand it.





Disclose Data a person, process, or system creates and publishes/shares data



Acquire

Ingest data from sensors, systems, or humans, recording its provenance and consent for use wherever possible.

Store

Record data to a trusted location that is both secure and easily accessible for further manipulation.

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Manipulate Data a person, process, or system transforms, moves, or analyzes data



Aggregate

Combine disparate datasets to create a larger dataset that is greater than the sum of its parts.



Analyze

Examine and transform data with the purpose of extracting information and discovering new insights.

Consume Data a person, process, or system benefits from manipulated data



Use

Apply the insights gained from data analysis toward making decisions, affecting change, or delivering a product or service.

Share/Sell

Provide access to datasets or data insights to new sets of data manipulators or consumers.

Dispose

Remove data from servers to prevent future. release or use.

https://www.accenture.com/us-en/blogs/blogs-new-data-ethics-guidelines-organizations-digital-trust

Why data governance is important

Working out what data assets to protect Allocating scarce cyber dollars

Ensuring that data is used properly



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Complying with increasing regulatory requirements

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RULES

REGULATIONS

Improving data security via information and cyber security Creating and enforcing data distribution policies



Creating the basis for effective data & analytics operations



Identifying your crown jewels for protection

Data Governance helps to:

Identify	data at risk
Locate	sensitive data
Ensure	that sensitive data is stored and managed properly
Identify	sensitive data users
Ensure	consistent data access processes
Ensure	safer access to sensitive data

Identify data at risk



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Who in the organisation is using sensitive data

Location of data and how the data flows through the enterprise

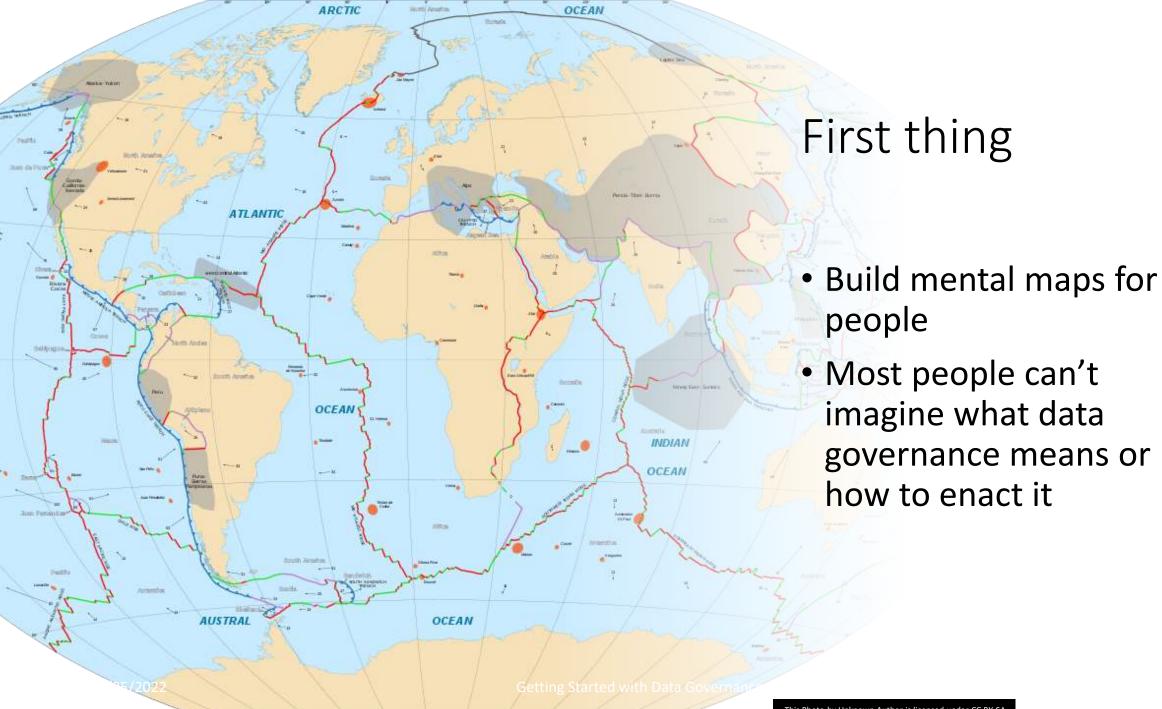
Organisational data stewardship ensures business ownership of the process

Data access management can assist with identification of who has access to which data



Can assist in mitigating the risk of people being the biggest cause of information security incidents

Steps to get started with data governance



Pick a definition & stick with it

"Data governance is the organization and implementation of policies, procedures, structure, roles, and responsibilities which outline and enforce rules of engagement, decision rights, and accountabilities for the effective management of information assets."

(John Ladley, Data Governance: How to Design, Deploy and Sustain an Effective Data Governance Program, 2012)

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Establish a mandate

Develop a data governance framework



https://www.imperva.com/learn/data-security/data-governance/

Example DG framework

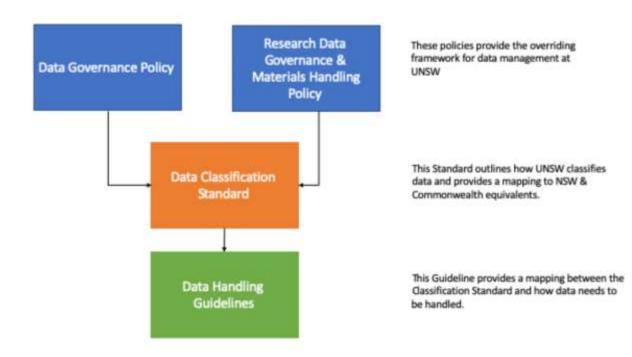
Give people an idea of the overall data governance program

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7.	PROCEDURES		
8.	DATA STANDARDS		

Develop policies, procedures including:

Governance structures Roles & responsibilities



Data Governance Policy mapping as at 17* June 2019



Establish a steering committee

Define what success looks like



Top down support



Clear definition



Ongoing funding



Dedicated resources



Focused strategy & plan



Develop a data governance strategy

https://www.jdsupra.com/legalnews/data-governance-and-data-management-74952/

Roles & responsibilities

- Recruit data governance roles
- Decide the size of your core DG team

Implementation

Run implementation project

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- Communications plan
- Benefits realization plan

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EXECUTE

Getting Started with Data Governance

STRATEGY

TECT

ORGANIZE

CONTROL

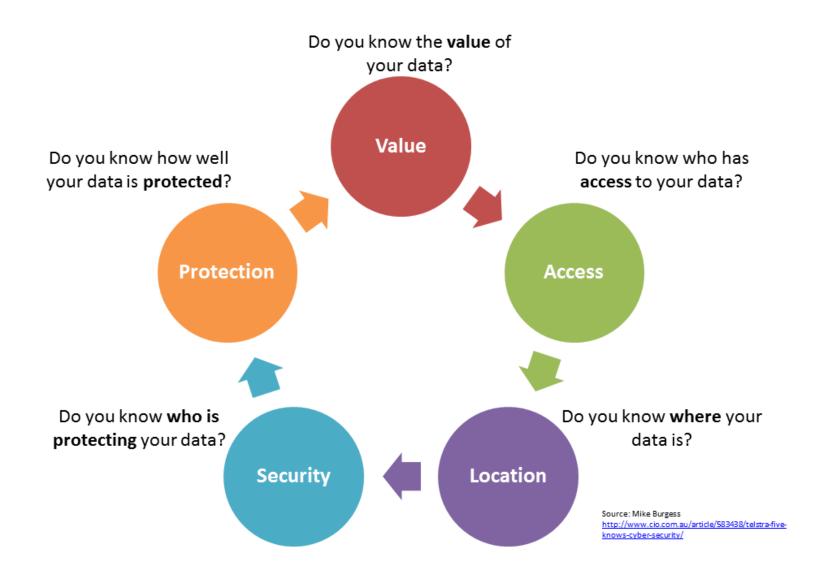
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Pick something that is **finite** and **useful** to start

Dealing with objections



Year	Data Governance Activity	
2014	Established the Data Governance Office	
2015	 Data Governance Framework and Strategy Data Governance Policy Data Classification Standard Data Handling Guidelines Data Governance structure, roles and responsibilities 	
2016	 Communications re UNSW Data Governance Framework: Data Governance Policy, Data Classification Standard, Data Handling Guidelines Develop risk assessment framework based on Data Classification Standard and Data Handling Guidelines Commence data classification process for existing UNSW core systems 	
2017	 Collibra Data Governance tool implementation Enterprise Data Governance Framework 2.0 Enterprise Data Governance Strategy 	
2018	 Data quality: Position Management Project (with HR) Data quality: Records & Archive Management System (RAMS) (with Records Management & IT) Data Breach Management Policy and Procedure System Classification Tool implemented Data Security Program (with IT): Data Security framework, Control & Monitoring practice based on Data Classification Business case: Research data governance and management process improvement (with Research Division) 	

Year	Data Governance Activity
2019	 Info Hub Azure Enterprise data warehouse business rules documentation in Data Key documentation relating to third party arrangements need to be appropriately maintained: In developing the framework [R4], information retention and data protection requirements will be clearly articulated to staff. Consideration will be given to the document retention practices as required within the UNSW Act 1989, State Records Act 1998, and the Australian Code for the Responsible Conduct of Research. (IA Action 2.3) Stage 1: Draft and complete a data mapping plan to identify high risk data within business areas Faculties, resource requirements and timelines Stage 2: Complete the data mapping of high risk data within Faculties business areas and/or divisions using a risk based approach Stage 2: Complete the data mapping of all the remaining areas, also following a risk based approach (IA Action 2.6) Data Strategy implementation Data Governance: systems classification tool and new process Azure Logical Data Warehouse - Establishment and transition of all UPP Tableau and QuickSight reports & dashboards Data Security Frogram (with UNSW IT) Data Security Frogram (with UNSW IT) Local encryption for researchers and professional staff with highly sensitive data (with UNSW IT) Local encryption for researchers and professional staff with highly sensitive data (with UNSW IT) Research Data Governance & Materials Handling Policy and Procedure Research Data Governance and management process improvement (PVC RI & DVCR) Research Data Management business case approved June 2018 Data S Information Governance gelocumes thereas improvement (PVC RI & DVCR) Research Data Management business case approved June 2018 Data S Information Governance development Enterprise Archive, Retention and Disposal policy

Year	Data Governance Activity
2019	 Incorporate Data Governance Framework into UNSW project initiation process new IT projects adoption UNSW Strategy Office adoption for new strategic projects ISMS and Data Classification Implementation (with UNSW IT) Data Breach Training Data Quality Program Data Assessment of HR System (PiMS) Data Quality reports - HR(PiMS) and Student related data(SiMs) Data Governance for Performance (with UPP Performance) Metadata Management Project Value Creation - Mapping of Data Model elements to Enterprise architecture components e.g. organisations, roles, applications etc. Inventory of key Data systems Data Governance for Work Force Planning (with UNSW HR) Data Mapping and Data Protection Impact Assessments Project
2020	 Data Governance tool - Info Hub Azure Enterprise data warehouse business rules documentation Establish data quality working groups Defence Industry Security Program (DISP) establishment AI Ethics - Policy and guideline/procedure Data Strategy Phase 1 – Implementation Data Strategy Phase 2 - consultation
2021-2	Future directions

Remember:

Data governance is a journey, not a destination

Some handy resources

https://www.datagovernance.unsw.edu.au/

https://data.uq.edu.au/

https://web.stanford.edu/dept/pres-provost/cgibin/dg/wordpress/

Bryan Petzold, Matthias Roggendorf, and Christoph Sporleder. 2020. 'Designing Data Governance That Delivers Value'. *McKinsey*, June 26.

https://www.mckinsey.com/business-functions/mckinseydigital/our-insights/designing-data-governance-thatdelivers-value#



Thank you

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