

THE INTERACTIONS OF DATA ARCHITECTURE AND DATA GOVERNANCE

Lessons from practice

Ben Meikle
Lead Data Architect - Anglicare

MY JOURNEY

Too many years in software development, project management, architecture

Macquarie Group

Enterprise Data architect – working with the CDO to implement data architecture standards alongside the maturing data governance practices

Lion

Enterprise Data Architect – working with Data director to build governance practices and accompanying data architecture practices

Anglicare

Lead data architect – I am both the data governance champion as well as the data architect – my challenge is to uplift the data maturity across Anglicare.

Anglicare operates 4 main business units – Residential care, Seniors communities, Community and Mission and Housing

WHY

Data is an asset and has value to the business.

Data has an impact on every area of the business at all levels. It impacts our day-to-day operations and activities and also enables decisions, both operational and strategic.

Management of data will become more critical as we evolve into the AI world.

What do we have to do?

Reporting

- What is your level of confidence in the data?
- How long did it take to prepare the data?
- Does it need to be pulled together from different sources?
- How much manual manipulation of the data is required?

Operations

What issues arise if data is:

- Not available when needed?
- Not correct? Different in different systems?
- Not fit for purpose? Definition not clear?
- Exposed internally/externally?
- streamline processes
- reduce our organisational risk

What do we get to do?

Opportunities

How can we use our data to:

- improve client/customer experience
- improve employee experience
- uncover new service opportunities – cross sell/upsell
- enable innovation through AI

WHAT

Data Governance Framework

A data governance framework consists of the following areas to ensure that data is managed effectively throughout the data lifecycle to enable businesses to realise value from its data assets.

Key components of the data management framework are:

- Ownership
- Data Definition
- Lineage
- Data Quality
- Controls
- Issues/Incident/Risk Management
- Ethical use of data
- AI Governance
- Education

Data Architecture Principles

Data architecture principles provide a set of guidelines to assist projects and development teams to ensure that the system landscape aligns to and implements the components of the data governance framework.

Simplify

- Single system of record is identified
- Data is sourced from authoritative source
- Data is published once/use multiple
- Data flows are automated
- Data is transferred/stored at lowest level of granularity

Understand

- Metadata is captured (Definition, Classification, Lineage)
- Data is modelled

Govern

- Data is owned
- Quality/Controls are automated
- Validated on entry
- Fixed at source
- Retained and disposed of appropriately

Access

- Data is catalogued
- Data is secured
- Access is federated and controlled

WHAT

Target State Data Architecture

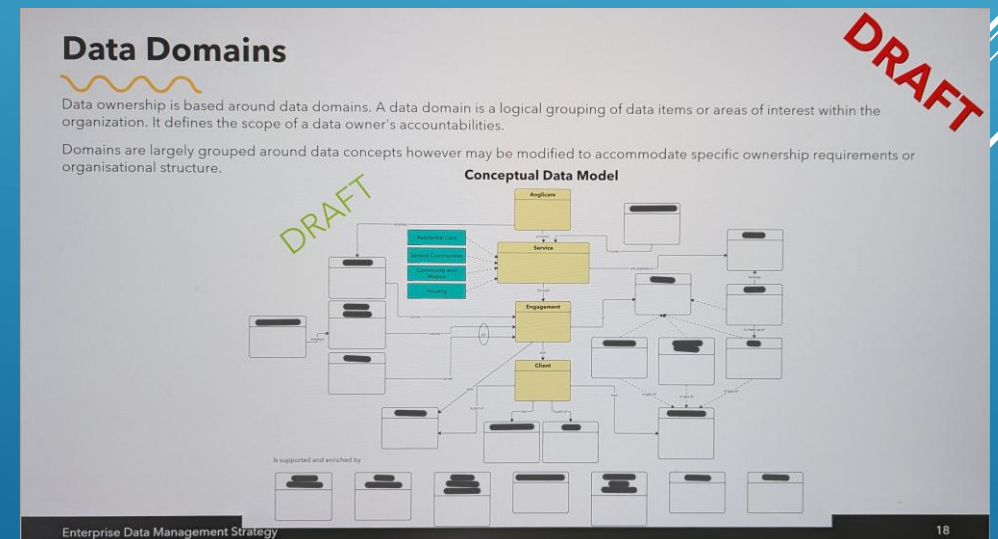
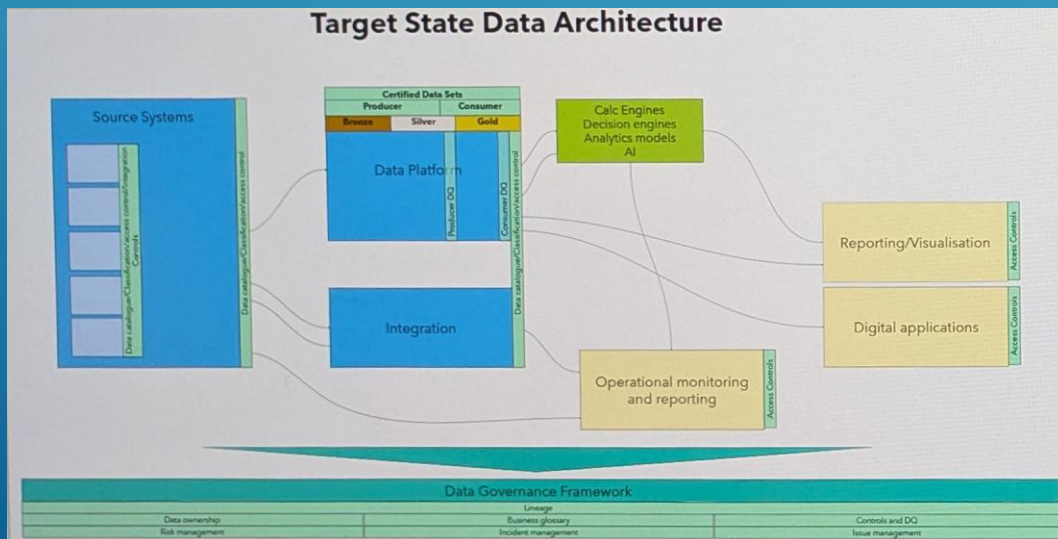
The target state data architecture defines conceptually how the aspects of the governance and principles are applied to our technology landscape.

Enterprise Conceptual and Logical data models

The conceptual and logical data models define our key entities and the relationships between them.

These models:

- Help define business requirements
- Build understanding of our data with the business stakeholders
- Inform our business glossary
- Help in understanding systems of record and integration requirements
- Identify areas of duplication and potential opportunities for reuse
- inform physical data models



HOW

Analysis of the culture of the organization and their willingness to adopt change and what are the triggers that can drive this change

Culture change

Data Management (data architecture and data governance) become part of the ways of working

Work with business areas and programs

- Risk management function
- Cyber programs
- Project Office
- Change Management/Learning and development
- Development teams – BAU activities

HOW

SENIOR LEADERSHIP ENGAGEMENT

Stream 1 - Data Architecture

Data architecture involves the practices of improving the way we think, handle and manage data within and across all our systems.

This involves:

- **Protecting our clients and employees**
- **Building foundational capabilities through the Enterprise Data Platform to enable innovation**
- **Improve our operational efficiency**
- **Build capabilities to ensure we meet our regulatory and compliance obligations**

Stream 2 - Data Governance

Data governance is about who makes the decisions and who is monitoring and prioritising the management of our data risk.

This involves:

- **Business leaders need visibility of what is happening with their data and understand the risks with their data.**
- **A senior business forum to drive, review and manage progress of data maturity and reduction of data risk.**
- **Commission external reviews to ensure that our data maturity is at the required standards to meet our regulatory and compliance obligations.**

HOW

2 SPEED STRATEGY

Traditional management and compliance

- Project based delivery
- Focus on quality, governance, consistency

Innovation and AI

- Tiger teams
- Fast, agile delivery
- Focus on quick delivery providing immediate business value



Data Architecture designing platform and building foundations through project work to support and enable both capabilities and minimize the gap between delivery speed.