

MODELSTORMING – AN INCLUSIVE APPROACH FOR REQUIREMENTS GATHERING

1. *What is Modelstorming?*

Modelstorming is part of an agile Business Event Analysis Modeling (BEAM) technique used to accelerate and facilitate data discovery, stakeholder engagement, and requirement analysis. At KeyData we use modelstorming for helping clients define requirements for data modelling and data governance projects.

The core of modelstorming is a workshop activity that involves key stakeholders from within a business focusing on developing a joint understanding of business processes and supporting data. Collaborative modelling is at the heart of modelstorming.

A modelstorming workshop facilitates:

- Identification of design requirements, challenges and opportunities.
- Clarifies and enables prioritisation of in scope business processes and events.
- Develops a shared understanding of metadata.
- Facilitates stakeholders to collaboratively model measurements, star schemas, facts and dimensions.
- Translates to the development of a holistic event matrix.
- Ensures that all key stakeholders feel included in the design of the project.

Experience has shown us that conducting modelstorming sessions develops a solid basis for collaboration at the start of projects and leads to greater buy in from stakeholders. The process provides key end users with a view of what to expect from a project and gives them a voice early on, differing from traditional approaches where developers often work in isolation. In this approach stakeholder involvement starts at the beginning of a project not at the delivery of a solution.

Importantly modelstorming encourages the business to resolve points of tension around business processes and data definitions before development work begins. This crucially reducing the need for reworking a solution once development is underway and contributes to reducing the cost of projects overall. It is also common that as a result of the modelstorming process that businesses identify the need for other activities such data discovery or data cleansing activities outside of the immediate project.

2. *What are the outputs from modelstorming?*

Discussions during modelstorming are captured on a BEAM canvas (see example below). We use this canvas to facilitate what we call dimensional thinking, encouraging stakeholders to talk through business processes using 7W's (who, what, when, where, how many, why and how). The canvas enables stakeholders to contribute to what ultimately ends up as a star schema design.

Example of a Completed BEAM Canvas



For data modelling projects, the BEAM canvas is then translated into an Event Matrix (see example below). The Event Matrix aligns identified business processes with data sources, data fields and highlights relationships. Once validated by key business stakeholders, the Event Matrix can then be used by developers to build out a solution with confidence knowing that reporting requirements are understood, captured and catered for and the likelihood of needing rework at delivery minimised.

Example of a Completed Event Matrix

Business Events	Related Tables (Filtered Views) in CRM																									
		Who	what	where	when	Person	Employing Authority	Registration Status	Age	Gender	Recent Graduate (Y/N)	Residential Address	Matter	Qualification Years	Int Qualification Path	Employment Sector	Condition	Permanent Flag	Residential Address	Current Work Location	Initial Reg/Date	Register Date	End Date	Financ		
Transition Process	[FilteredContact] + [FilteredABC_application]	x																								
Applying for recognition	[FilteredContact] + [FilteredABC_application]	x																								
Applying permission to work	[FilteredContact] + [FilteredABC_application]	x																								
1st time provisional (2 years) + Extending provisional	[FilteredContact] + [FilteredABC_application]	x																								
Reapplying at the end of four years provisional (2	[FilteredContact] + [FilteredABC_application]	x																								
1st time full employment (5 years)	[FilteredContact] + [FilteredABC_application]	x																								
Renewal	[FilteredContact] + [FilteredABC_registrationrenewal]	x																								
Transitioning to full process (5 - x years)	[FilteredContact] + [FilteredABC_recommendation]	x																								
Removal from register	[FilteredContact] + [FilteredABC_contactdetailchange]	x																								
Change Base employment	[FilteredContact] + [FilteredABC_experience]	x																								
Change Job Type (Permanent or Not)	TBD (no reliable record or logic)																									
Change Residential address	[FilteredABC_contactdetailchange]	x																								
Compliance Management - Persons	[FilteredIncident] + [FilteredABC_complianceassessment]	x																								
Compliance Management - Employing Authority	[FilteredIncident] + [FilteredABC_complianceassessment]																									
Matter - Breaches	[FilteredABC_complianceassessment] + [FilteredABC_breach]	x																								
Conditions Management	[FilteredABC_registrationcondition]	x																								
Graduate Lists	[FilteredABC_qualification] + [FilteredABC_graduatelist]	x																								

3. *What involvement are stakeholders expected to have?*

Stakeholder involvement in modelstorming is crucial to the process. Typically, modelstorming sessions last around 3 to 4 hours depending on the complexity of scope. Where longer is required, additional sessions are organised so as to minimise the impact on stakeholder's business as usual activities.

A stakeholder involved in a modelstorming session would generally be expected to be able to:

- Engage in discussions around business processes.
- Identify key elements of processes that need to be recorded and measured.
- Discuss and describe data related to processes.
- Contribute toward defining an agreed understanding of data elements.

Following a session, key technical stakeholders need to be available to work with KeyData to map the captured requirements against data sources, data tables and fields. This effort is important to producing an accurate and usable Event Matrix.

In general, it would be expected that a technical SME, in addition to being involved in a modelstorming session, would be available for approximately 3 to 5 hours spread across the following 3 days after modelstorming to help facilitate the mapping process. This provides the added benefit of exposing SME's to the collaborative modelling process from start to finish.