



DATA ARCHITECTURE IN AGILE, MULTIDISCIPLINARY TEAMS

Applying data architectural rigour to the software
production process

THE ROLE OF THE AGILE DATA ARCHITECT

How the data architect integrates into the agile development process



What?

The data architect



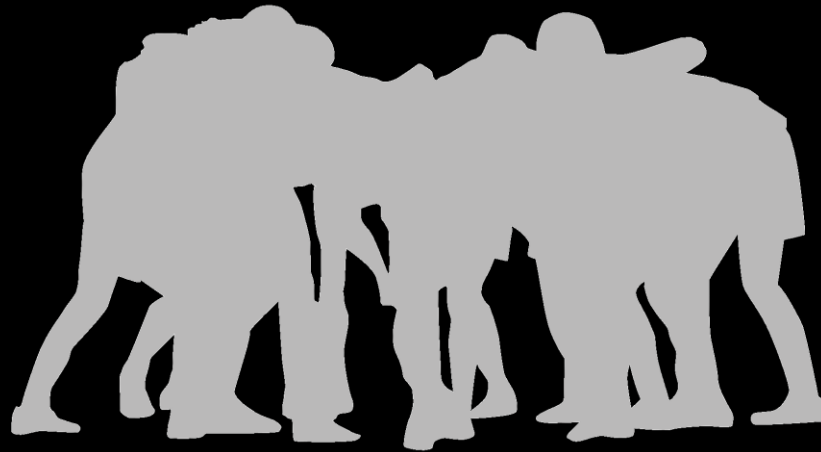
Habitat: Libraries, archives, quiet reading spaces

Behaviour: Solitary, bookish, contemplative

Description: Given to long periods of semantic ontological contemplation resulting in the production of ideologically faultless and wholly impractical taxonomies

What?

The agile team



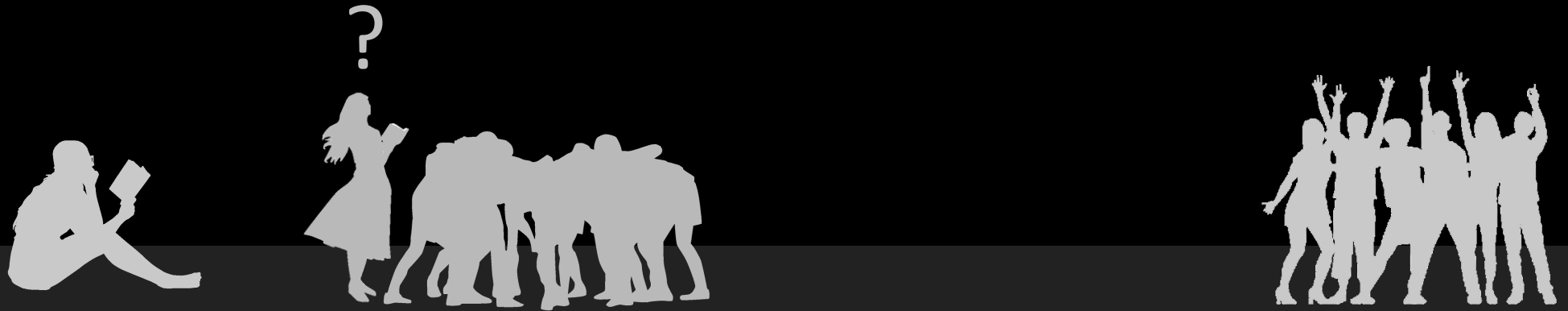
Habitat: Collaborative spaces,
whiteboards

Behaviour: Pack animal. Uses speed
and agility to bring down its quarry

Description: Fast paced and
creative, quite happy to learn by
mistakes and plunge headlong into
error prone scenarios as part of
the learning process

What?

Traditional process



Initiate



Plan



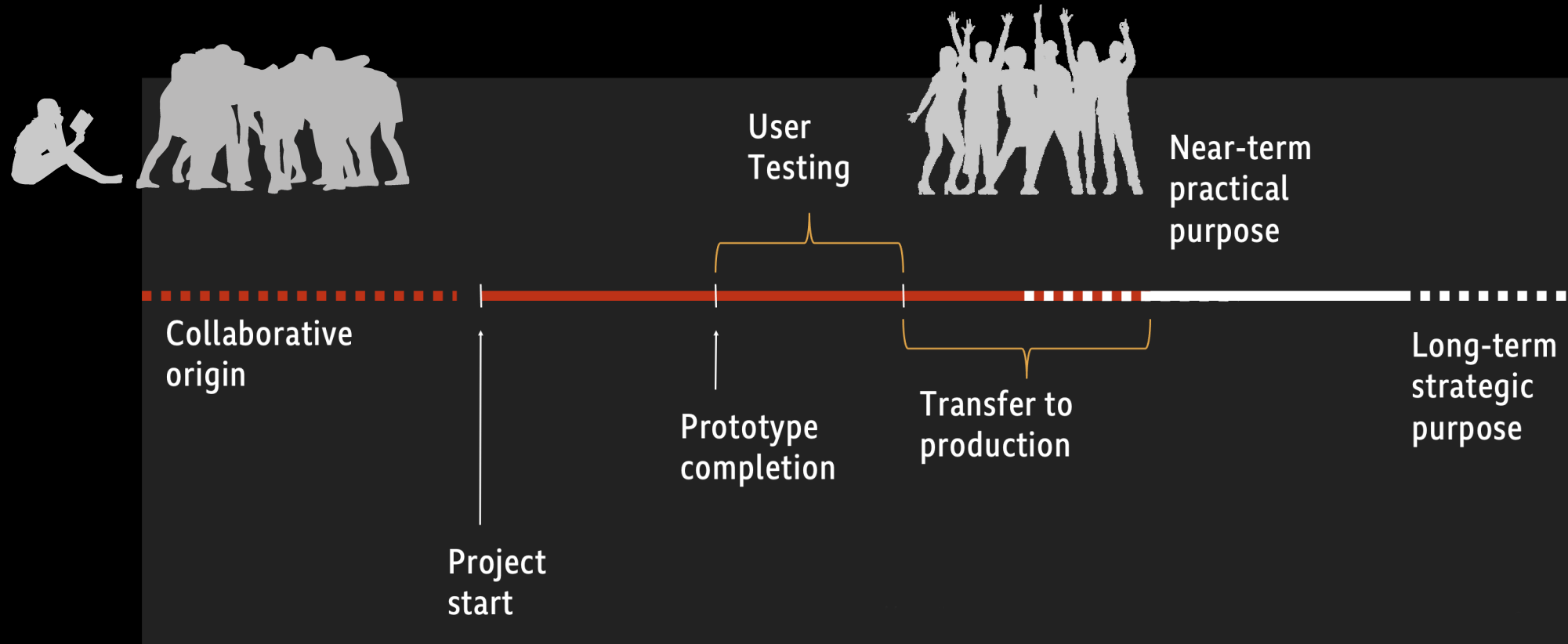
Develop



Launch

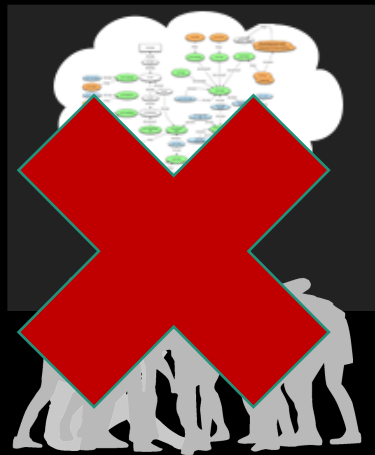
What?

Agile development process



What?

Agile sprint process



Collaborative
origin

Project
start

Sprint 2

Sprint 3

How?

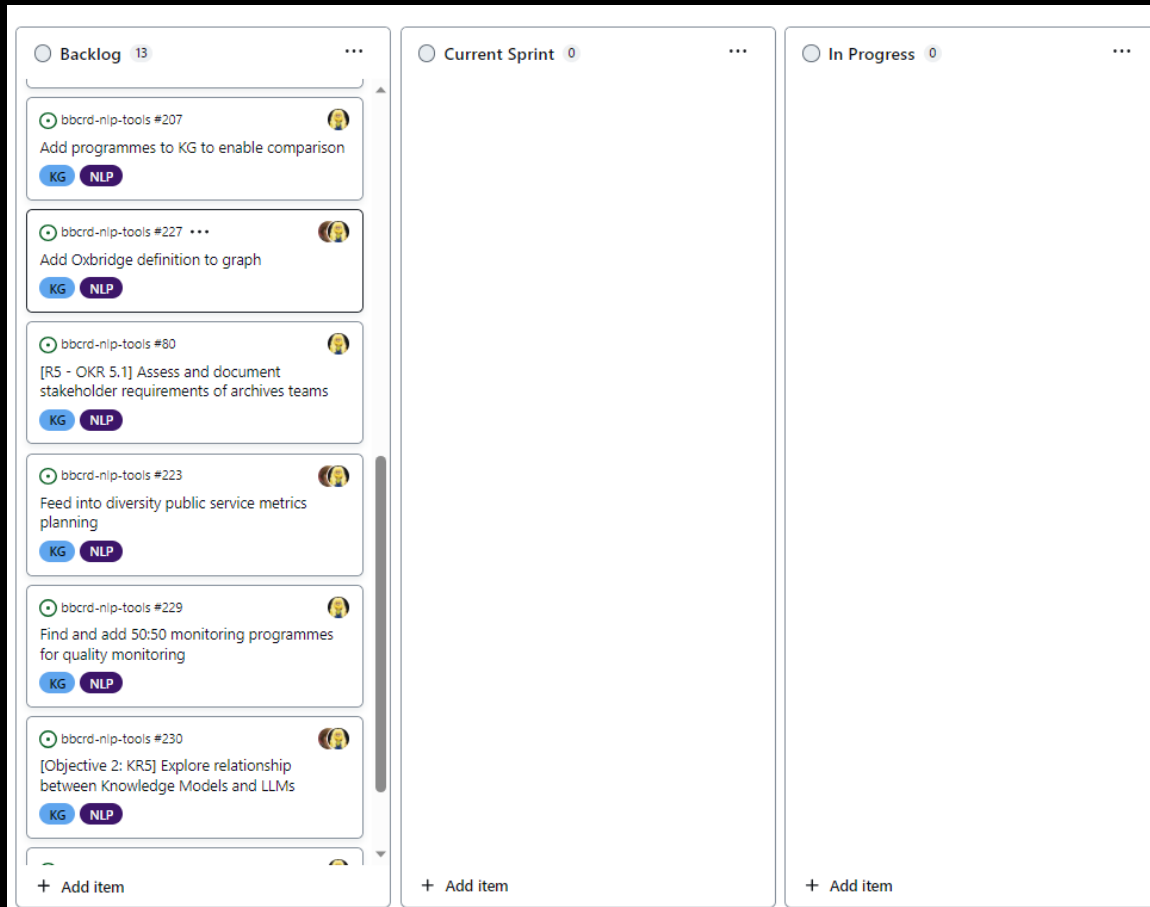
Ideation



Data architect contributes to ideation sessions and research, everyone's ideas are equally valid here

How?

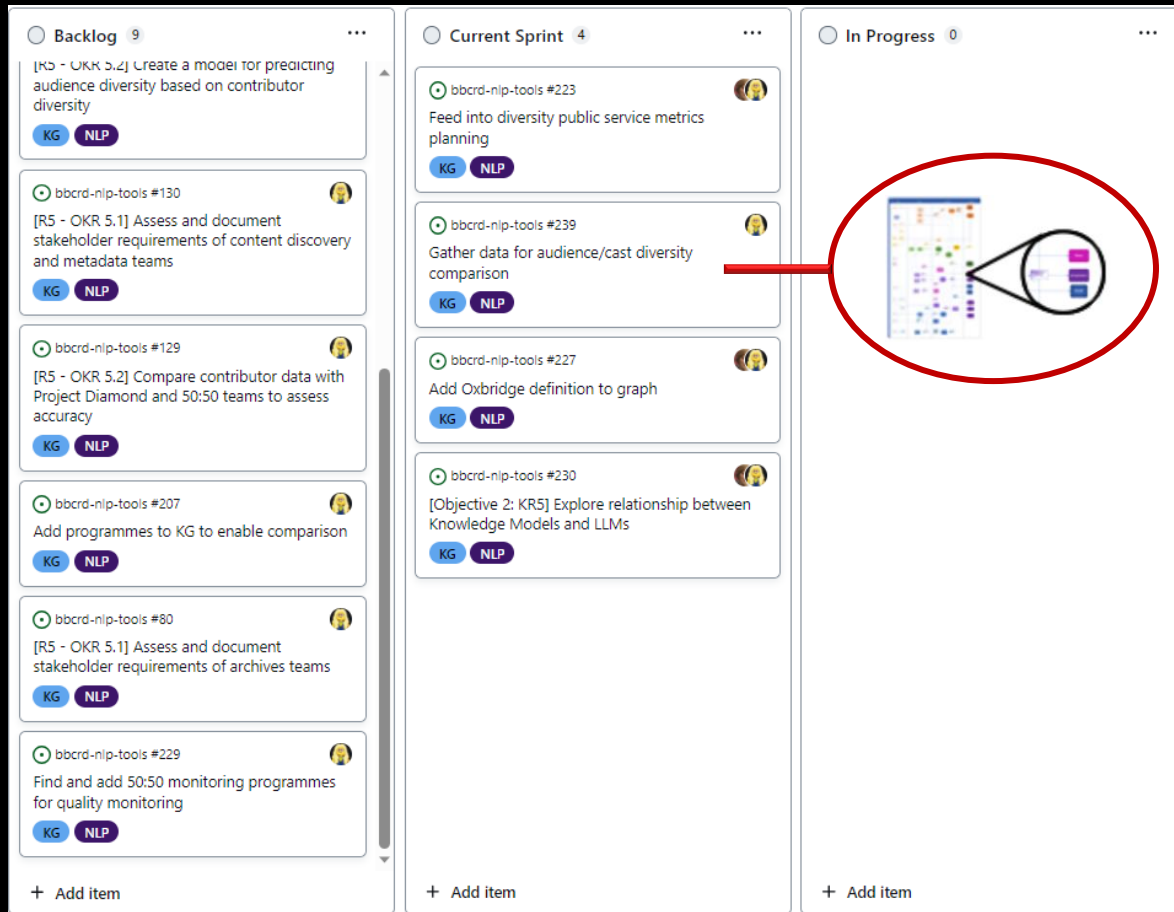
Project start



Data architecture tasks
are part of the process
and live on the board
alongside the others

How?








































Sprint planning



Individual tasks are worked on where necessary to the shared team goal

How?

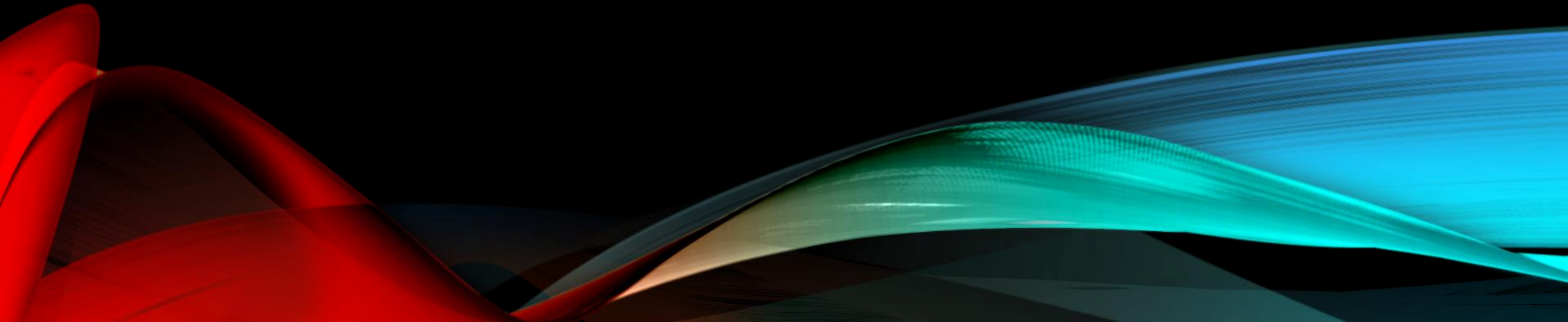
Project retro/review

The Good...	The Bad...	The Learned...
<div>Holidays - hooray!  2 </div> <div>good/detailed feedback on summarisation and tagging of podcast segments  2 </div> <div>segmentation demo - I think we're working in a less siloed way  1 </div> <div>good to add web demo and data storage to the pipeline  1 </div> <div>Good to navigate the complex world of Solr and come out of in unscathed!  1 </div> <div>Done some really good work on an evaluation framework for segmentor models.  1 </div> <div>Good to get to the bottom of segeval issue  0  </div> <div>Got hold of a list of 50:50 programme stats  0  </div>	<div>Meeting heavy at start of sprint - ate a lot of time  2 </div> <div>Had quite alot of time taken away from this sprint by other commitments  2 </div> <div>still lots left to do!</div> <div>various technical hurdles meaning tasks taking longer than expected</div> <div>Difficult territory with interfacing different bits of code  1 </div> <div>Still not able to access consumption stats due to SCV changes  0  </div> <div>Hard to get hold of people who are on holiday  0 </div> <div>Illness  0 </div>	<div>Brugge has a beer pipeline (not a BEIR pipeline)  1 </div> <div>Sometimes it's a lot easier to copy login credentials from a browser cookie than to do it programmatically  1 </div> <div>Segmentation metrics don't seem to correlate with apparent quality of segmentation for corruption/editing  1 </div> <div>refreshed knowledge of flask/ web dev  0 </div> <div>Quite alot about evaluation of segmentors and ml models in general  0 </div>

Data architects raise points alongside others so understanding is shared

MAPPING THE DATA ENVIRONMENT

Getting to grips with the data ecosystem to maximise potential opportunities



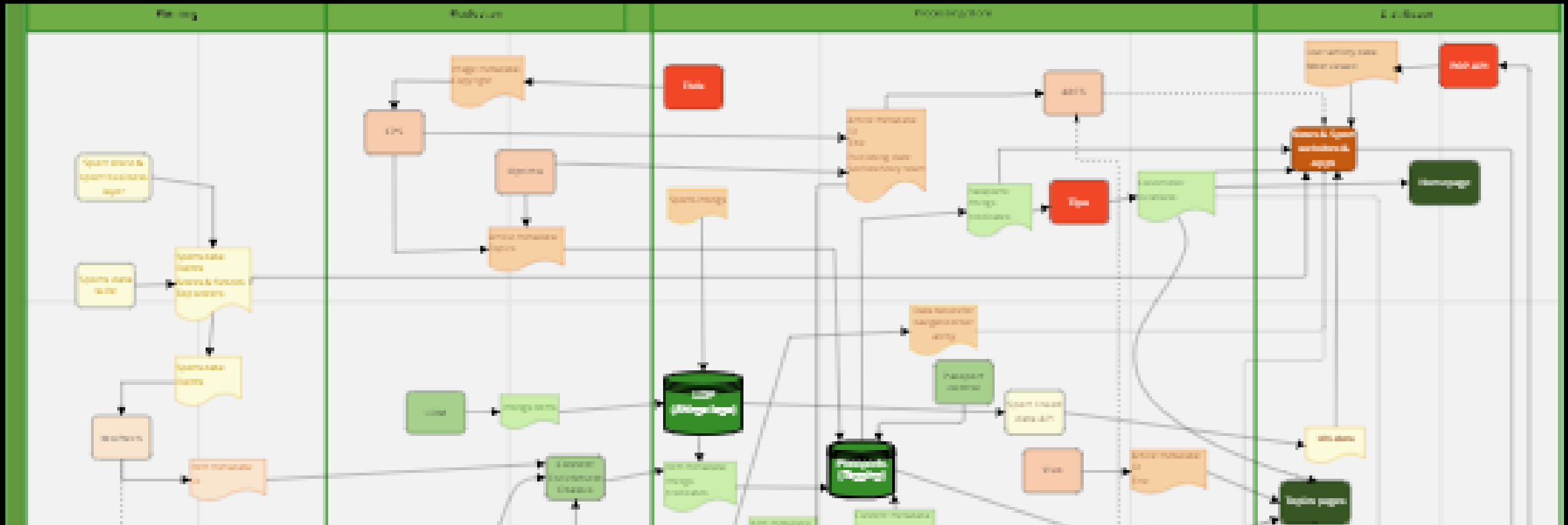
How?

Knowing the data ecosystem

- Do you know where you're trying to get to?
- Do you know where you are now?
- Do you have a map?

How?

Knowing the data ecosystem



How?

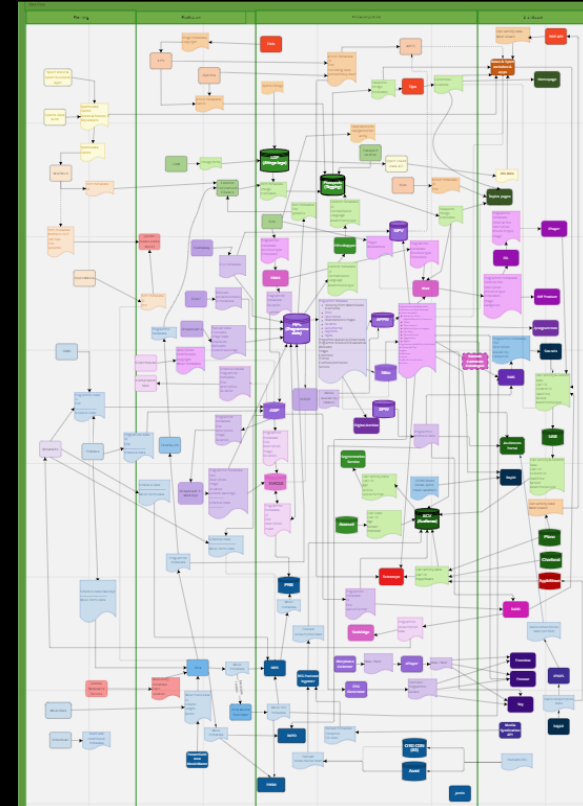
Knowing the data ecosystem



How?

Knowing the data ecosystem

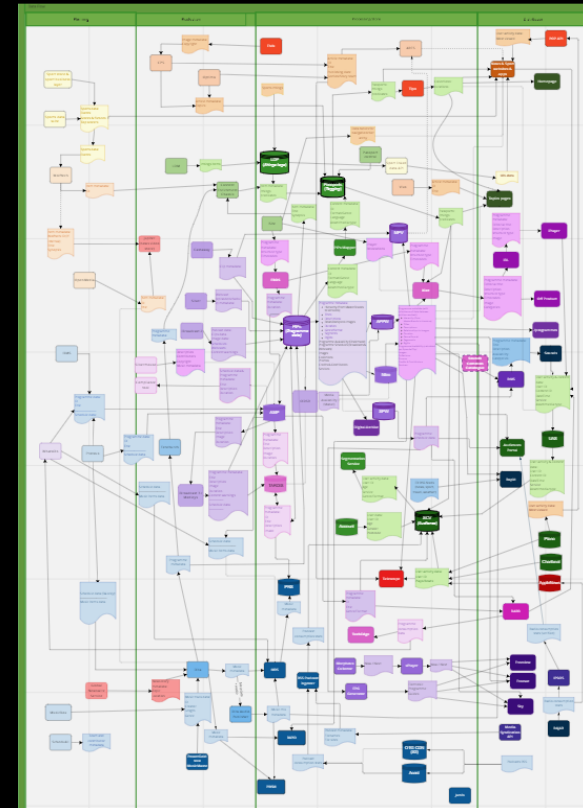
Where are the overlaps?



How?

Knowing the data ecosystem

Where is the buried treasure?



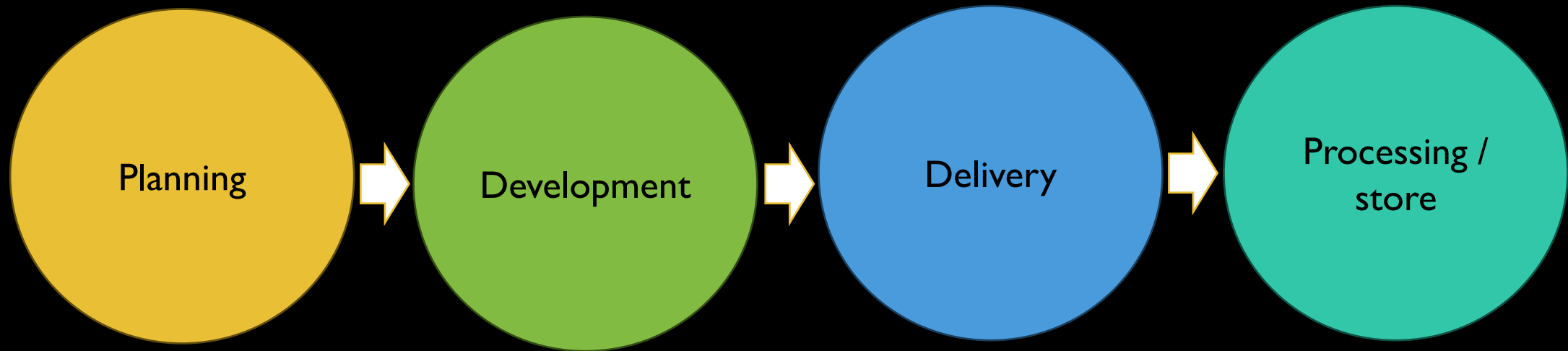
ORIGINATING DATA ARCHITECTURE PROJECTS

How the data architect originates projects drawing on the data ecosystem



How?

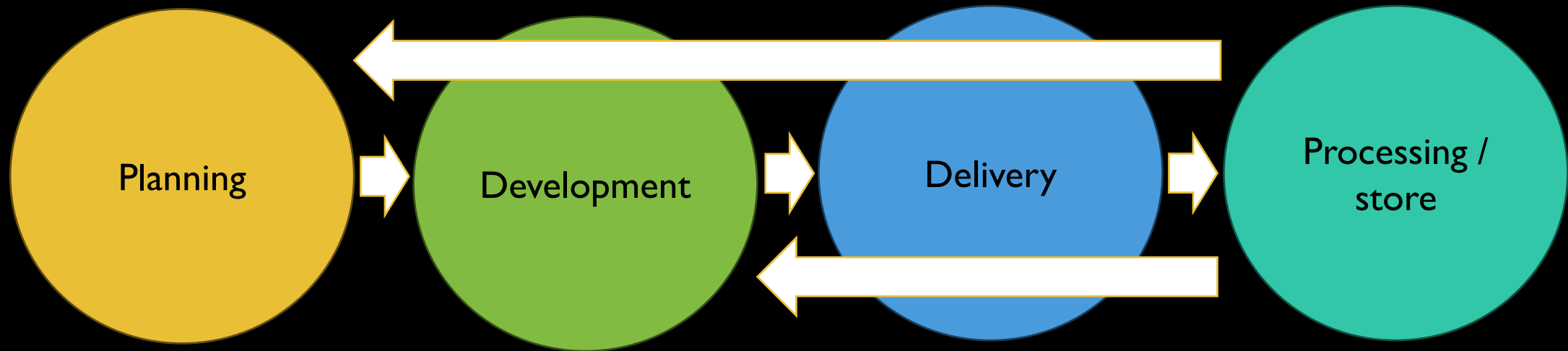
Using the data ecosystem map



What is being lost?

How?

Using the data ecosystem map



Are you using what you have?

Thank you

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