

10TH LAND ADMINISTRATOR DOMAIN MODEL WORKSHOP

Evolving Registration

How Do Established Registrars Embrace Change?

Dave Stow | Michael Hill | Anthony Beck | Laura Alderson
Ordnance Survey, United Kingdom



Imperative for change for the land authorities

Megatrends



User expectations



Demands on the Land Authority

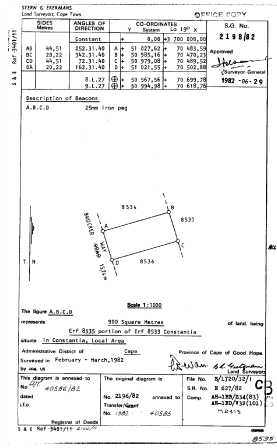


Data models naturally change over time

LADM as a domain model fits all of these...



Paper records



Simple early models, rights may be remain articulated in scans of paper

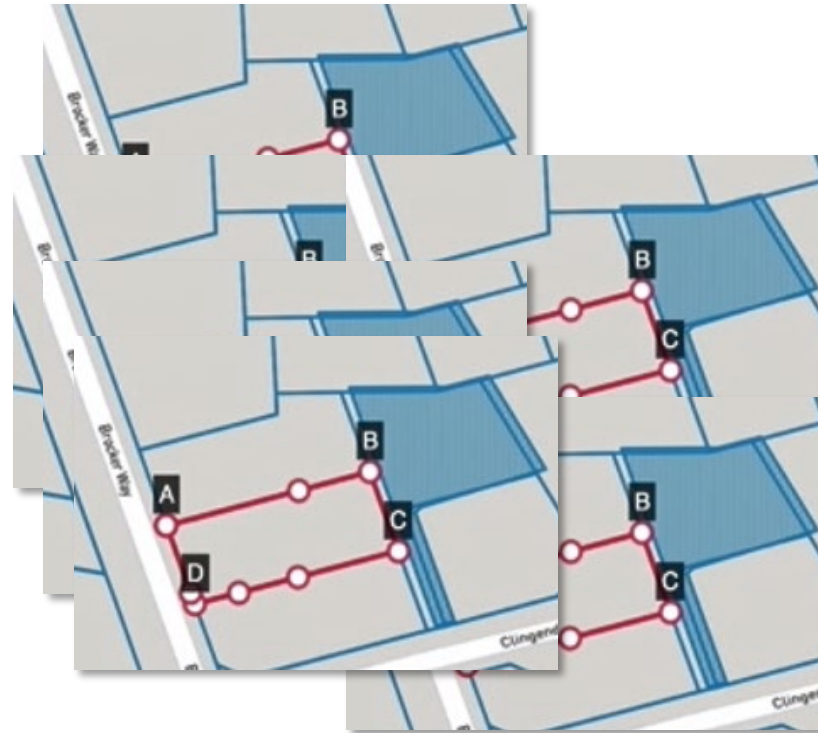
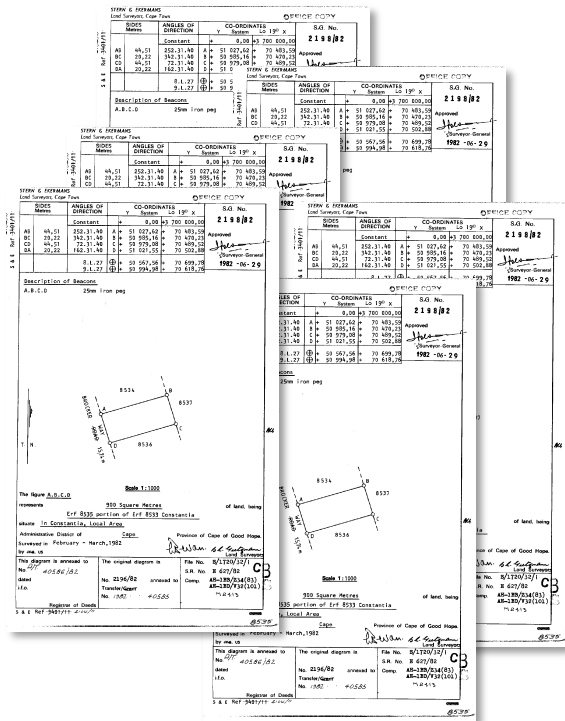


Better models, reflecting the needs of today



Future models, reflecting the needs of tomorrow

Traditional approach – transform and go-live

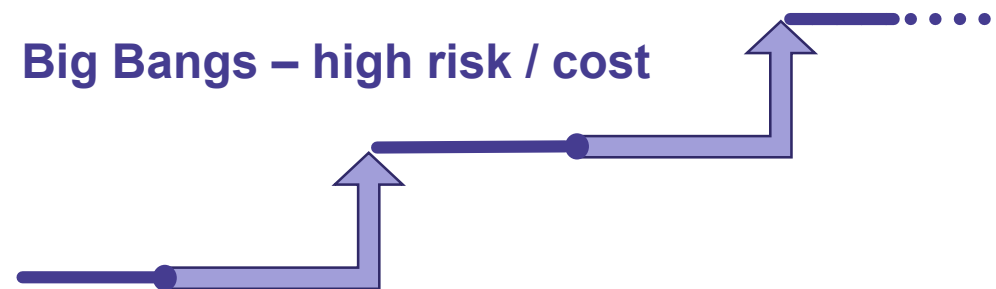


Transform data

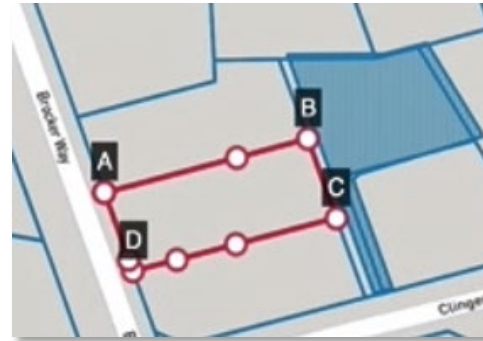
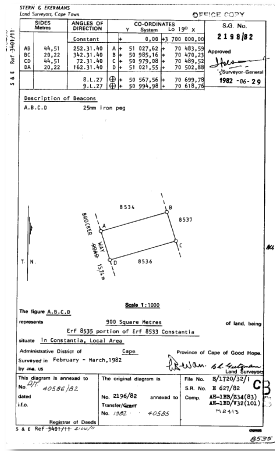
Go live with new system

Problems with platform refresh

- Major events trigger major change
 - High risk of failure
 - Long delivery cycle with minimal benefit until the end
- Obsolete at point of delivery
- From one fixed state to another
 - Future change is constrained



Mass transformation of data is a problem

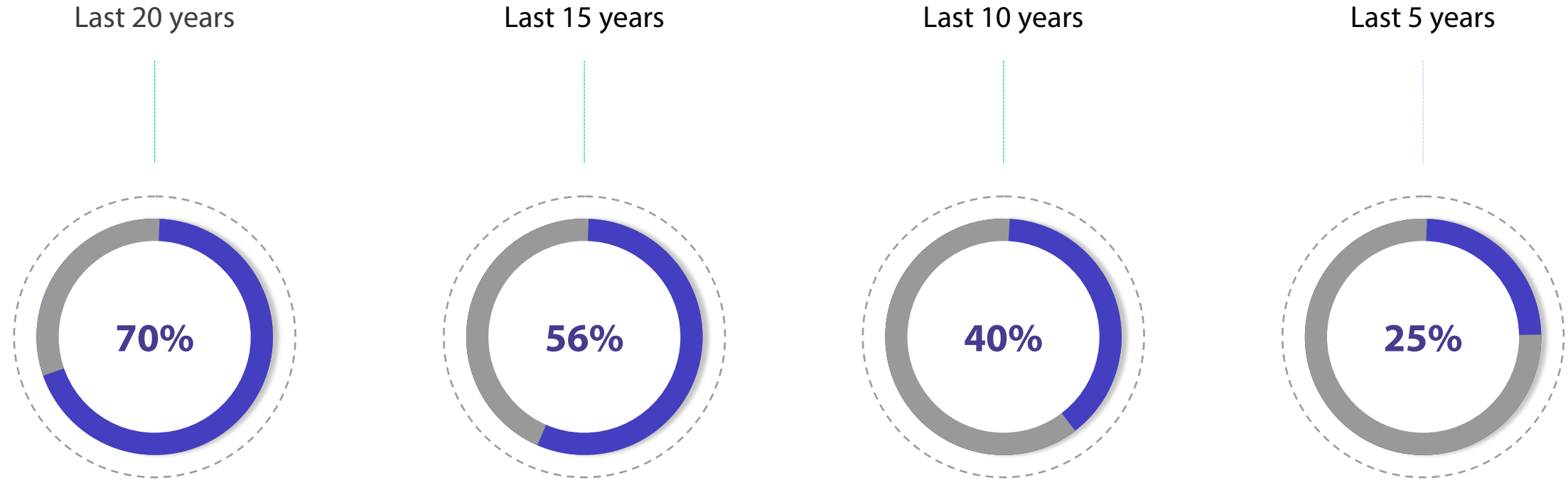


Mass transformation is undesirable: it delays delivery and constrains your ability to deliver change

Mass transformation should not be necessary: Transform as needed – record by record

Mass transformation is wasted effort: Records will be transformed that will not transact for years

Percentage of titles actually transacted on



Source: HMLR Price Paid data, adjusted up to account for excluded entries; and ONS residential households data, adjusted down to account for unregistered titles.

Need to fundamentally rethink approach

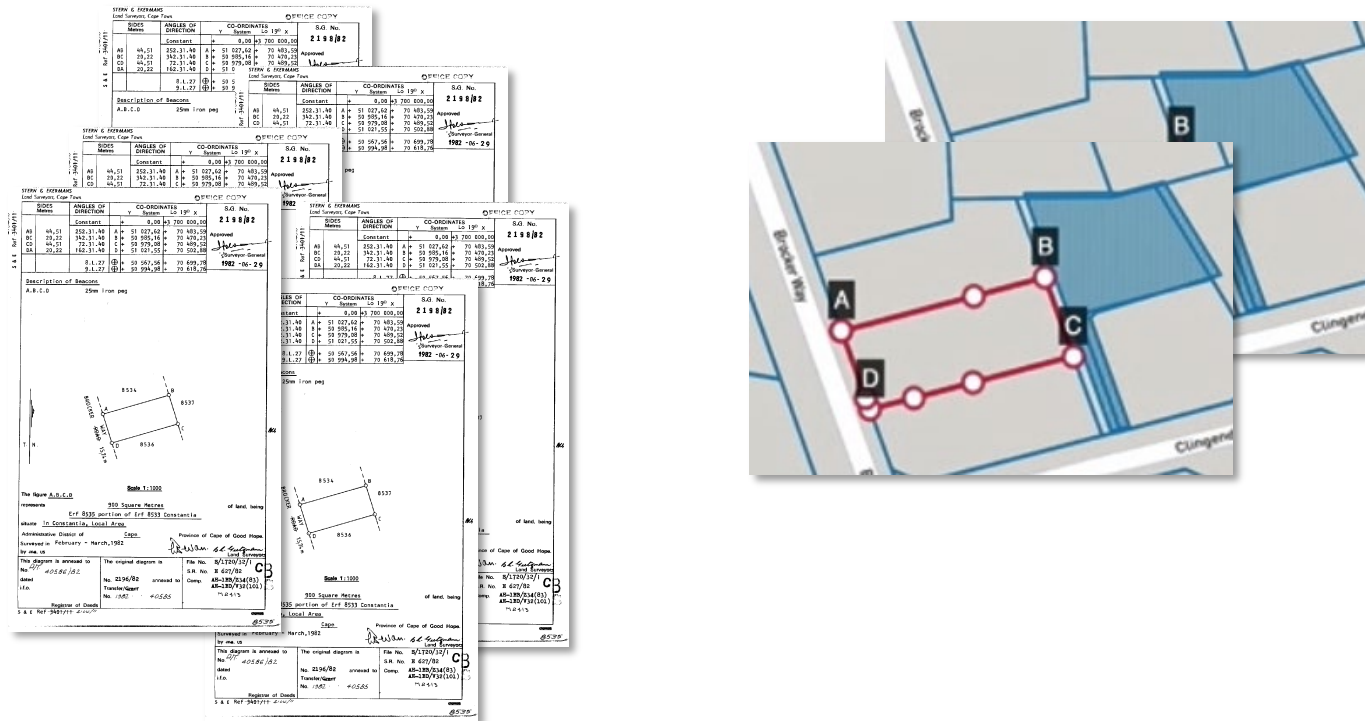
Architect to enable change

Multiple versions of workflows need to co-exist

Multiple versions of the data models need to co-exist

Move from a “mass data transformation” model to “Transform when needed”

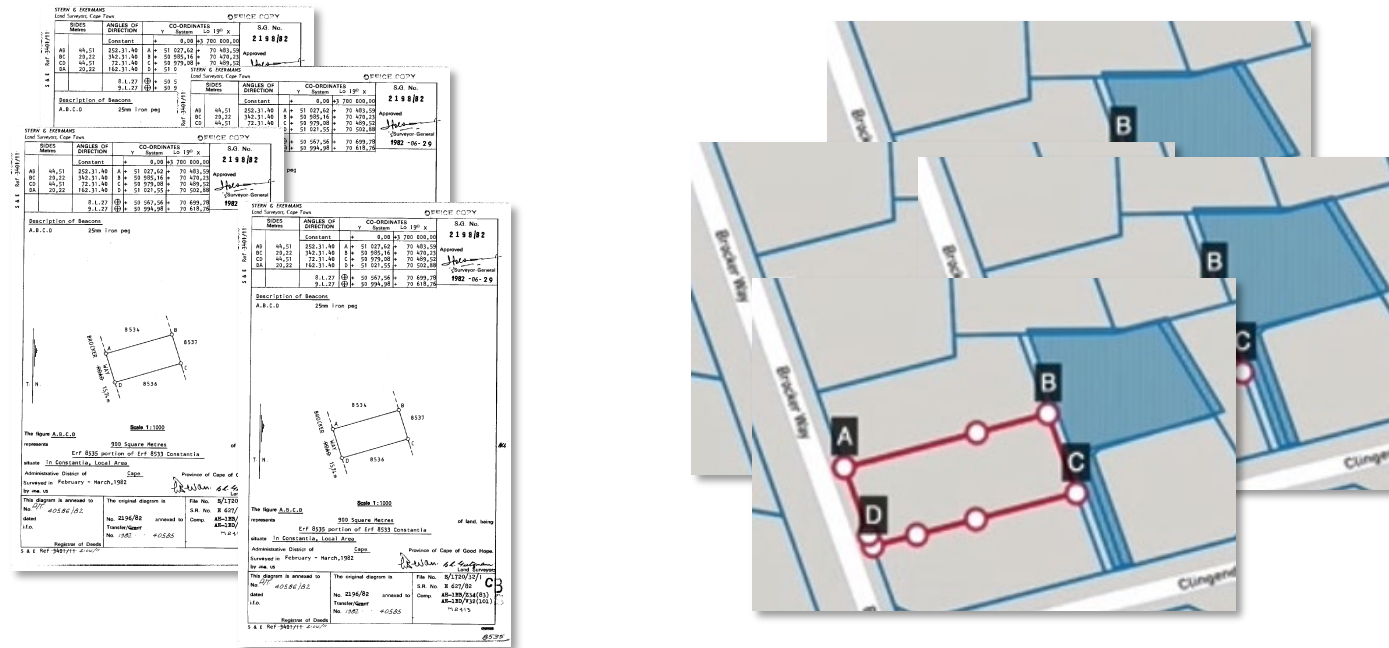
Transform as needed – a sliding window of data models



Transform data on title-by-title basis

Evolve the technology incrementally

Transform as needed – a sliding window of data models



Transform data on title-by-title basis

Evolve the technology incrementally

Transform as needed – a sliding window of data models

The image shows two overlapping Ordnance Survey forms. The top form is a 'TYPE & EXTENT' form, and the bottom form is a 'DEED COPY' form. Both forms contain coordinate data and survey details. The 'TYPE & EXTENT' form includes a table with columns for 'POINT', 'COORDINATE', 'Easting', 'Northing', and 'Height'. The 'DEED COPY' form includes a table with columns for 'POINT', 'COORDINATE', 'Easting', 'Northing', and 'Height'. Both forms also contain sections for 'Description of Boundary' and 'Remarks'.



Transform data on title-by-title basis

Evolve the technology incrementally

Solution design needs

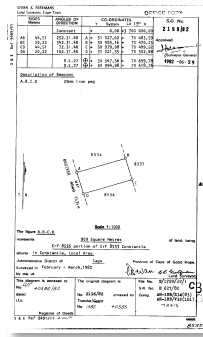
Move away from fixed relational models

Consider Document based NoSQL databases

Visualisation needs to support all models; Edit only for latest data model

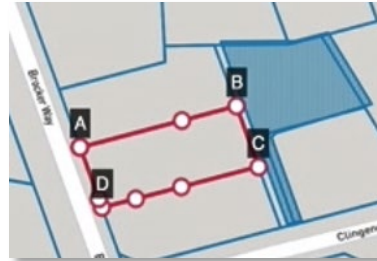
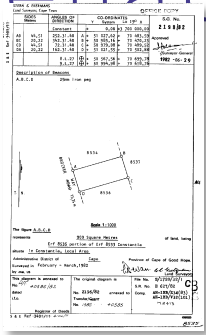
Ability to upgrade from one data model to a later one

Business value early, frequent change enabled



- Minimal data transformation delivers value early in the implementation process...
- Use a simple LADM compliant data model
- Rights and Land can be articulated on paper scans
- Digitise only what is needed for search

Business value early, frequent change enabled



- Shift to a “Change as Usual” mindset
- Adopt “Transform as Needed” approach
- Update title to newer model only when needed
- Focus background systematic transformation on records that are likely to transact

Thank you

Dave Stow

Snr Architect (Land Administration)

www.os.uk

dave.stow@os.uk

03454 56 04 20

