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Capability Modelling with System Architect – How it works, how it helps and where it fits in the big picture

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Who are Altus?

Business & System Architecture
Consultants for Financial Services



Bridging the gap between strategy and delivery



Architecture challenges of Financial Services

- Intangible products
- Dependent on technology
- Non-expert technology users
- Data can be 'live' for decades
- Retrospective regulatory change
- A long history of M&A
- Project driven environment
- Multi-dimensional change



The Altus response

- Architecture to save money
- Connect change to principles
- Bridge the business/IT divide
- Visualisation
- Focus on information
- Tool Support
- Architecture via projects



Clients

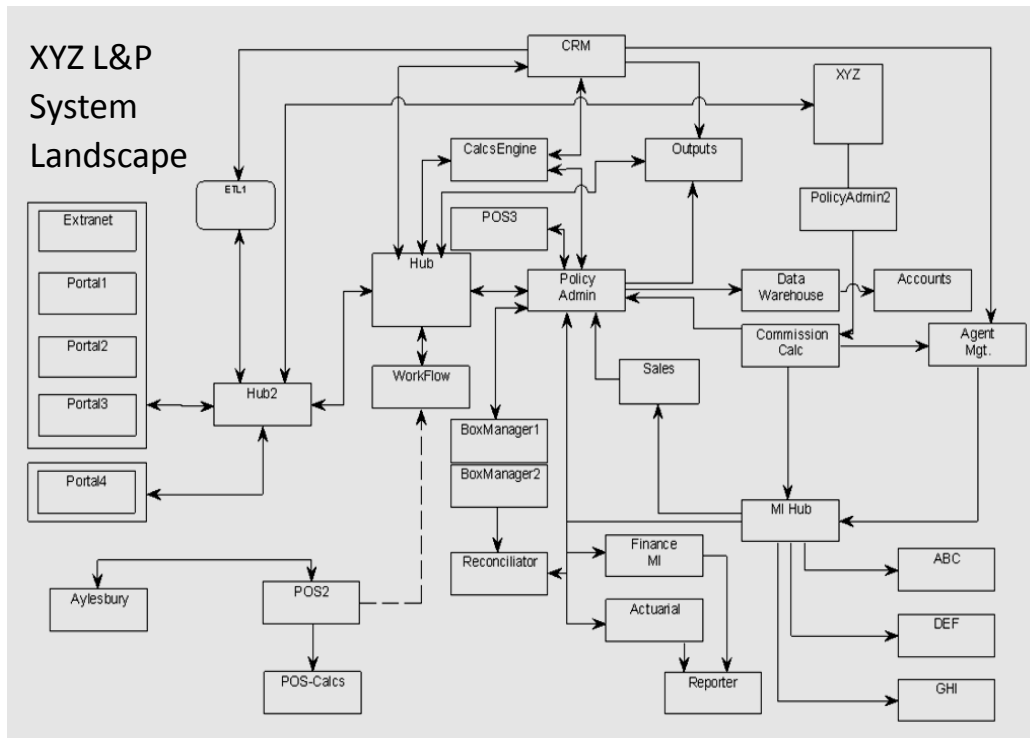


System Rationalisation – common issues

Multiple systems appear to perform the same function...

...variations by product type, brand and channel

Complex inter-connectivity and inter-dependencies



Systems not used as originally designed for...

...or what YOU thought the business were using them for

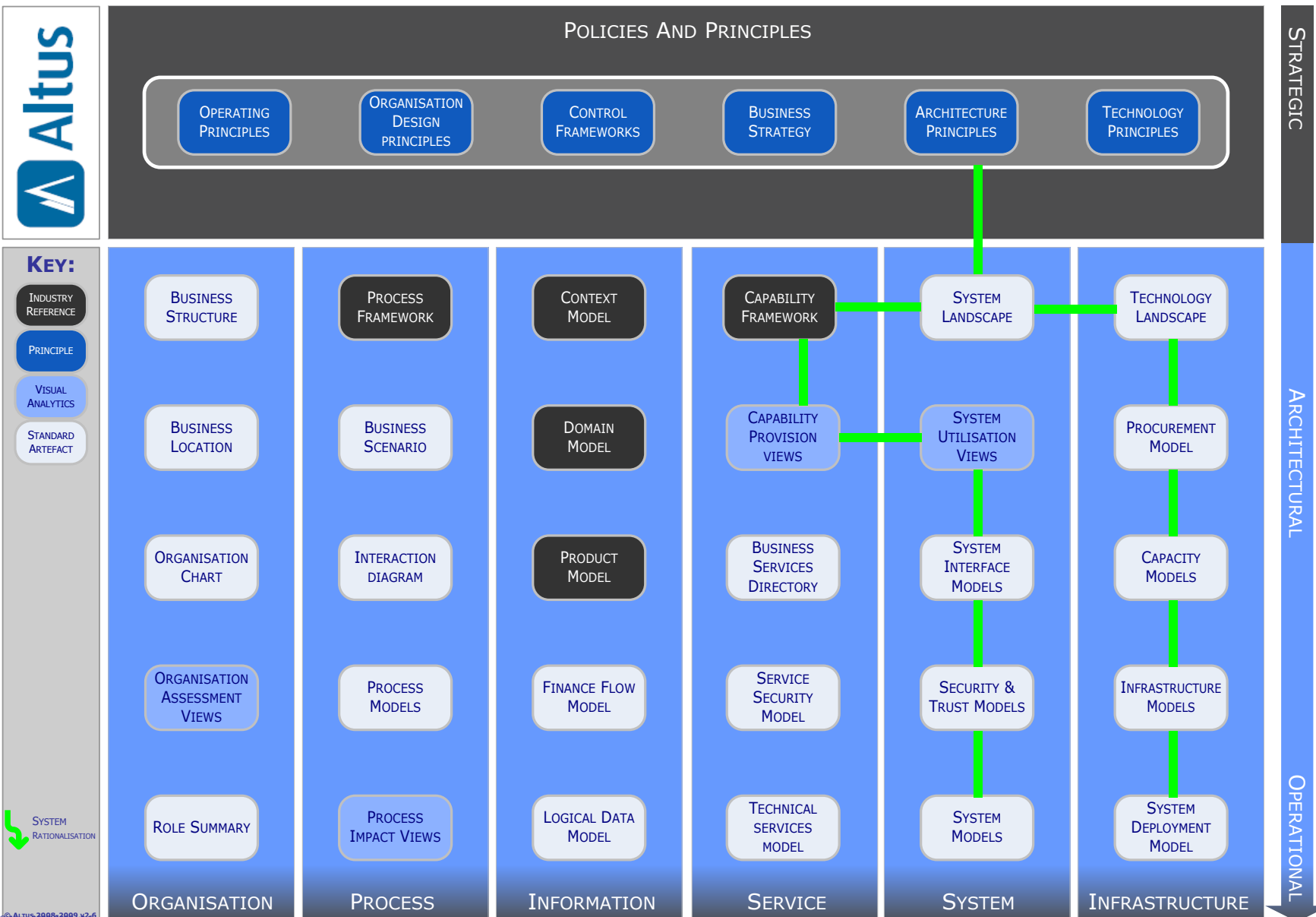
Technology decisions driving design

Hidden complexity when you get to the detail

...an IT-centric approach leads to nasty surprises later!



System Rationalisation



Business Capabilities – What are they?

- WHAT a business does, not HOW it does it (that's process)
- An analogy...

Boeing 747 Capabilities



Thrust creation

+



Payload support

+



Lift generation

Boeing 747 Business Process

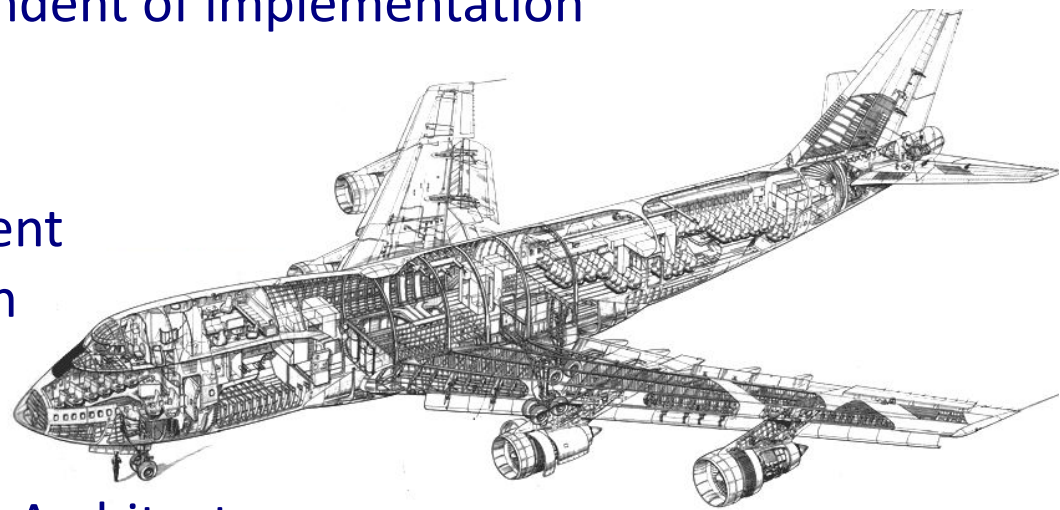


Fly to New York!



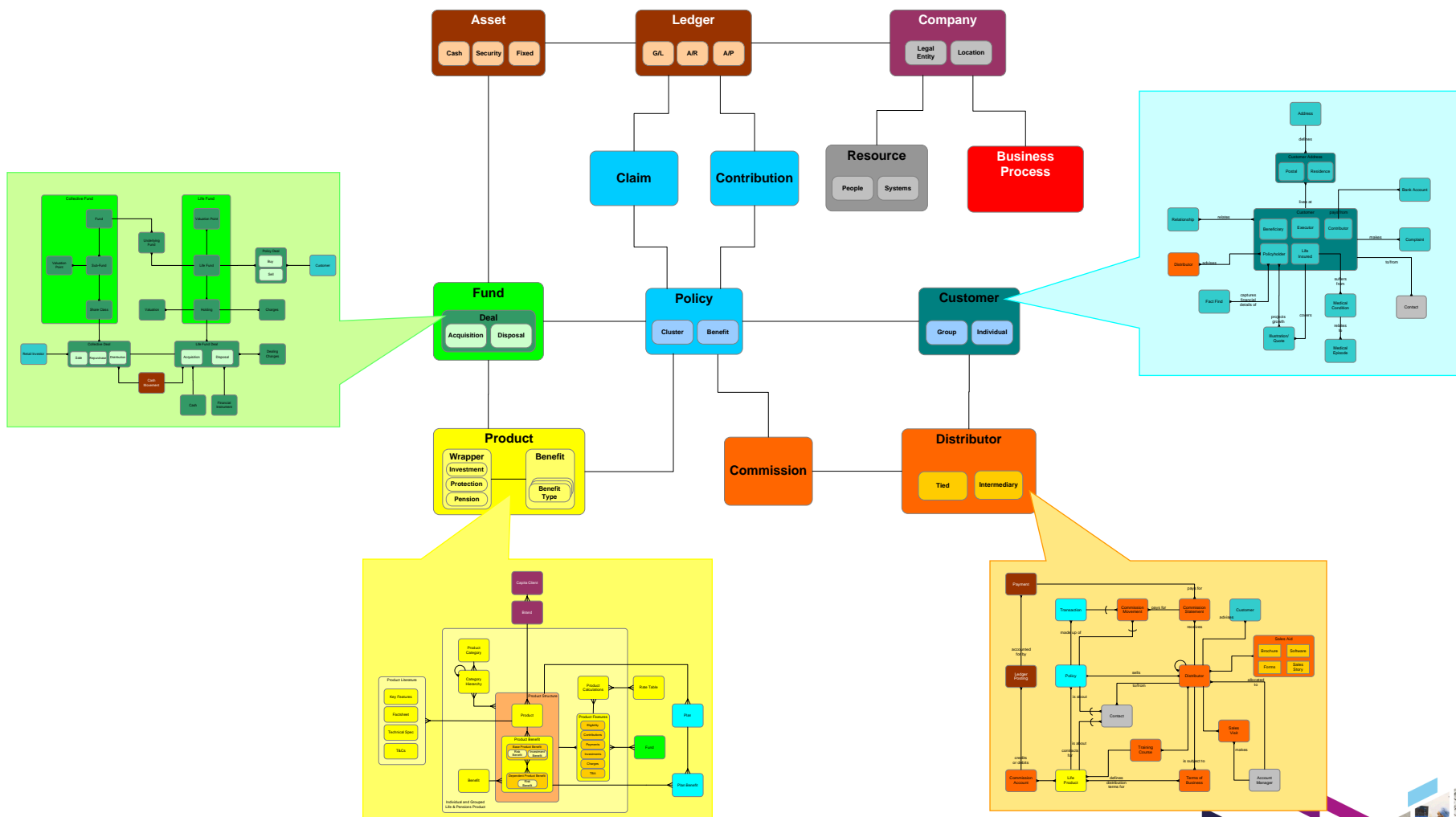
Capability Framework for Financial Services

- What is it?
 - A parts diagram of the business!
 - A top-down data-oriented view
 - A logical view - independent of implementation
- A few examples:
 - Identity Confirmation
 - Direct Debit arrangement
 - Commission calculation
 - Archive retrieval
- Why is it important?
 - A stable foundation for Architecture
 - A sound basis for Service definition (business and technical)
 - A common language across Business and IT
 - A good tool to understand other aspects of the business



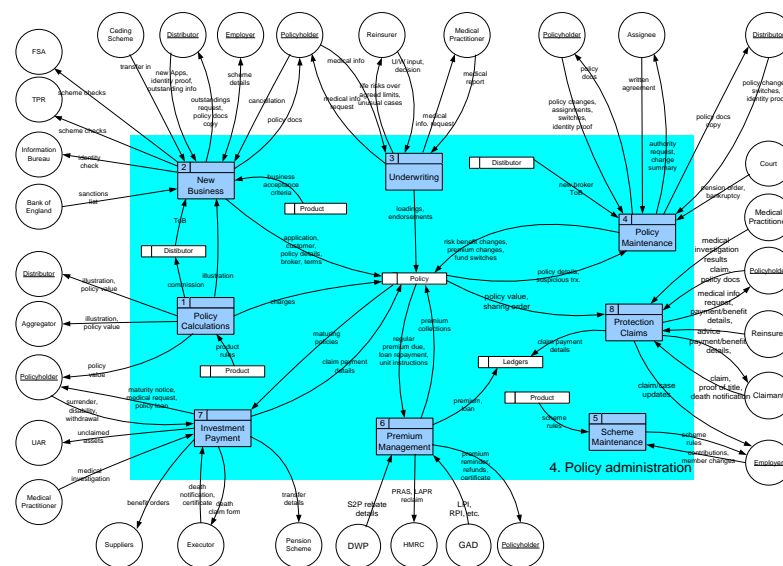
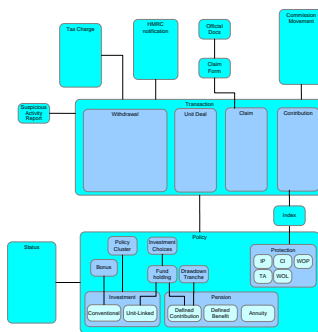
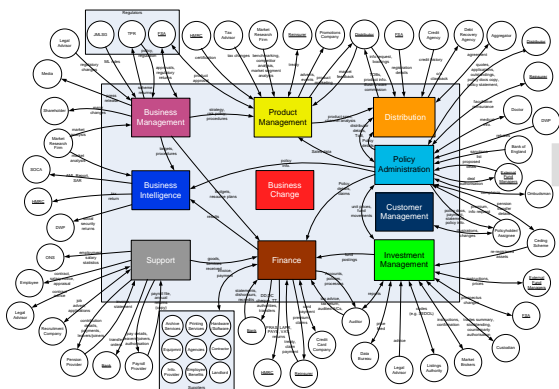
Building the Framework

- Analyse information flows, Identify key data entities and classify into broad business domains (7-9 clusters of related entities).



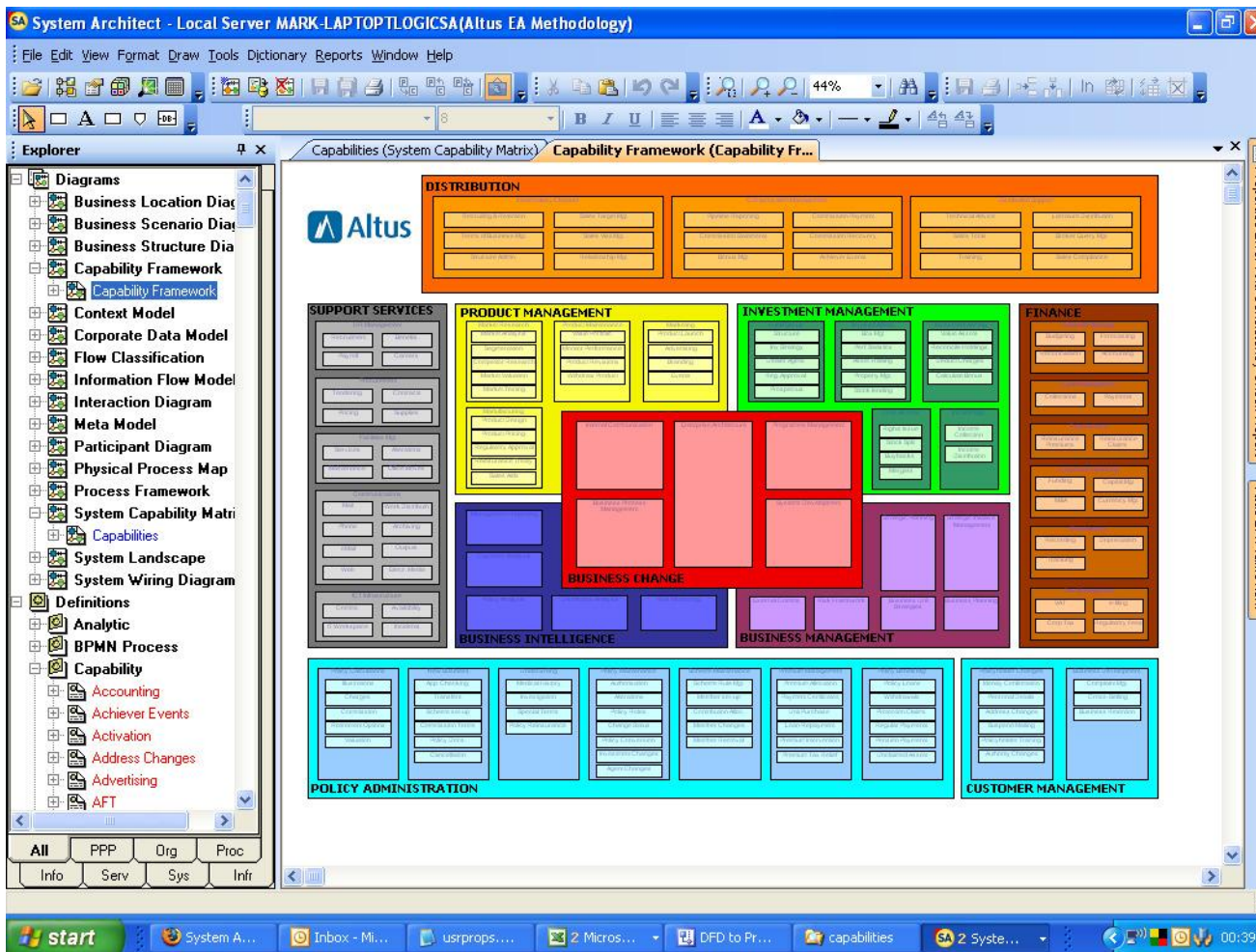
Building the Framework

- 4 Break down each capability into sub-capabilities based on lower level entities and their basic lifecycles.



Building the Framework

- 6 The final step is to produce a one-page iconic image of the hierarchy which can be used to map against numerous other domains – process, application, location, etc.



Building the Framework

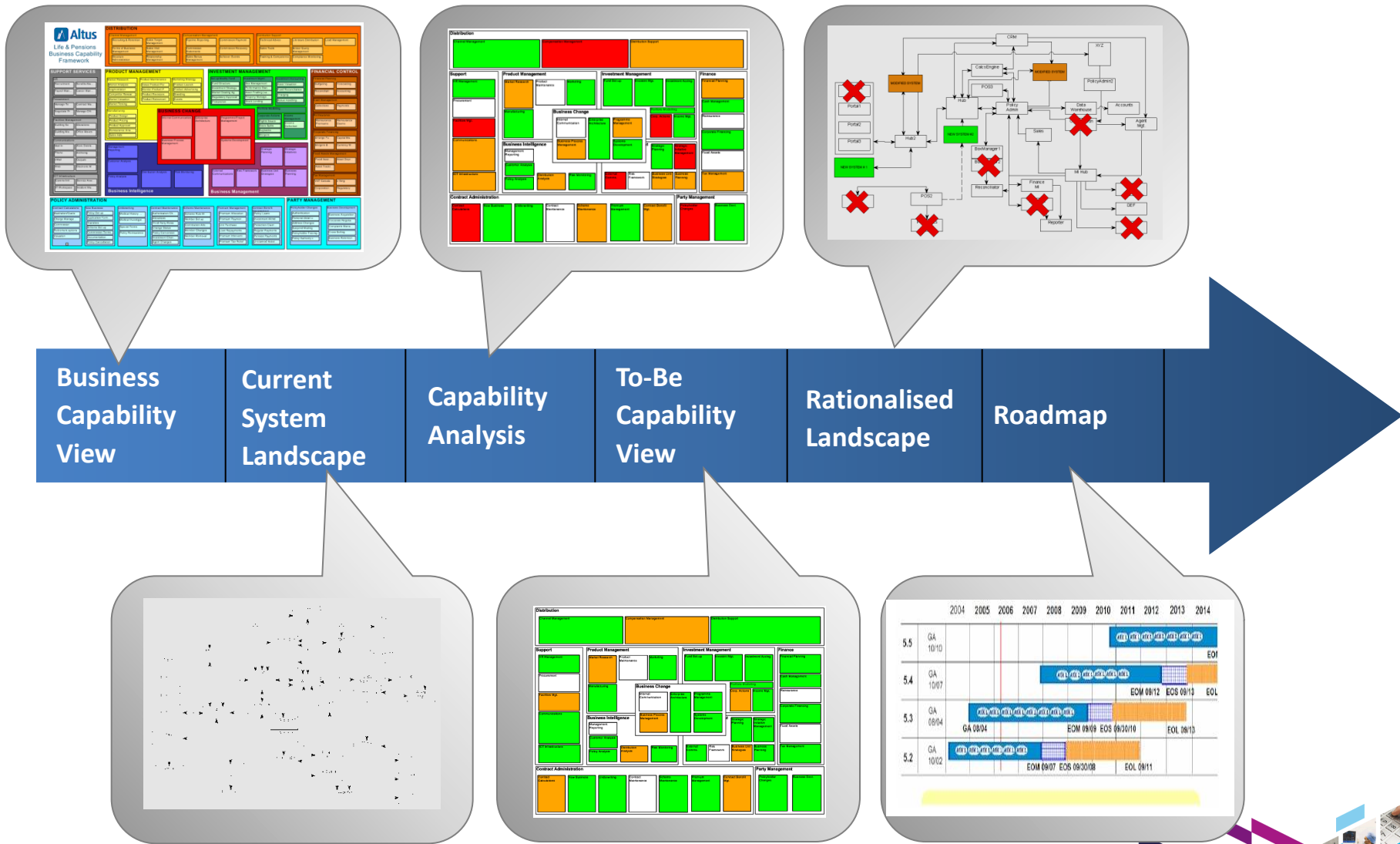
- 6 The final step is to produce a one-page iconic image of the hierarchy which can be used to map against numerous other domains – process, application, location, etc.

The screenshot displays the Altus System Architect software interface. The main window shows a 'Capability Framework' diagram with a hierarchical structure of colored boxes representing different capability areas. The Explorer pane on the left lists various diagrams and definitions, including 'Business Location Diagram', 'Business Scenario Diagram', 'Business Structure Diagram', 'Capability Framework', 'Context Model', 'Corporate Data Model', 'Flow Classification', 'Information Flow Model', 'Interaction Diagram', 'Meta Model', 'Participant Diagram', 'Physical Process Map', 'Process Framework', 'System Capability Matrix', 'Capabilities', 'System Landscape', and 'System Wiring Diagram'. The Properties pane on the right shows the 'Properties Error And Consistency Check Report' and 'Altus E-A Framework'.

The diagram itself is a complex hierarchy of boxes. At the top is 'DISTRIBUTION' (orange). Below it are 'SUPPORT SERVICES' (grey), 'PRODUCT MANAGEMENT' (yellow), 'INVESTMENT MANAGEMENT' (green), and 'FINANCE' (brown). In the center is 'BUSINESS CHANGE' (red). Below that are 'BUSINESS INTELLIGENCE' (blue) and 'BUSINESS MANAGEMENT' (purple). At the bottom is 'POLICY ADMINISTRATION' (cyan). Each box contains a grid of smaller boxes, representing a detailed breakdown of capabilities.

The Framework depicts the top 3 levels of capability breakdown (~150 boxes). Further levels can be added to the repository for complex areas - there are over 700 entries in the Altus L&P reference model.

Rationalising the Landscape



Capturing the business view

Capture WHICH systems deliver WHICH capabilities

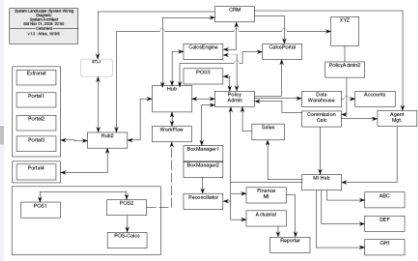
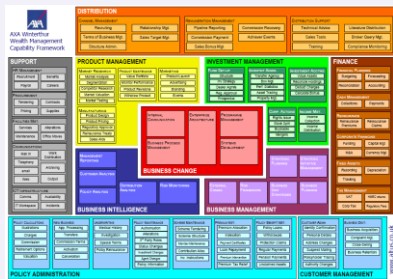
Capture



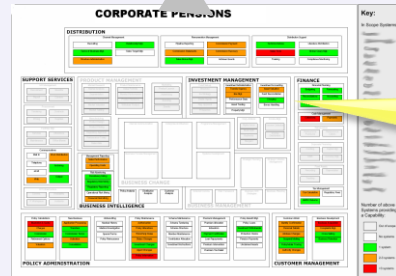
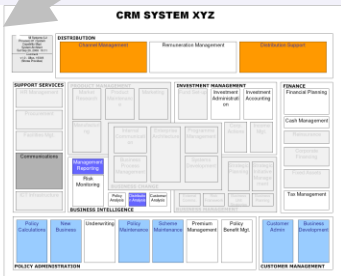
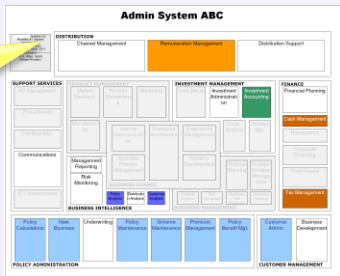
Corporate Persons									
NO.	DESCRIPTION	AS	CS	IS	MS	PS	TS	VS	WS
M1.1.1	Customer Management								
M1.1.2	Product Management								
M1.1.3	Investment Management								
M1.1.4	Finance								
M1.1.5	Support Services								
M1.1.6	Business Intelligence								
M1.1.7	Business Management								
M1.1.8	Policy Administration								
M1.1.9	Customer Management								
M1.1.10	Customer Management								
M1.1.11	Customer Management								
M1.1.12	Customer Management								
M1.1.13	Customer Management								
M1.1.14	Customer Management								
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M1.1.26	Customer Management								
M1.1.27	Customer Management								
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M1.1.29	Customer Management								
M1.1.30	Customer Management								

Automated upload into System Architect – cross-reference with existing models

Modelling

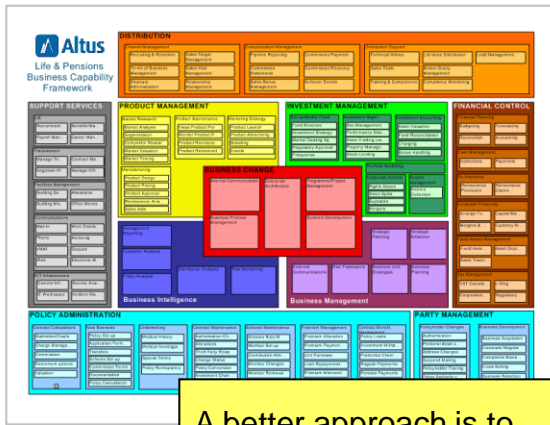


Per system views of capabilities they deliver

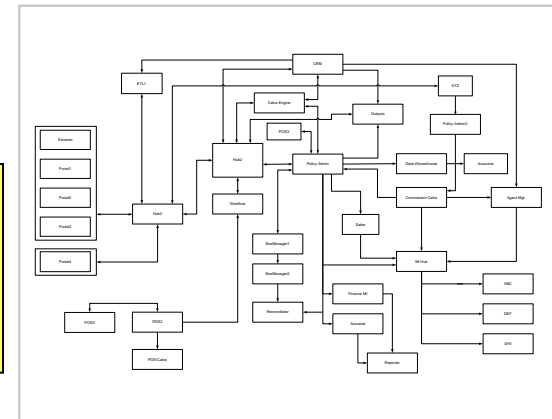


RAG maps showing number of systems delivering each capability

System Rationalisation - summary



Rationalisation projects typically start from an IT view of what systems have been designed for.



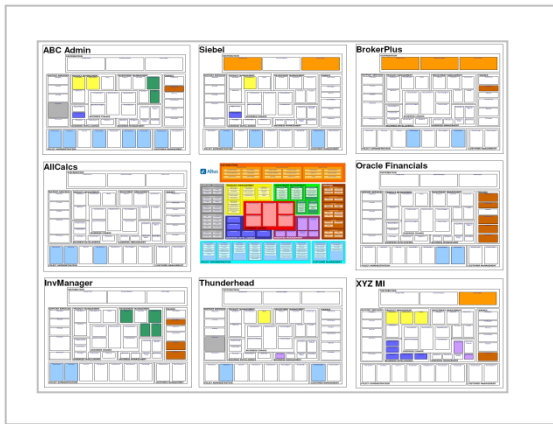
A better approach is to start from a model of what a business does - the Capability Framework...

CAPABILITY FRAMEWORK

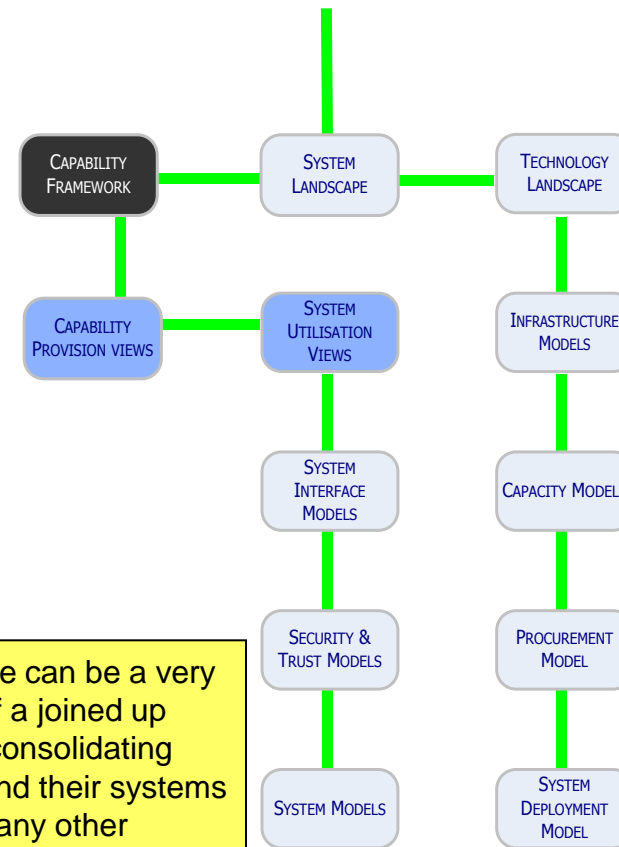
SYSTEM LANDSCAPE

CAPABILITY PROVISION VIEWS

...then map the systems used to support each capability and produce a mini framework for each one - this highlights gaps and overlaps and can be tool-generated.



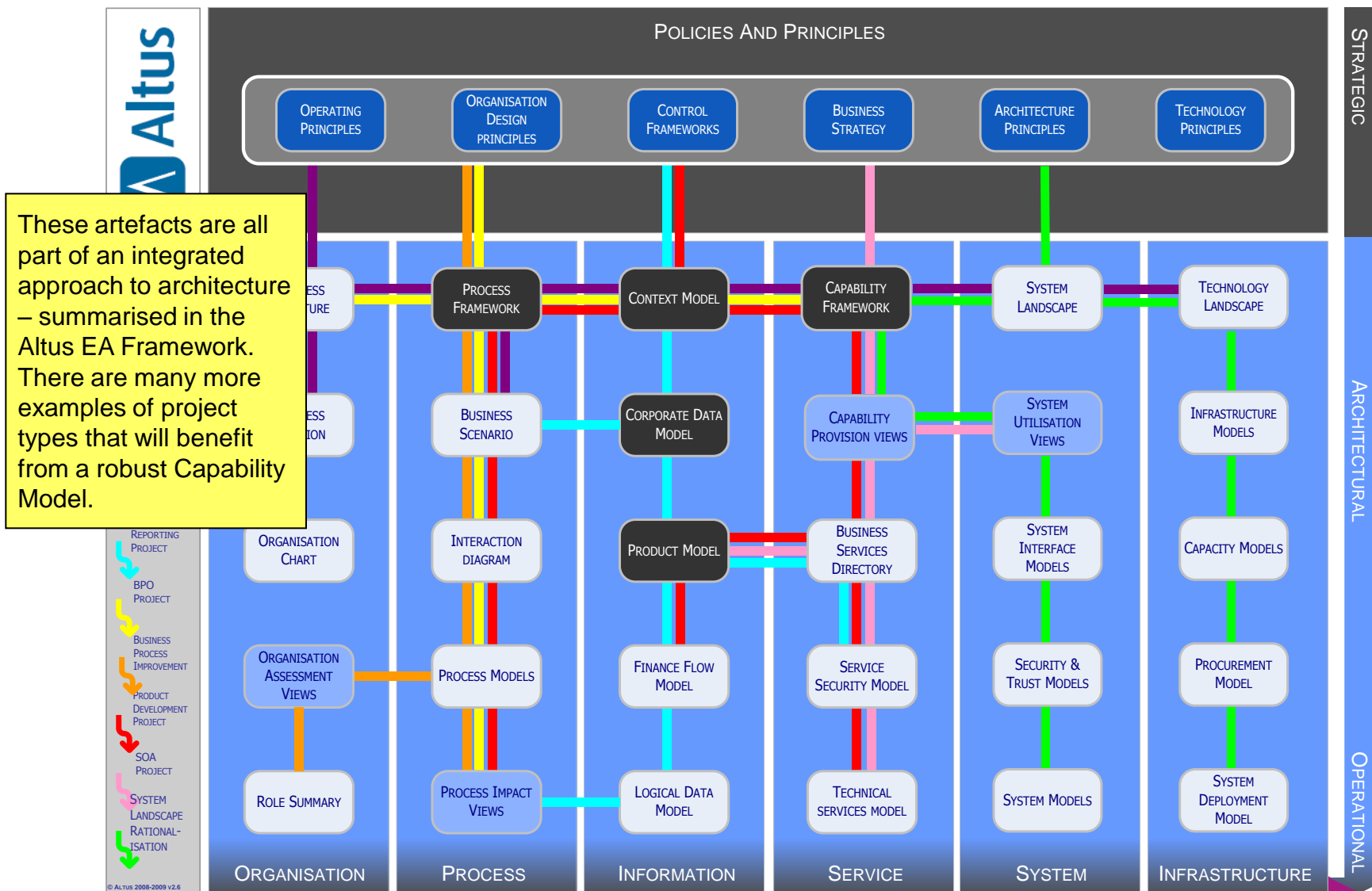
System Rationalisation - summary



This technique can be a very helpful part of a joined up approach to consolidating businesses and their systems – involving many other artefacts too.



System Rationalisation - summary



Capability Visualisations



....let's see it for real





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