



Avancier Methods (AM) DOCUMENT

Architecture catalogues

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- ▶ Catalogues are used to document architectural entities and their attributes.
- ▶ In TOGAF, some catalogues are high-level summaries that record two or three inter-related entities by name only

Catalogues as artefacts in a document framework

Architectural entities	POLDAT etc.
Architecture artefacts	Catalogues that list architectural entities with attributes
	Matrices that relate architecture entities
	Diagrams that describe and/or relate architectural entities
Architecture models and languages	e.g. ArchiMate, UML, AML
Management documents	Deliverables, work in progress or signed off. Often contain architecture artefacts
A meta model for an architecture repository	Defines architectural entities, their attributes and inter-relationships
Pre-defined classifications and reference models	Generalised taxonomies and common design patterns

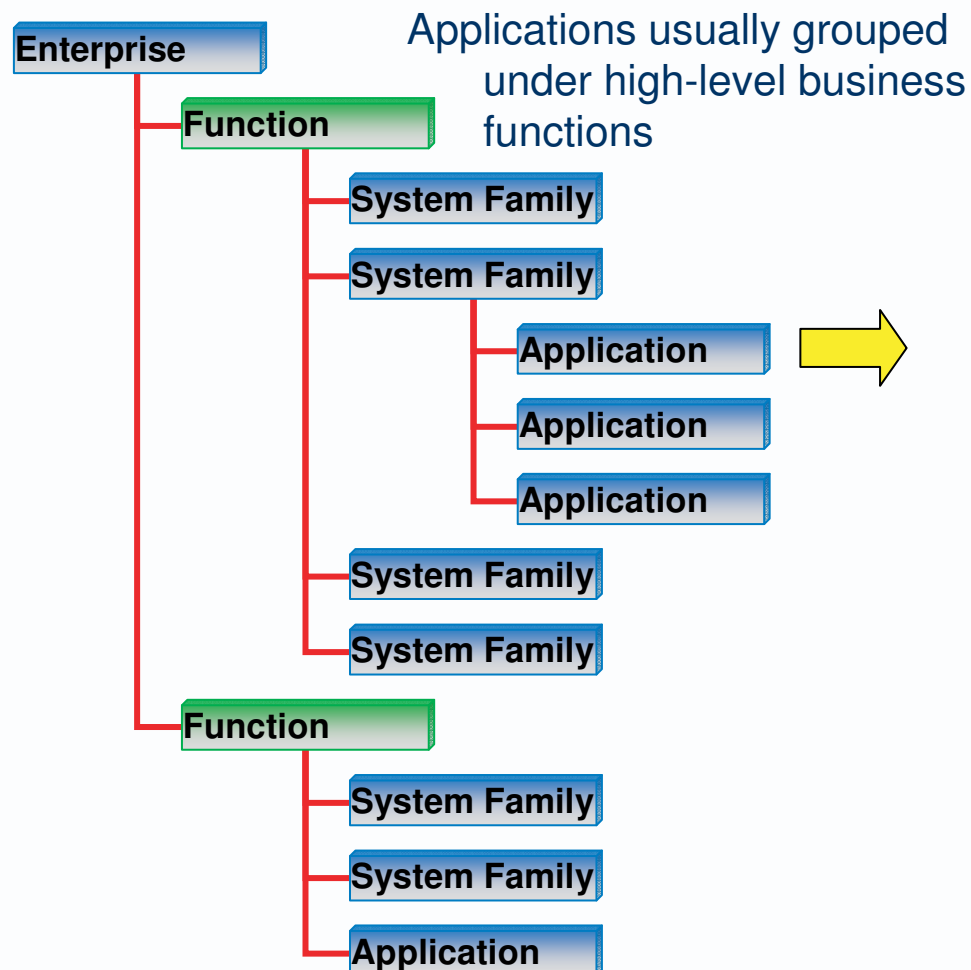
Architecture catalogues in general

- ▶ You can **catalogue** the instances of each architectural entity type
- ▶ The entry for one entity has a **standard list of attributes**

Architectural Entity	Notes
Attribute	
Attribute	
Attribute	
Attribute	

- ▶ It is usual to organise a catalogue in a **hierarchical structure**

A hierarchically structured application catalogue



<u>Application</u>	Application
Application name	
Cost to buy or build	
Cost to run and maintain per month	
Value to the enterprise	
Licence/contract expiry dates	
Status	
Class	
Roles: owners, users, maintainers	
Business processes supported	
Organisation units supported	
Applications/components communicated with	
Data stores accessed	
Networks used	
Hardware/software platform technologies	
Etc.	

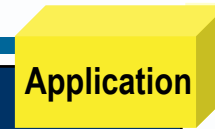
A generic catalogue entry template

- ▶ Generic attributes you might add to specific catalogue entries

Architectural entity	Notes
Identity	Unique identifier
Description	Short narrative
Volumetrics	Number or frequency
Cost to buy or build	H/M/L or other measure
Cost to run and maintain per month	H/M/L or other measure
Value to the enterprise	H/M/L or other measure
Failure frequency	H/M/L or other measure
Owner(s)	Roles or Actors who pay for the thing
Maintainer(s)	Roles or Actors who update the thing
Location(s)	Places where the thing can be found
Business process(es)	Business processes supported by the thing
Business goal(s)	Business goals or objectives supported by the thing
Etc.	



A specific architectural entity template

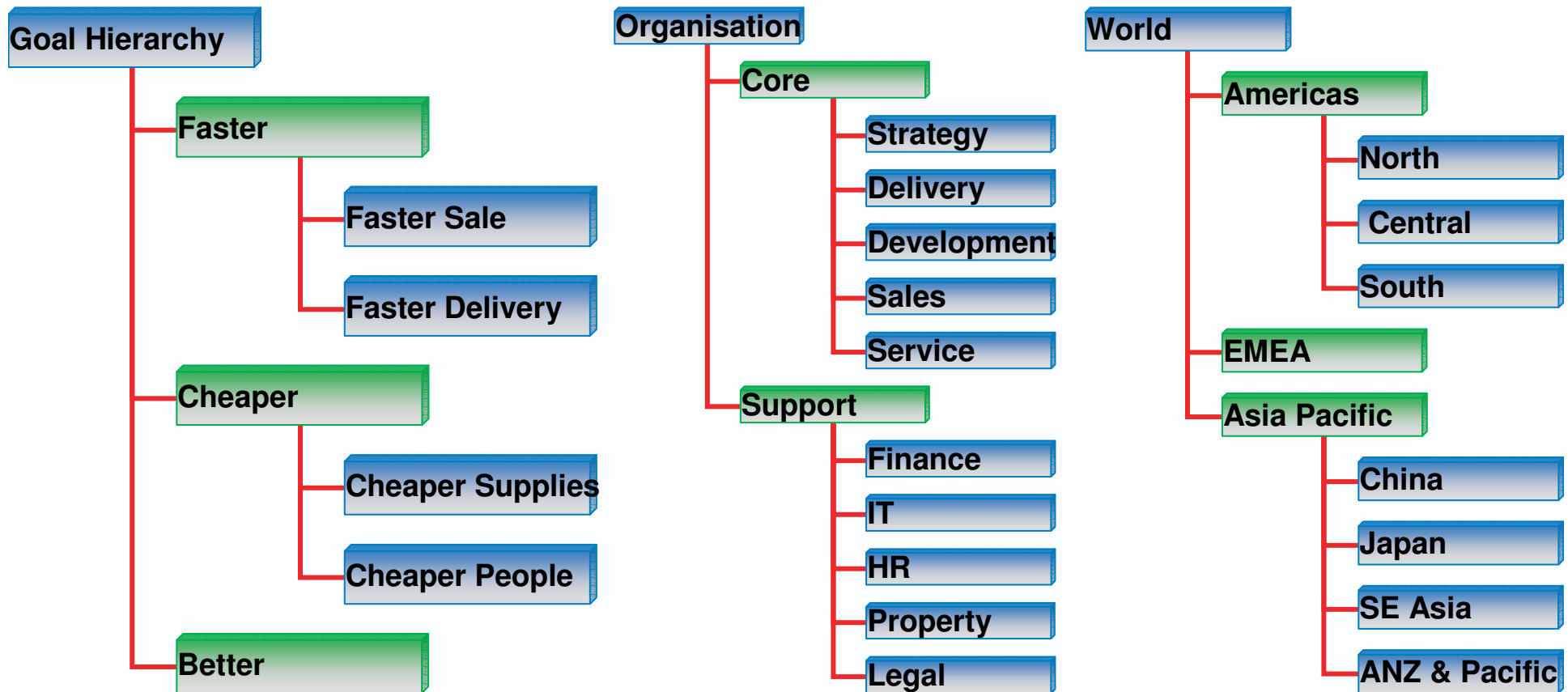


Application	Application
Application name	
Cost to buy or build	Note the inclusion here of financial attributes from the generic template
Cost to run and maintain per month	
Value to the enterprise	
Licence/contract expiry dates	
Owners, users, maintainers	
Status	(planned, operational, obsolete)
Class	(maintained, frozen, to be replaced)
Business processes supported	
Organisation units supported	
Applications/Components communicated with	
Data stores accessed	
Networks used	
Hardware/software platform technologies	
Etc.	

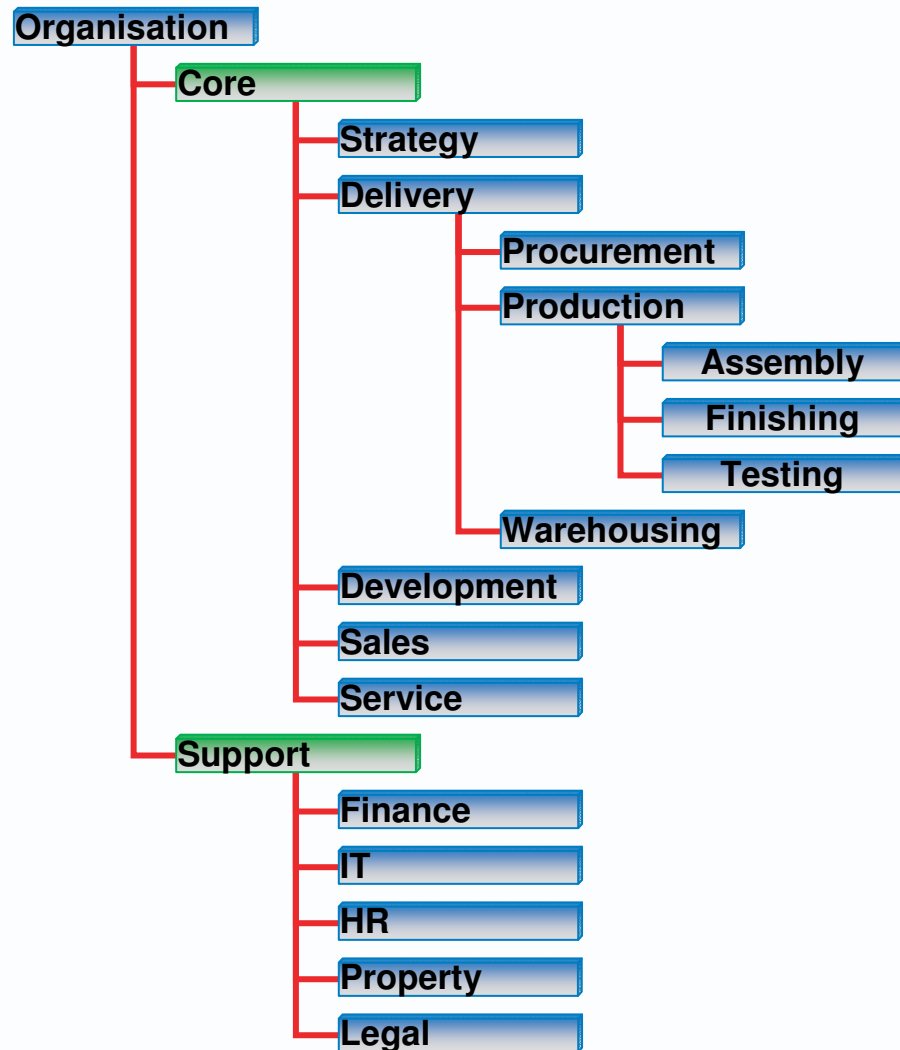
A hierarchical structure makes large catalogues manageable



Goals, Organisations, Locations, etc. can be clustered into groups for manageability



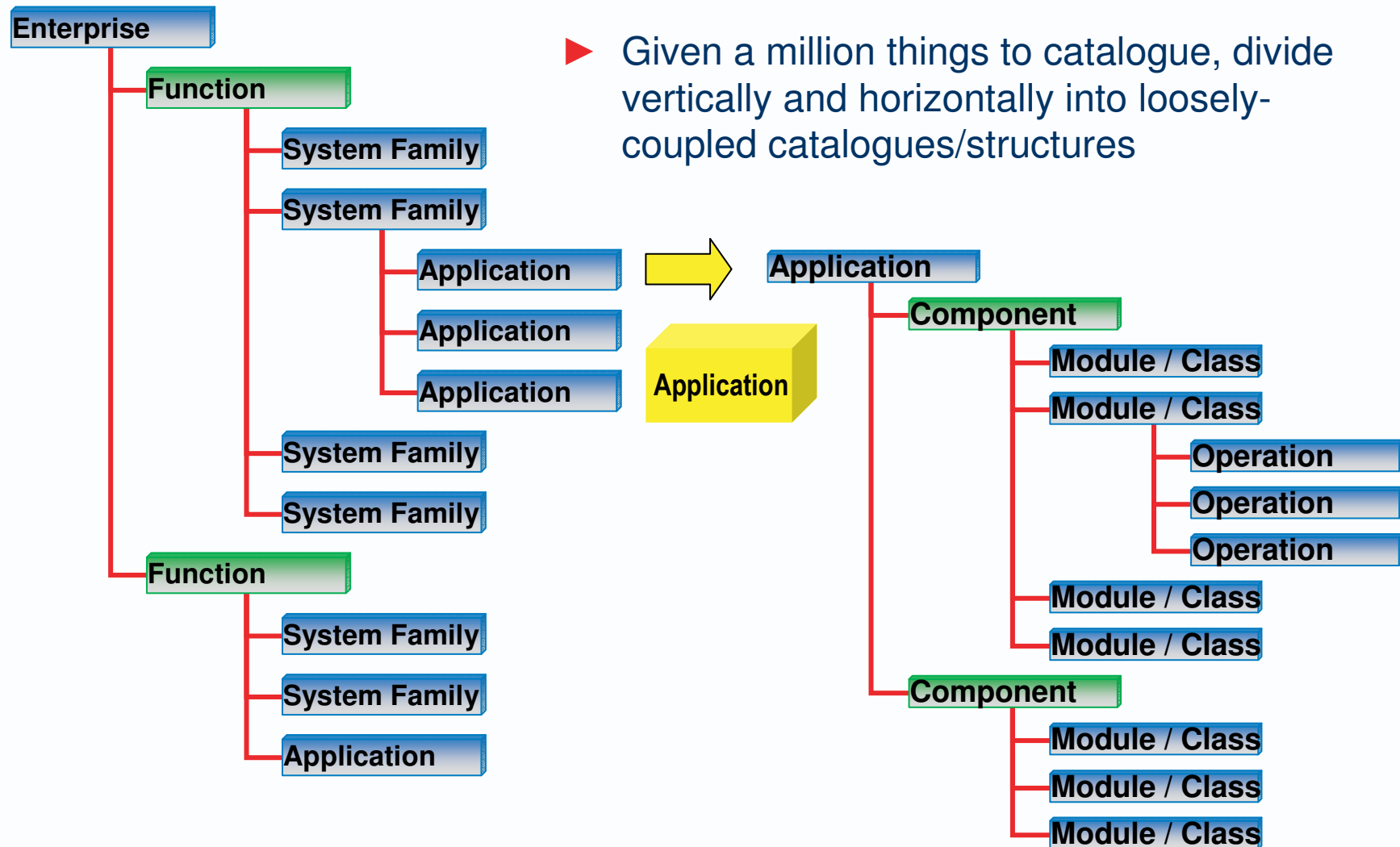
4 levels of decomposition are usually enough



- ▶ You'll want to decompose a structure to whatever level of granularity is useful and maintainable.
- ▶ Note however that a structure with four levels is as deep as most of us can manage.
- ▶ It is difficult to maintain the integrity of a structure with more than a thousand nodes
- ▶ And difficult to avoid or manage duplication of lower level entries

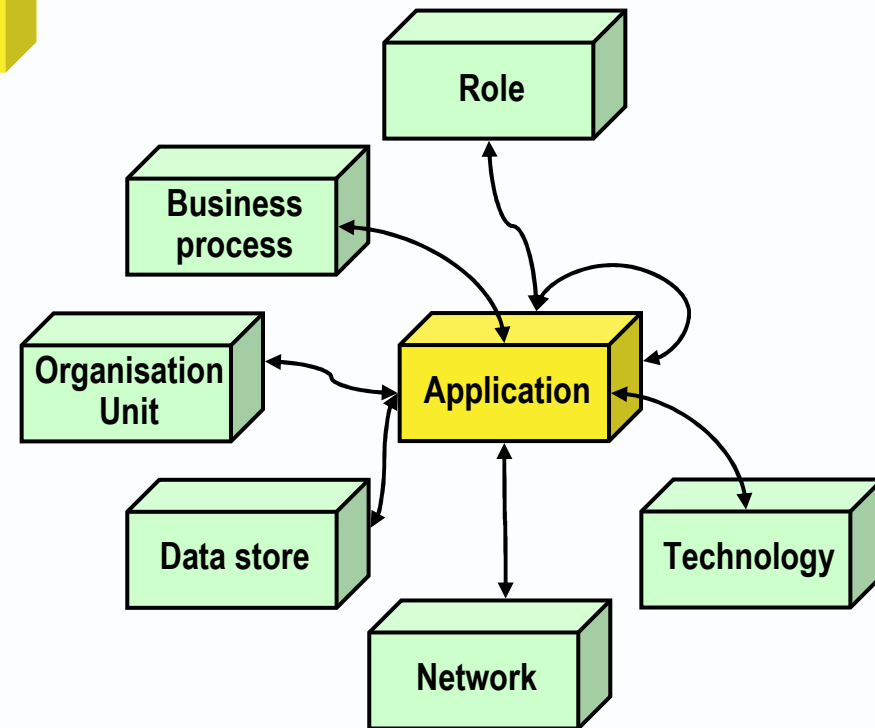
Divide deep structures into distinct catalogues

▶ Given a million things to catalogue, divide vertically and horizontally into loosely-coupled catalogues/structures



Notice some attributes imply relationships

<u>Application</u>	Application
<u>Application name</u>	
Cost to buy or build	
Cost to run and maintain per month	
Value to the enterprise	
Licence/contract expiry dates	
Status	
Class	
Roles: owners, users, maintainers	
Business processes supported	
Organisation units supported	
Applications/components communicated with	
Data stores accessed	
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Hardware/software platform technologies	

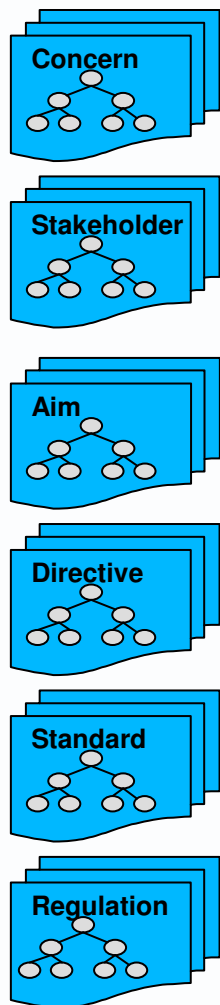


- ▶ Some attributes are “foreign keys” (the primary keys of other Entities)

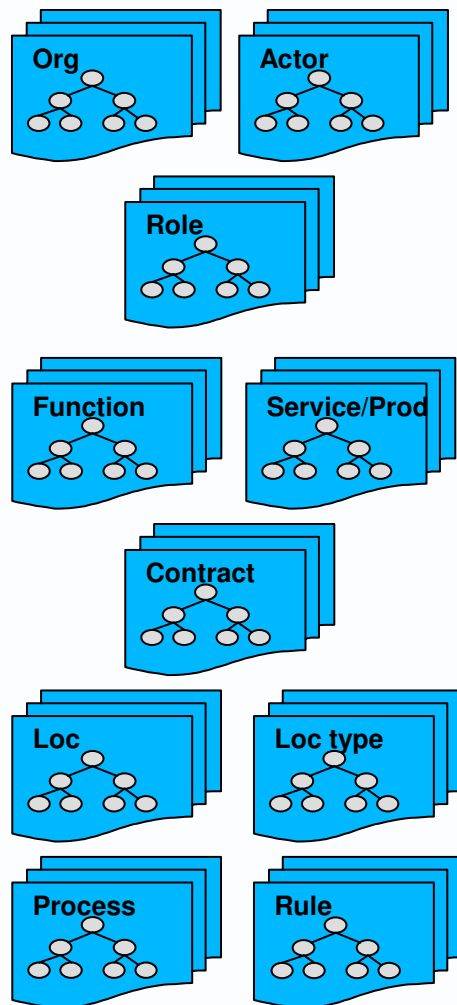


Catalogues in AM

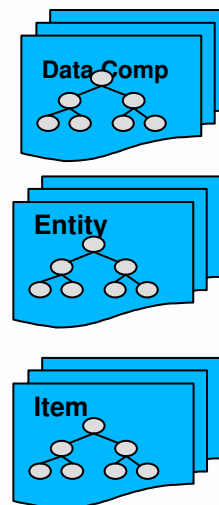
Context



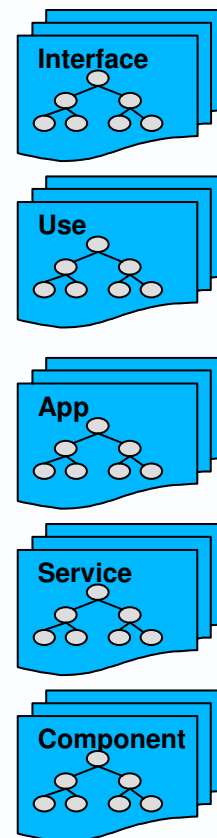
Business



Data

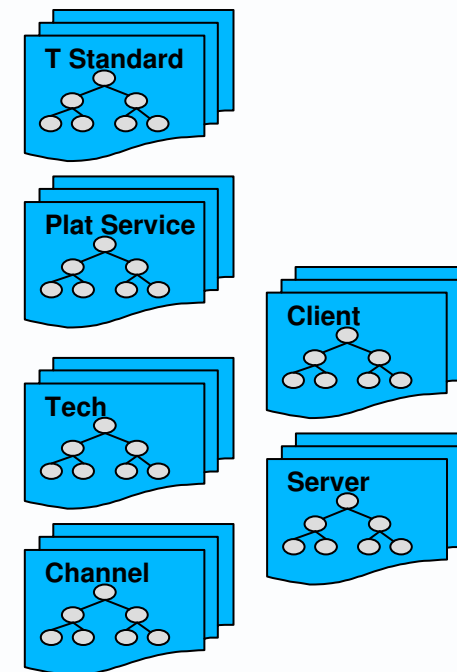


Apps



Software

Infrastructure





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