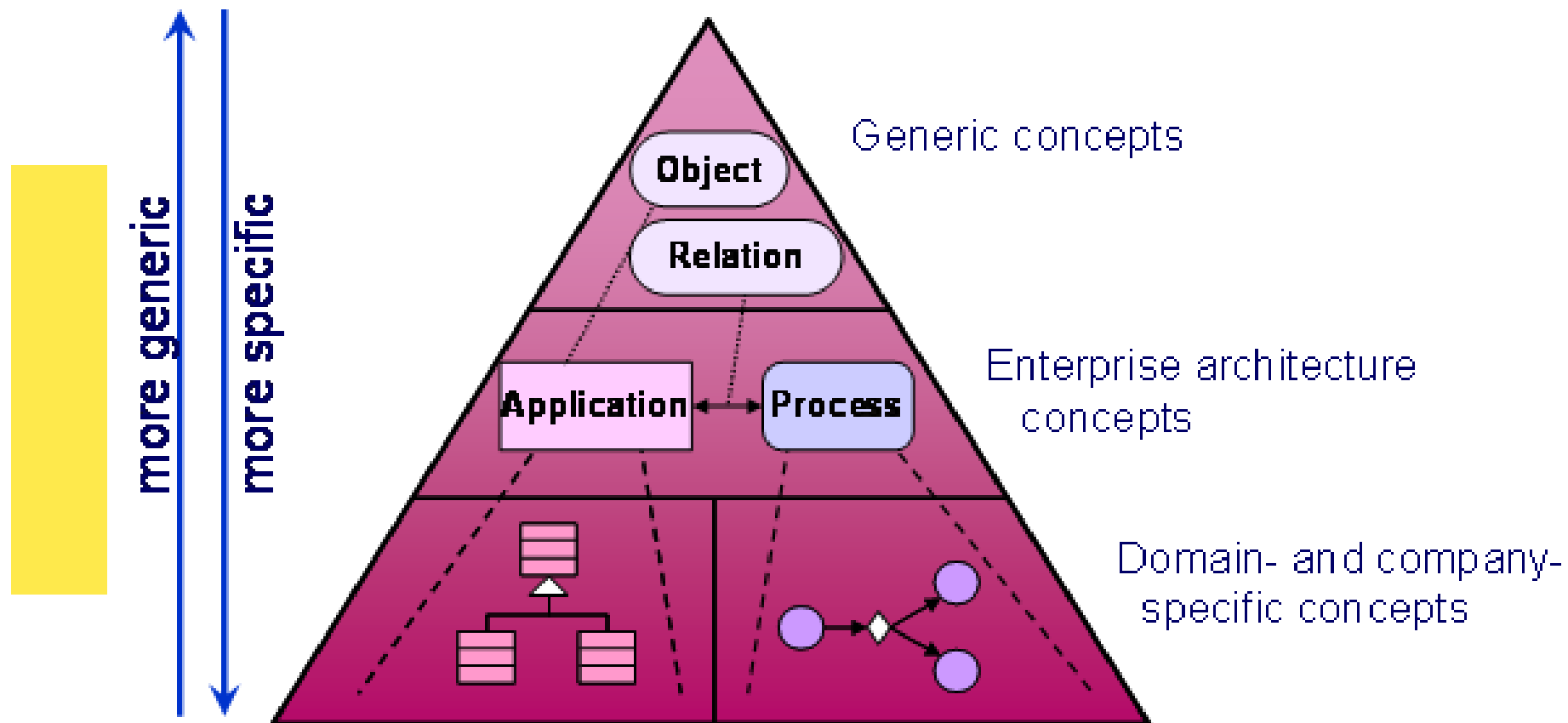


Enterprise Architecture Modelling with ArchiMate

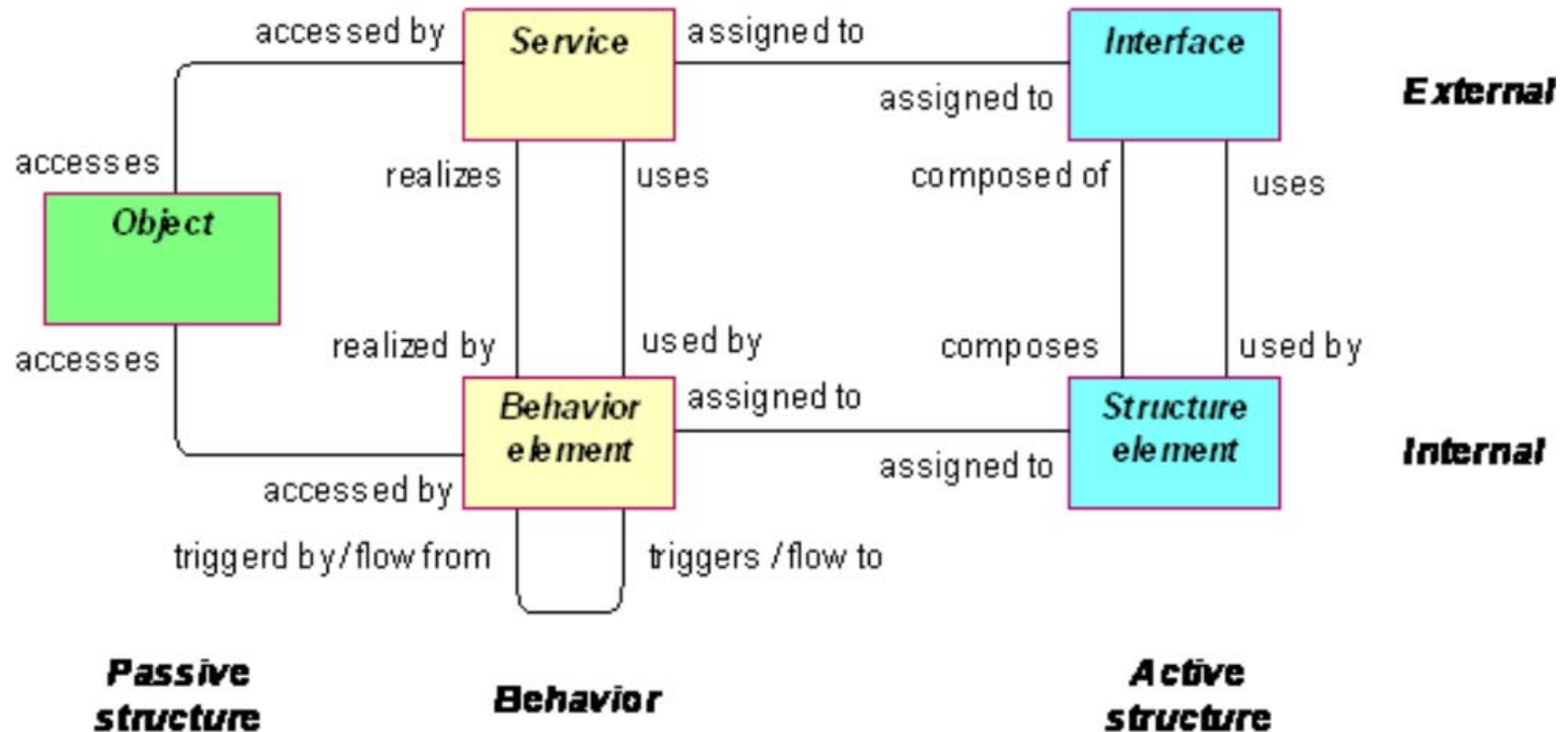


Metamodel Structure of ArchiMate



Source: ArchiMate 1.0 Specification, http://www.opengroup.org/archimate/doc/ts_archimate/

Core Concepts



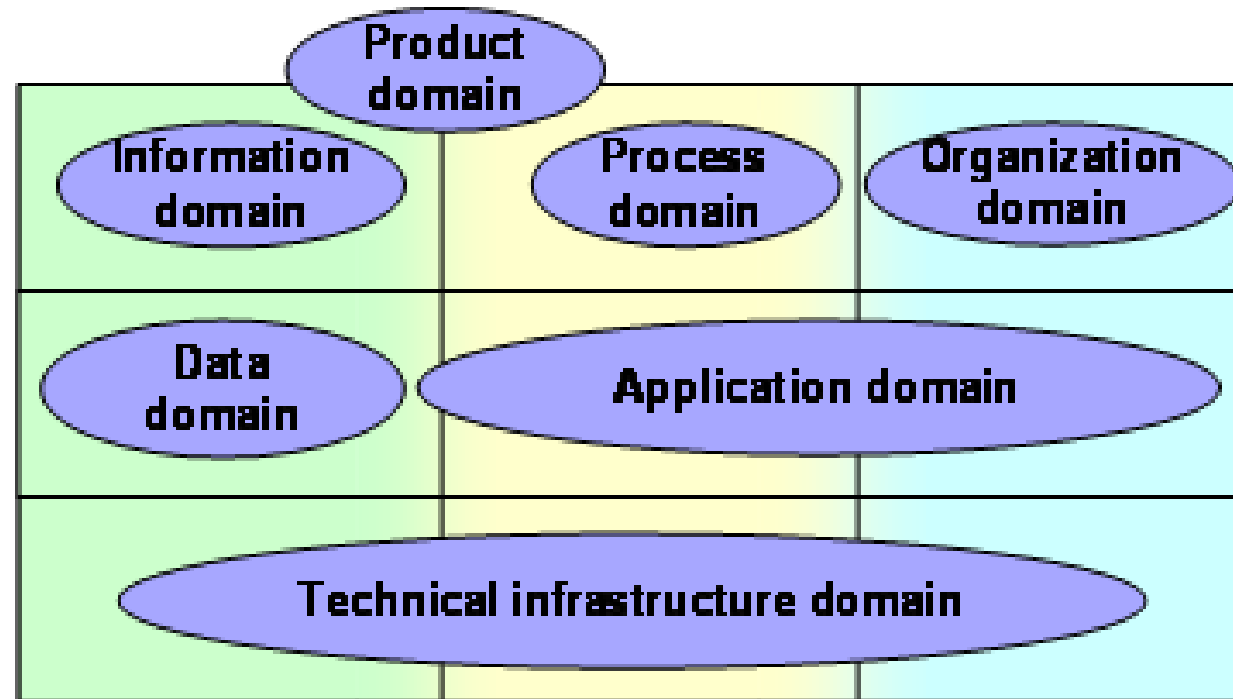
ArchiMate Framework

Environment

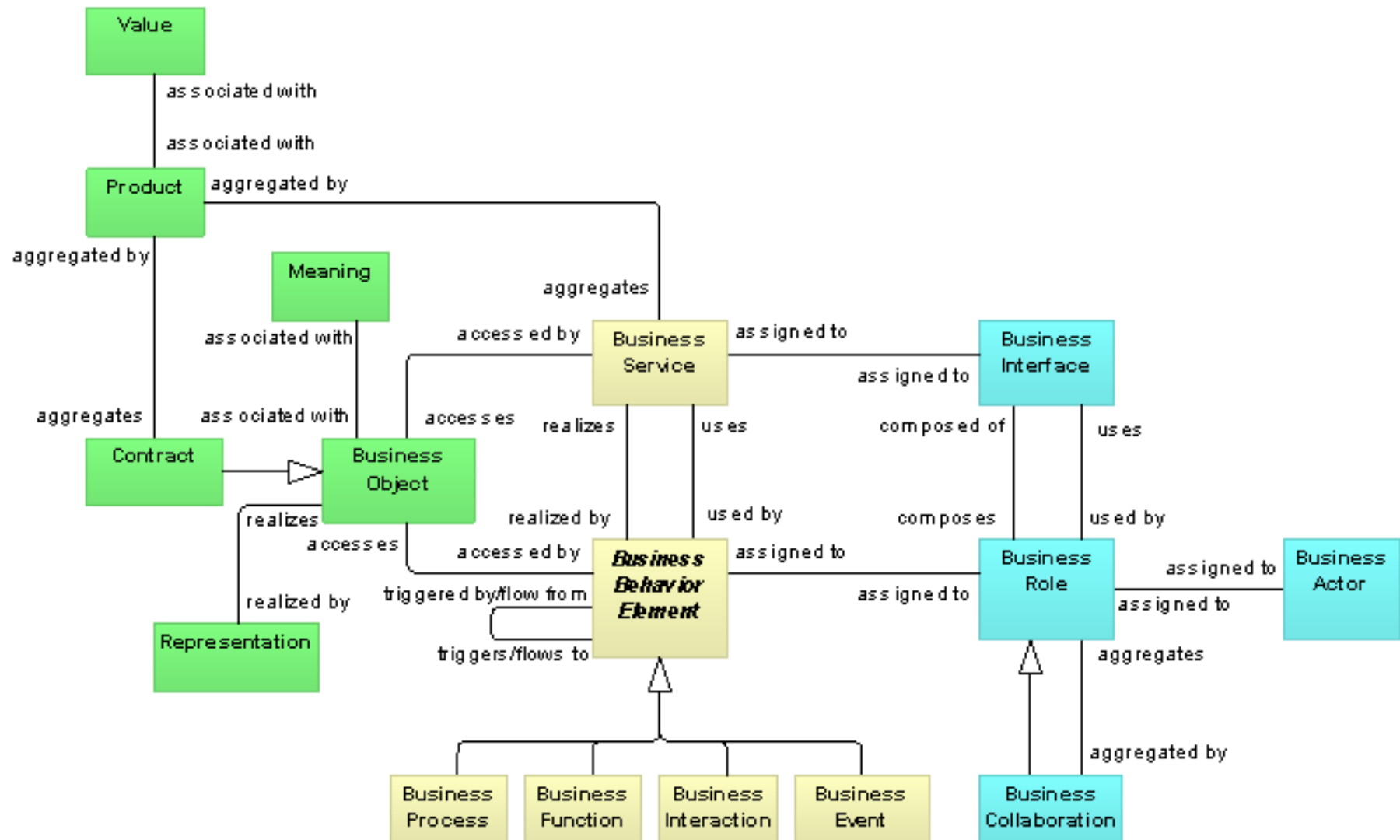
Business

Application

Technology

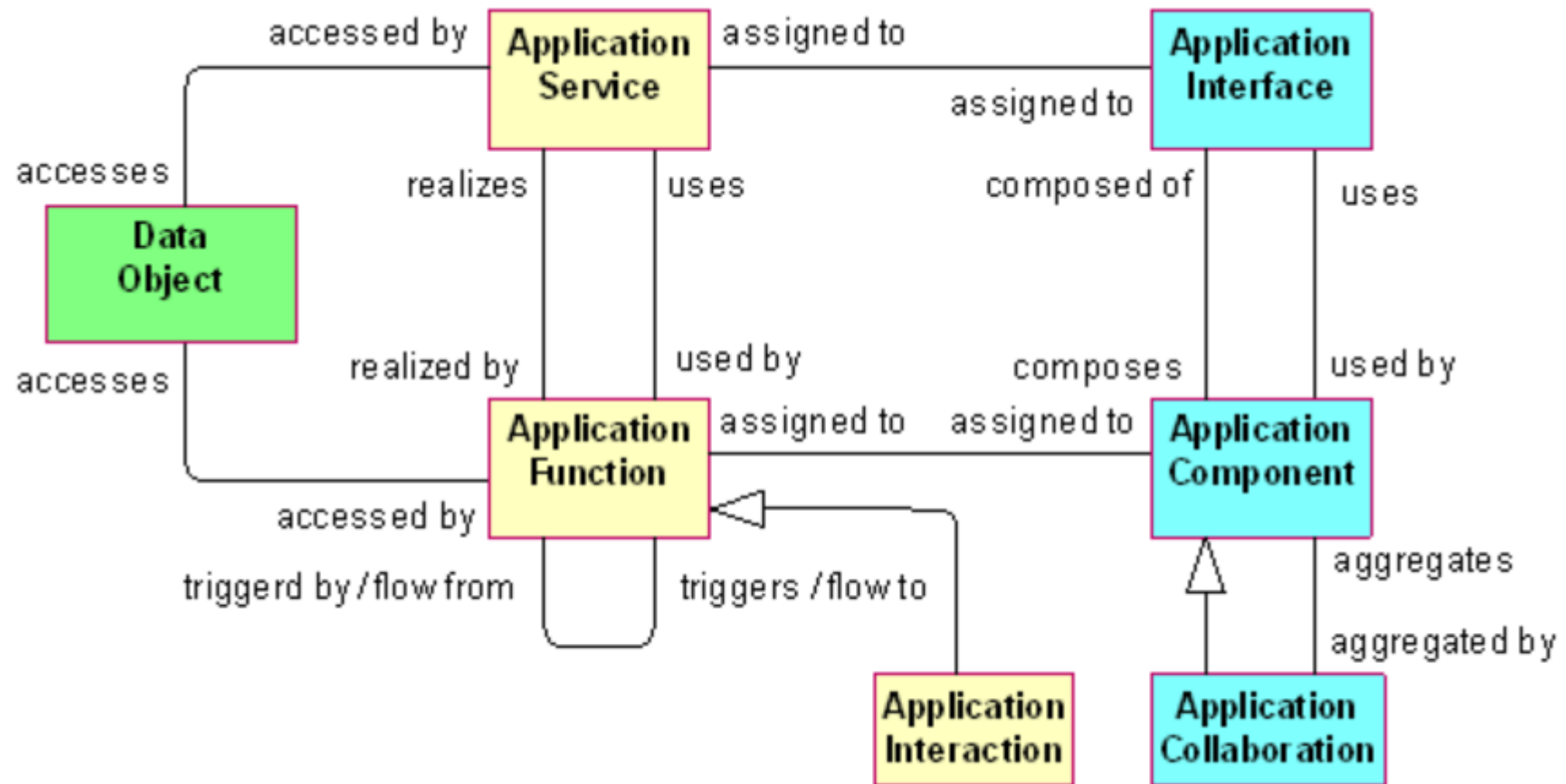


Business Layer Metamodel

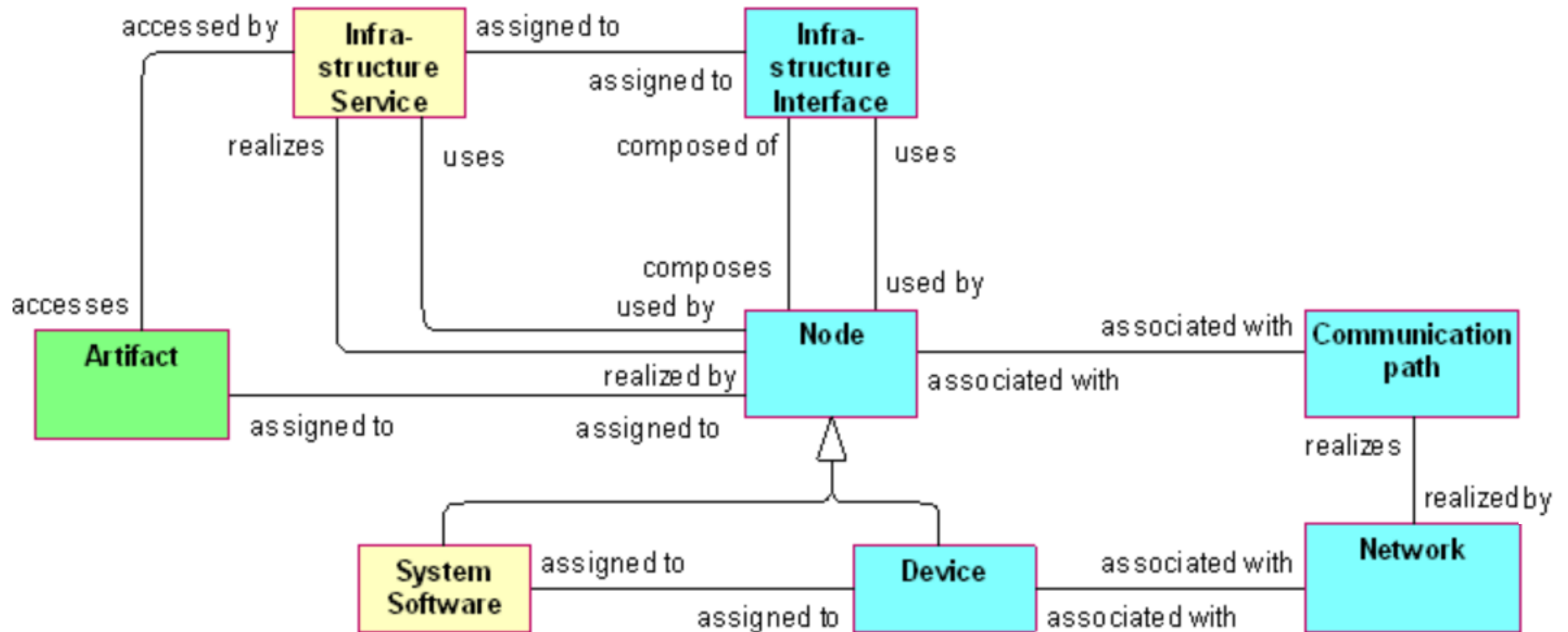


Source: ArchiMate 1.0 Specification, http://www.opengroup.org/archimate/doc/ts_archimate/

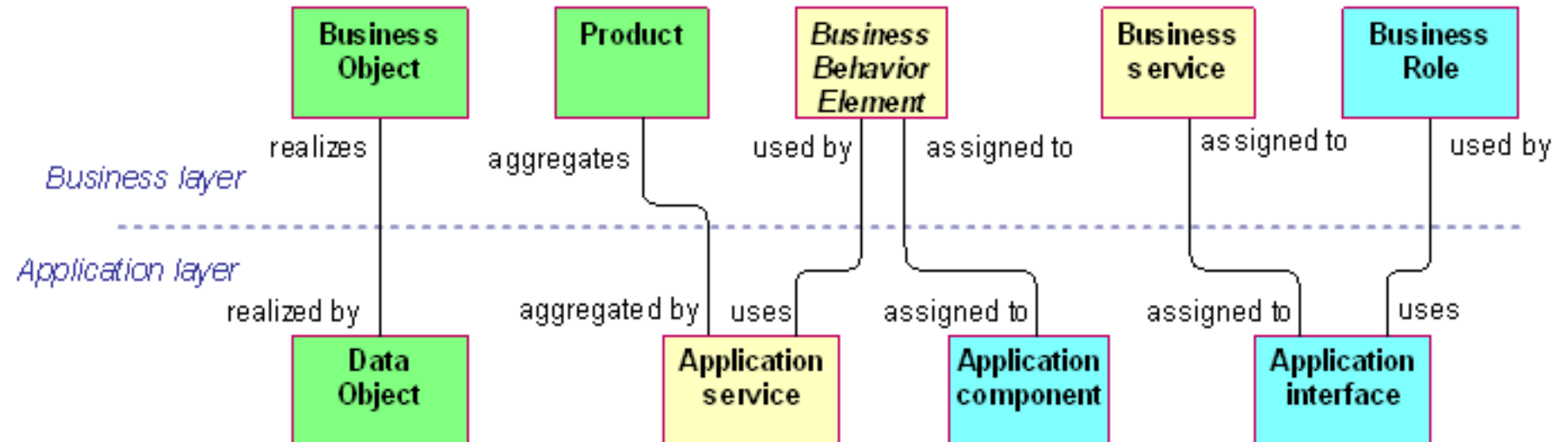
Application Layer Metamodel



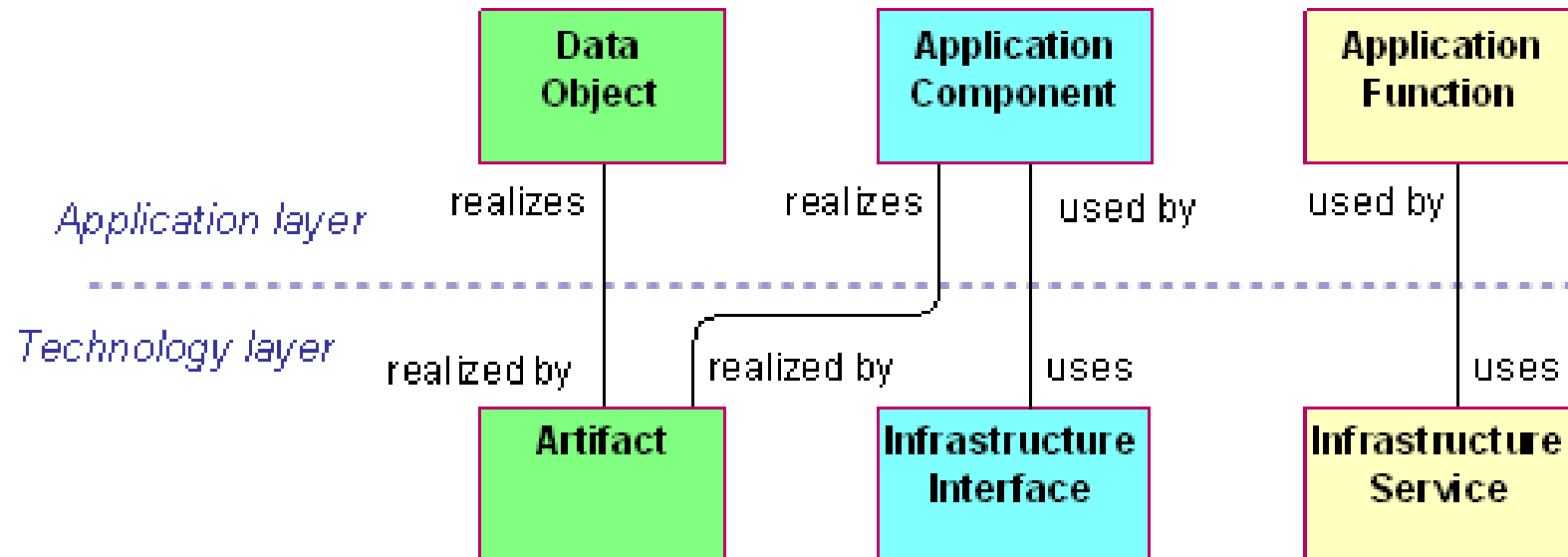
Technology Layer Metamodel





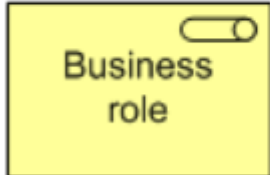

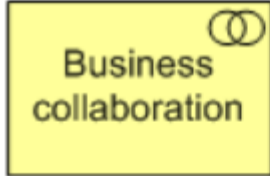
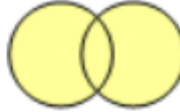


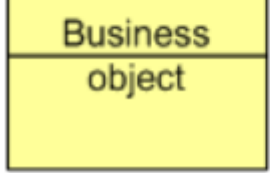
Cross-Layer Dependencies: Business-Application Alignment



Cross-Layer Dependencies: Application-Technology Alignment


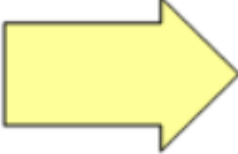

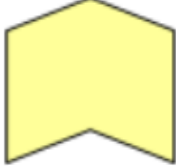


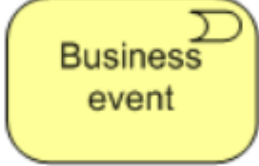





Business Layer Concepts (I)

Concept	Description	Notation
Business actor	An organizational entity that is capable of performing behavior.	 
Business role	A named specific behavior of a business actor participating in a particular context.	 
Business collaboration	A (temporary) configuration of two or more business roles resulting in specific collective behavior in a particular context.	 
Business interface	Declares how a business role can connect with its environment.	 
Business object	A unit of information that has relevance from a business perspective.	




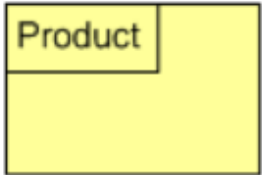
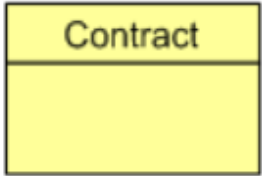
Source: ArchiMate 1.0 Specification, http://www.opengroup.org/archimate/doc/ts_archimate/

Business Layer Concepts (II)

Business process	A unit of internal behavior or collection of causally related units of internal behavior intended to produce a defined set of products and services.		
Business function	A unit of internal behavior that groups behavior according to, for example, required skills, knowledge, resources, etc., and is performed by a single role within the organization.		
Business interaction	A unit of behavior performed as a collaboration of two or more business roles.		
Business event	Something that happens (internally or externally) and influences behavior.		
Business service	An externally visible unit of functionality, which is meaningful to the environment and is provided by a business role.		

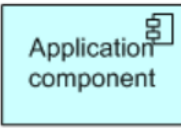
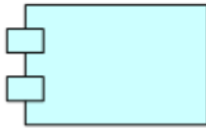

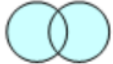



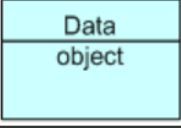





Source: ArchiMate 1.0 Specification, http://www.opengroup.org/archimate/doc/ts_archimate/

Business Layer Concepts (III)

Representation	The perceptible form of the information carried by a business object.	
Meaning	The knowledge or expertise present in the representation of a business object, given a particular context.	
Value	That which makes some party appreciate a service or product, possibly in relation to providing it, but more typically to acquiring it.	
Product	A coherent collection of services, accompanied by a contract/set of agreements, which is offered as a whole to (internal or external) customers.	
Contract	A formal or informal specification of agreement that specifies the rights and obligations associated with a product.	

Source: ArchiMate 1.0 Specification, http://www.opengroup.org/archimate/doc/ts_archimate/

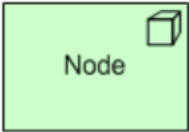
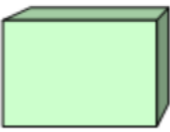
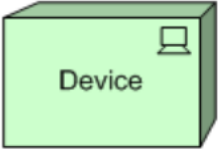



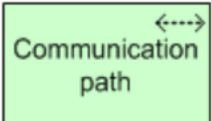

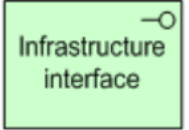

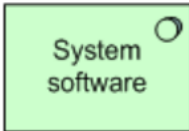

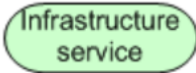


Application Layer Concepts (I)

Concept	Definition	Notation
Application component	A modular, deployable, and replaceable part of a system that encapsulates its contents and exposes its functionality through a set of interfaces.	 
Application collaboration	An application collaboration defines a (temporary) configuration of two or more components that co-operate to jointly perform application interactions.	 
Application interface	An application interface declares how a component can connect with its environment.	  
Data object	A coherent, self-contained piece of information suitable for automated processing.	
Application function	A coherent group of internal behavior of a component.	 
Application interaction	A unit of behavior jointly performed by two or more collaborating components.	 
Application service	An externally visible unit of functionality, provided by one or more components, exposed through well-defined interfaces, and meaningful to the environment.	

Source: ArchiMate 1.0 Specification,
http://www.opengroup.org/archimate/doc/ts_archimate/










Technology Layer Concepts

Concept	Definition	Notation
Node	A computational resource upon which artifacts may be deployed for execution.	 
Device	A physical computational resource upon which artifacts may be deployed for execution.	 
Network	A physical communication medium between two or more devices.	 
Communication path	A link between two or more nodes, through which these nodes can exchange information.	 
Infrastructure interface	A point of access where the functionality offered by a node can be accessed by other nodes and application components.	 
System software	A software environment for specific types of components and objects that are deployed on it in the form of artifacts.	 
Infrastructure service	An externally visible unit of functionality, provided by one or more nodes, exposed through well-defined interfaces, and meaningful to the environment.	
Artifact	A physical piece of information that is used or produced in a software development process, or by deployment and operation of a system.	 



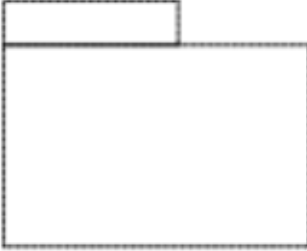

Source: ArchiMate 1.0 Specification,
http://www.opengroup.org/archimate/doc/ts_archimate/



Relationships

Structural Relationships		Notation
Association	Association models a relationship between objects that is not covered by another, more specific relationship.	
Access	The access relationship models the access of behavioral concepts to business or data objects.	
Used by	The used by relationship models the use of services by processes, functions, or interactions and the access to interfaces by roles, components, or collaborations.	
Realization	The realization relationship links a logical entity with a more concrete entity that realizes it.	
Assignment	The assignment relationship links units of behavior with active elements (e.g., roles, components) that perform them, or roles with actors that fulfill them.	
Aggregation	The aggregation relationship indicates that an object groups a number of other objects.	
Composition	The composition relationship indicates that an object consists of a number of other objects.	

Relationships (II)

Dynamic Relationships		Notation
Flow	The flow relationship describes the exchange or transfer of, for example, information or value between processes, function, interactions, and events.	
Triggering	The triggering relationship describes the temporal or causal relations between processes, functions, interactions, and events.	
Other Relationships		Notation
Grouping	The grouping relationship indicates that objects, of the same type or different types, belong together based on some common characteristic.	
Junction	A junction is used to connect relationships of the same type.	
Specialization	The specialization relationship indicates that an object is a specialization of another object.	