



ArchMate 3 - Motivation and Strategy

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A Story: Meditation

A guru held an evening meditation with his disciples daily. When the domestic cat one day ran into the meditation room and disturbed the meditation, he ordered, that the cat shall be bound outside during the meditation. So one could meditate undisturbed again. But the time passed and the guru died. His successor observed strictly the tradition that during the evening meditation outside »a cat« must be tied up. When the cat finally died, too..

...a new cat was acquired to be able to be tied up during the evening meditation.



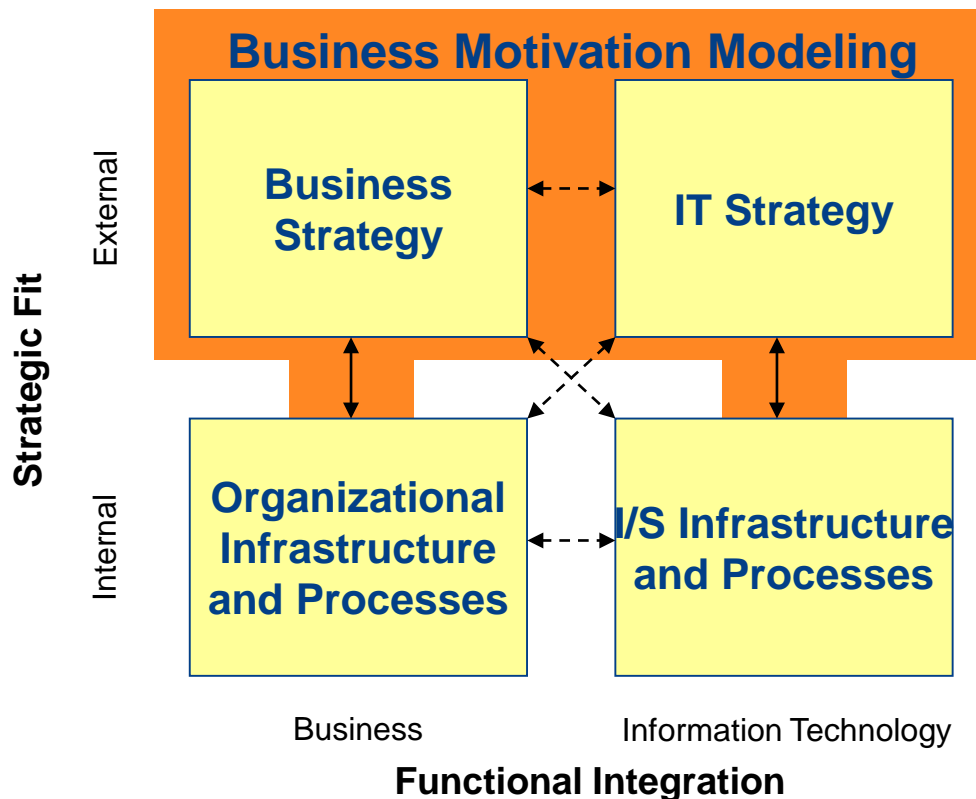
Translated from: Peter Knauer (2002). Handlungsnetze – Über das Grundprinzip der Ethik. Frankfurt

Motivation Modeling supports Traceability

- Business Motivation modeling makes the reasons for decisions explicit.
- Business Motivation Model supports traceability:
 - ◆ show *why* an enterprise does what it does in the way it does it.
- If we know the reasons for decisions, we can assess *what can be changed* and *what should not be changed*
 - ◆ not to change parts of the architecture which are essential
 - ◆ not to keep elements of the architecture that are not useful anymore

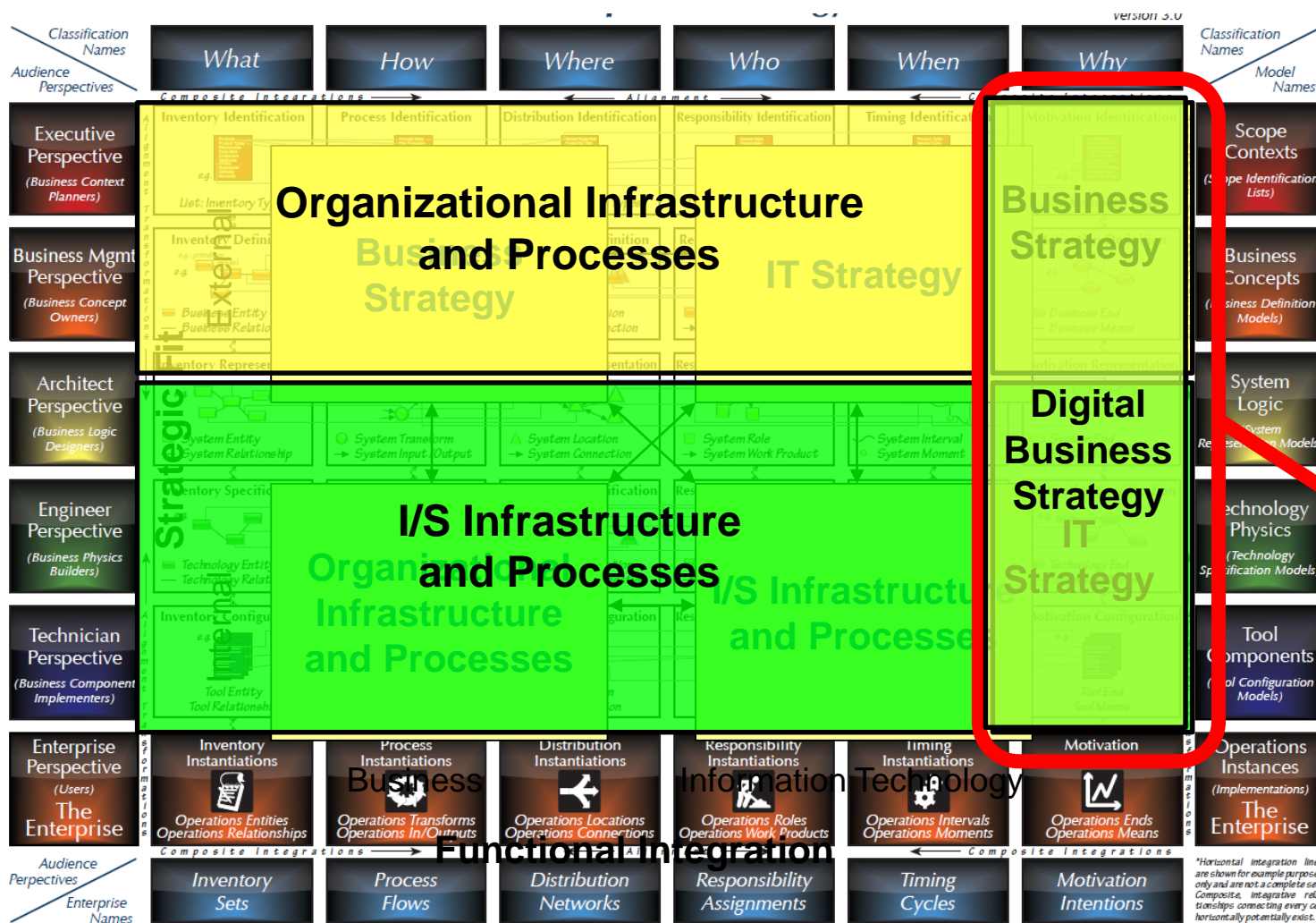
Motivation Modeling and Strategic Alignment

- The Motivation Modeling represents the strategic layer of the Strategic Alignment Model



(Hendersen & Venkatraman 1993)

Business Motivation Model corresponds to WHY



Business Motivation Modeling

Motivation

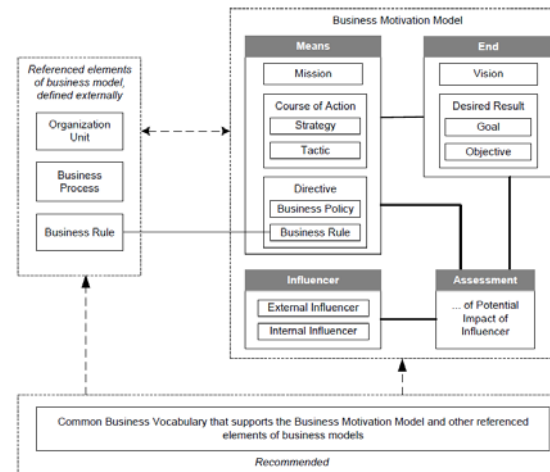
- **Motivation:** When an enterprise executes a business process or applies a business rule, it should be able to say **why**.
- Much of the motivation for what an enterprise does is based on people in the enterprise deciding what is best for it:
 - ◆ what are the **goals** and
 - ◆ what are the **strategies** to achieve them
- The enterprise should be able to say
 - ◆ who decided
 - ◆ on what **assessments**
 - ◆ of what **drives** or **influences**.

Business Motivation Modeling for Transformation Projects

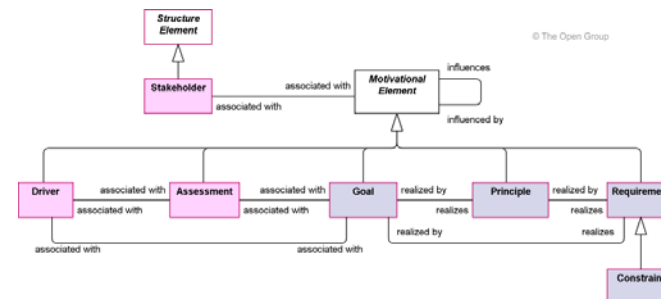
- A Business Motivation Model specifies
 - ◆ goals to be achieved by the project
 - ◆ strategies how to achieve the goals
 - ◆ on what influencers and assessments is the project based
- Business Motivation modeling supports consistency in decision making between different projects, e.g.
 - ◆ not changing elements that are essential for other projects

Two Approaches for Business Motivation Modeling

■ OMG Business Motivation Model



■ ArchiMate Motivation Extension





Archimate Motivation and Strategy

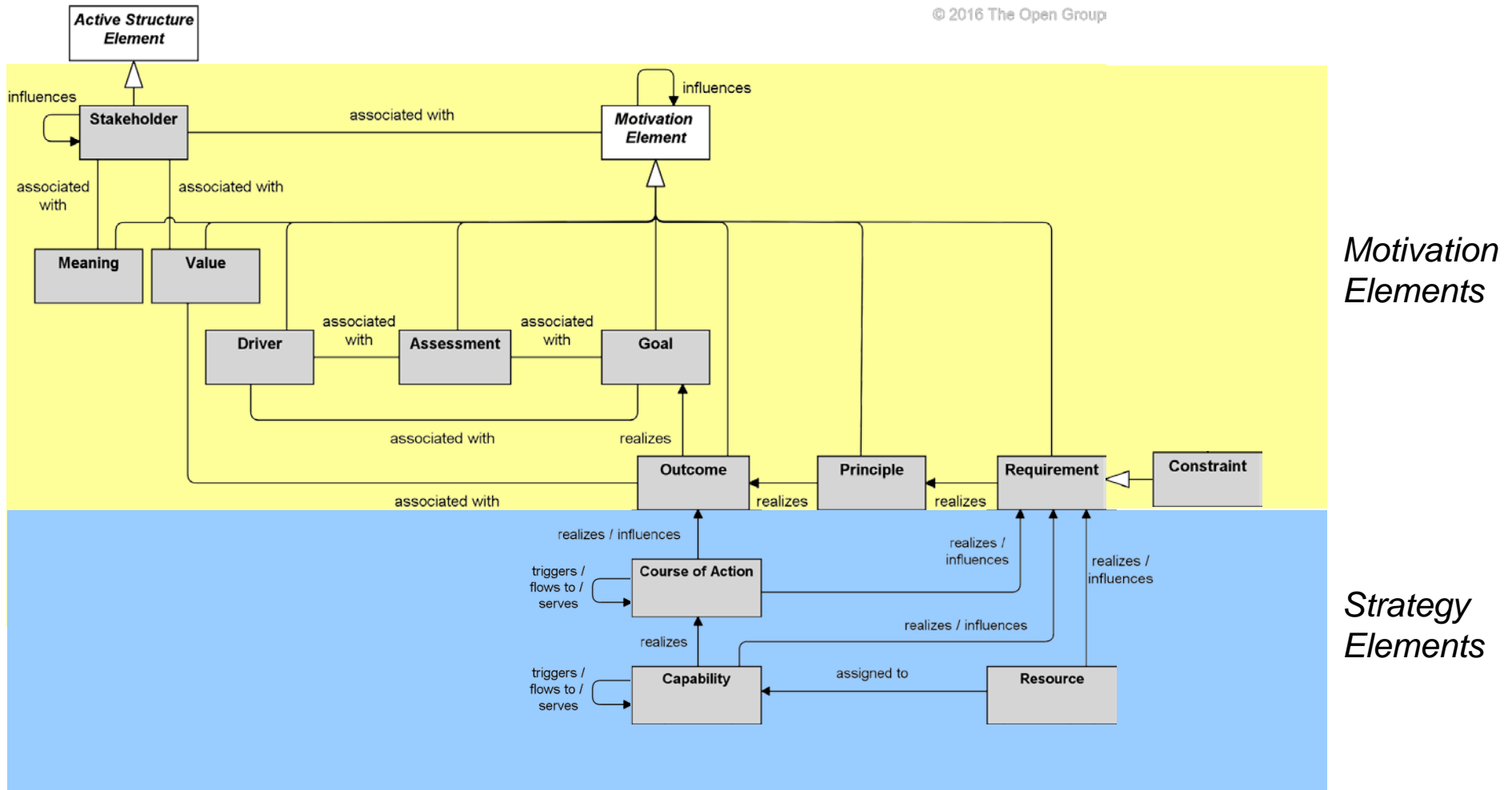
Motivation and Strategy in ArchiMate

The Motivation aspect and the Strategy layer together correspond to what is covered by the OMG Business Motivation Model

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	Passive structure	Behavior	Active structure	Motivation
Strategy				
Business				
Application				
Technology				
Physical				
Implementation & Migration				

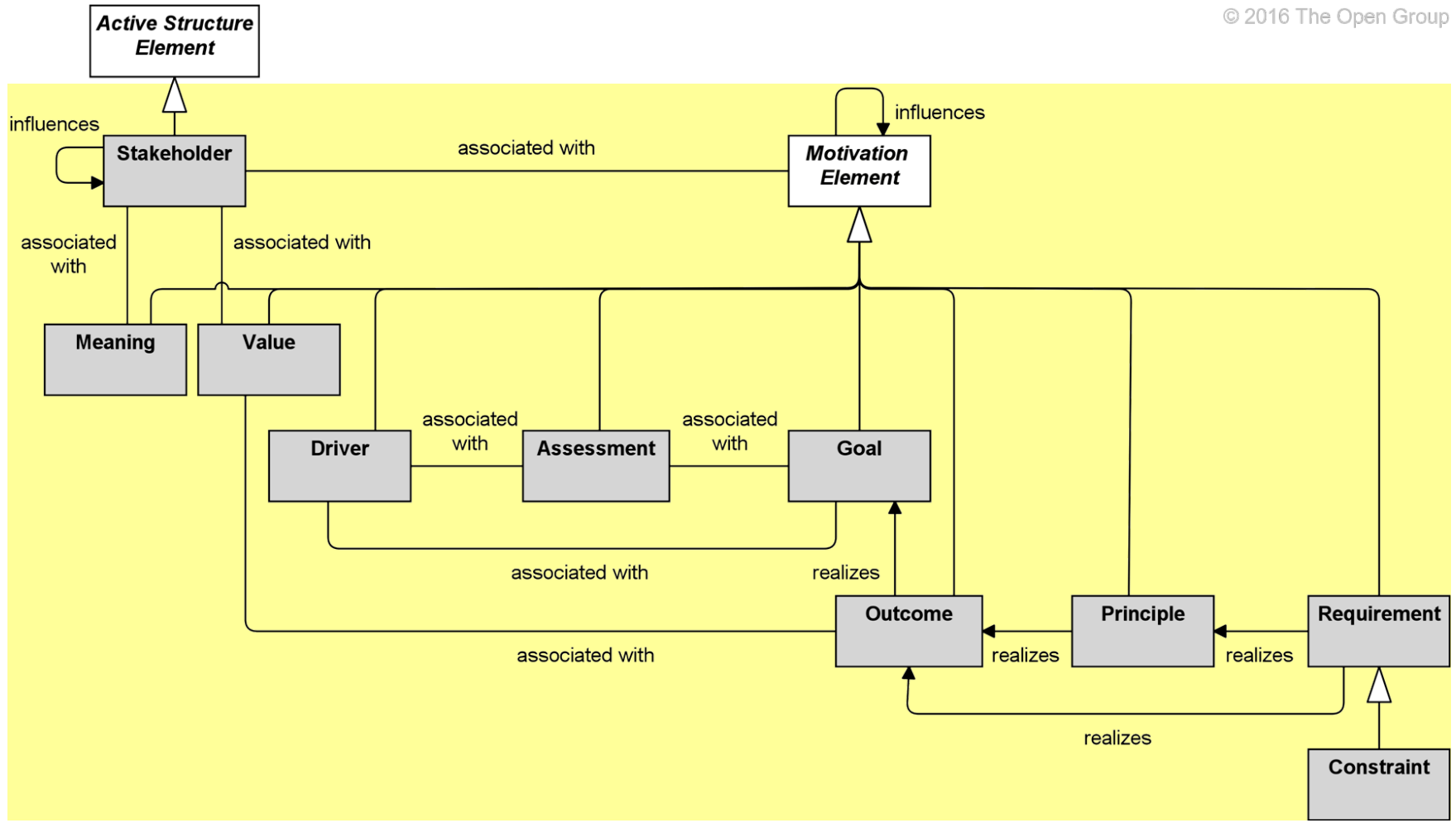
Motivation and Strategy Elements Metamodel





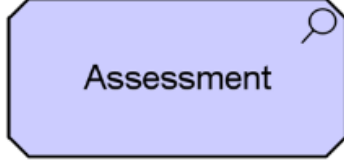
Motivation Elements

Motivation Elements Metamodel

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Motivation Elements (I) – Drivers and Assessments

Element	Definition	Notation
Stakeholder	The role of an individual, team, or organization (or classes thereof) that represents their interests in the outcome of the architecture.	
Driver	An external or internal condition that motivates an organization to define its goals and implement the changes necessary to achieve them.	
Assessment	The result of an analysis of the state of affairs of the enterprise with respect to some driver.	

Drivers

- Drivers are usually associated with a stakeholder
- Often called “concerns”
- Examples
 - ◆ Internal drivers: Customer satisfaction and Profitability
 - ◆ External drivers: economic changes or changing legislation.
- The name of a driver should preferably be a noun.

Representation of Drivers

- The OMG Business Motivation Model has the concept of influencers, which correspond to the Drivers.
- An influencer is anything that can have an effect on an organization, anything that can potentially hinder it or assist it.
- In practice we model only the influencers that affect the goals, outcomes and courses of action of the enterprise.
- Influencers are neither good nor bad
 - ◆ They only become good or bad if they are judged as opportunities, threats, strengths or weaknesses (see assessments)
- Influencers should be stated in a neutral, factual manner.
- I suggest to represent Drivers as facts (not as nouns)

(Bridgeland & Zahavi 2009, p. 52f)

Examples of Influencers for Cora Group

Influencers

A Fast-food Restaurant has opened close to Portia Restaurant

Innovative Restaurant Shortage in Western Suburbs

New Anti-smoking Regulation

Cora has to expand its business year on year

Managers are generally promoted from within the company

New waiters receive two days introductory training. Further training is informal, on the job.

Small Space

Closing for Events Disappoints some customers

Assessment

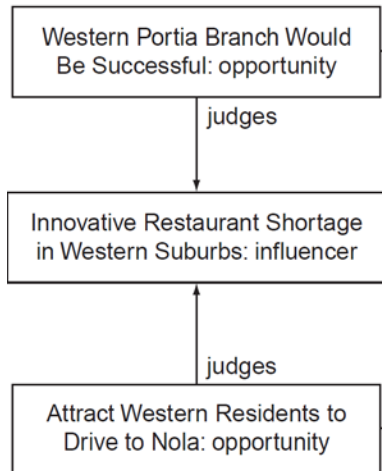
- An assessment may reveal strengths, weaknesses, opportunities, or threats for some area of interest.
 - ◆ **External driver** can be assessed as
 - *Opportunity* – favorable (positive)
 - *Thread* – unfavorable (negative)
 - ◆ **Internal driver** can be assessed as
 - *Strength* – favorable (positive)
 - *Weakness* – unfavorable (negative)

- Strengths and opportunities may be translated directly into goals
- Weaknesses and threats can be considered as problems that need to be addressed by goals that “negate” the weaknesses and threats

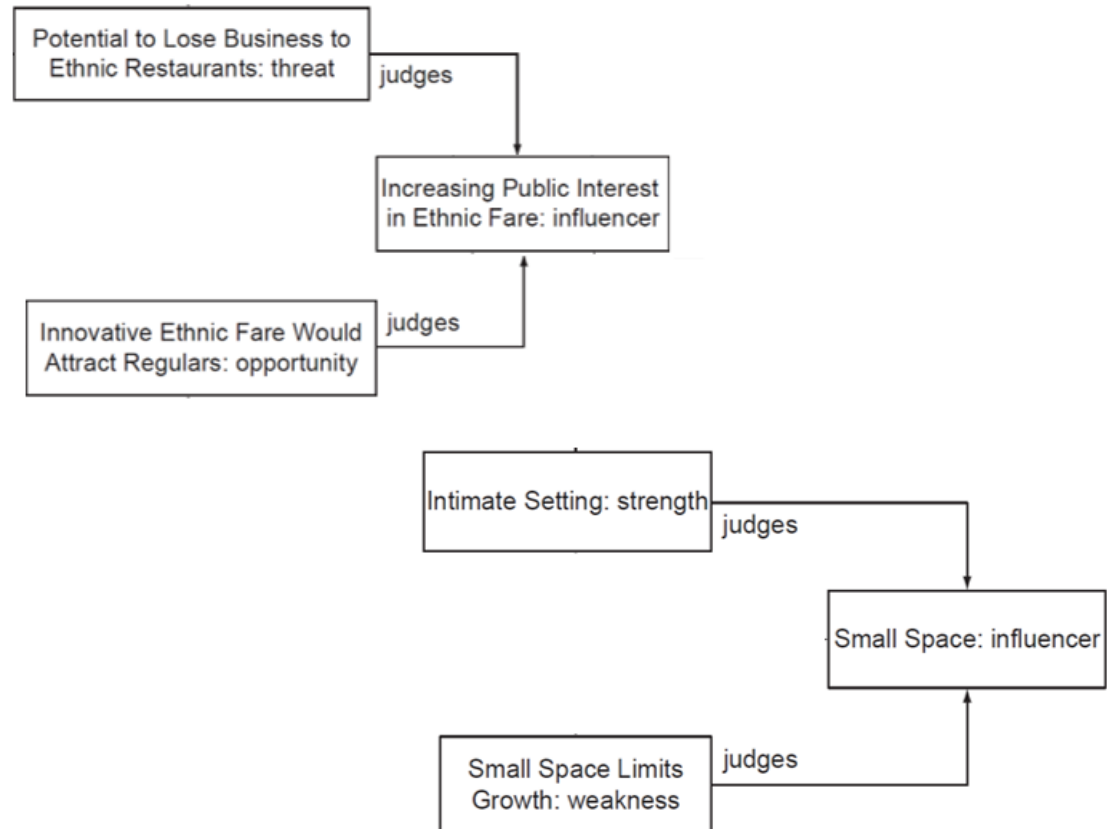
	Internal	External
Positive	Strength	Opportunity
Negative	Weakness	Threat

Assessments of Drivers/Influencers

Examples:

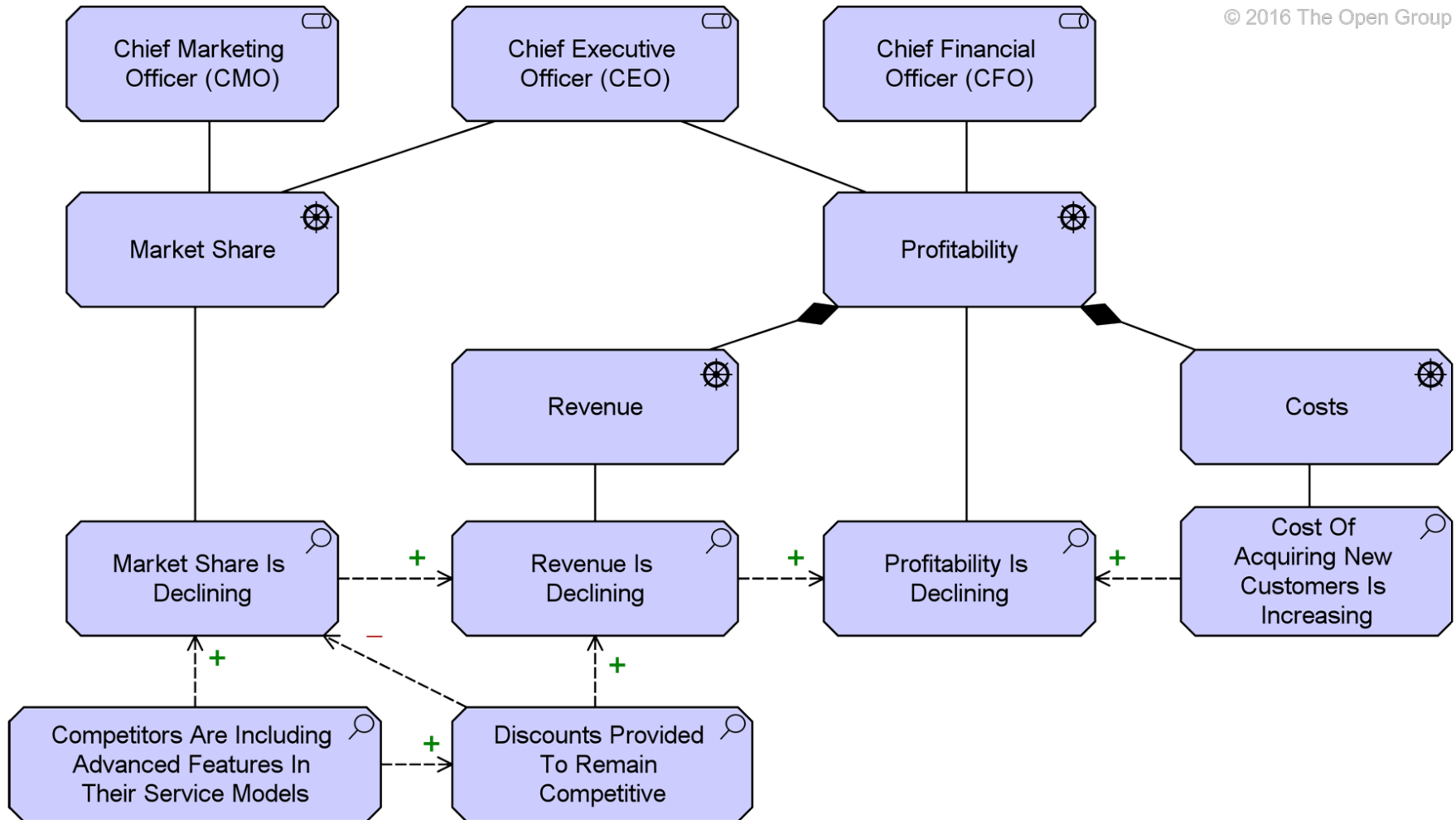


An influencer/driver can be assessed in different ways:


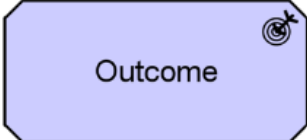







Example: Stakeholders, Drivers, Assessment

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Motivation Elements (II): Goal, Outcome, Principle, Requirement, Constraint

Goal	A high-level statement of intent, direction, or desired end state for an organization and its stakeholders.	
Outcome	An end result that has been achieved.	
Principle	A qualitative statement of intent that should be met by the architecture.	
Requirement	A statement of need that must be met by the architecture.	 
Constraint	A factor that prevents or obstructs the realization of goals.	 

Goals

- Goals are typically used to measure success of an organization
- Examples of Goals:
 - ◆ to increase profit, to reduce waiting times at the helpdesk, or to introduce online portfolio management.
- Goals are generally expressed using qualitative words; e.g., “increase”, “improve”, or “easier”.
- It is very common to associate concrete outcomes with goals

Outcome

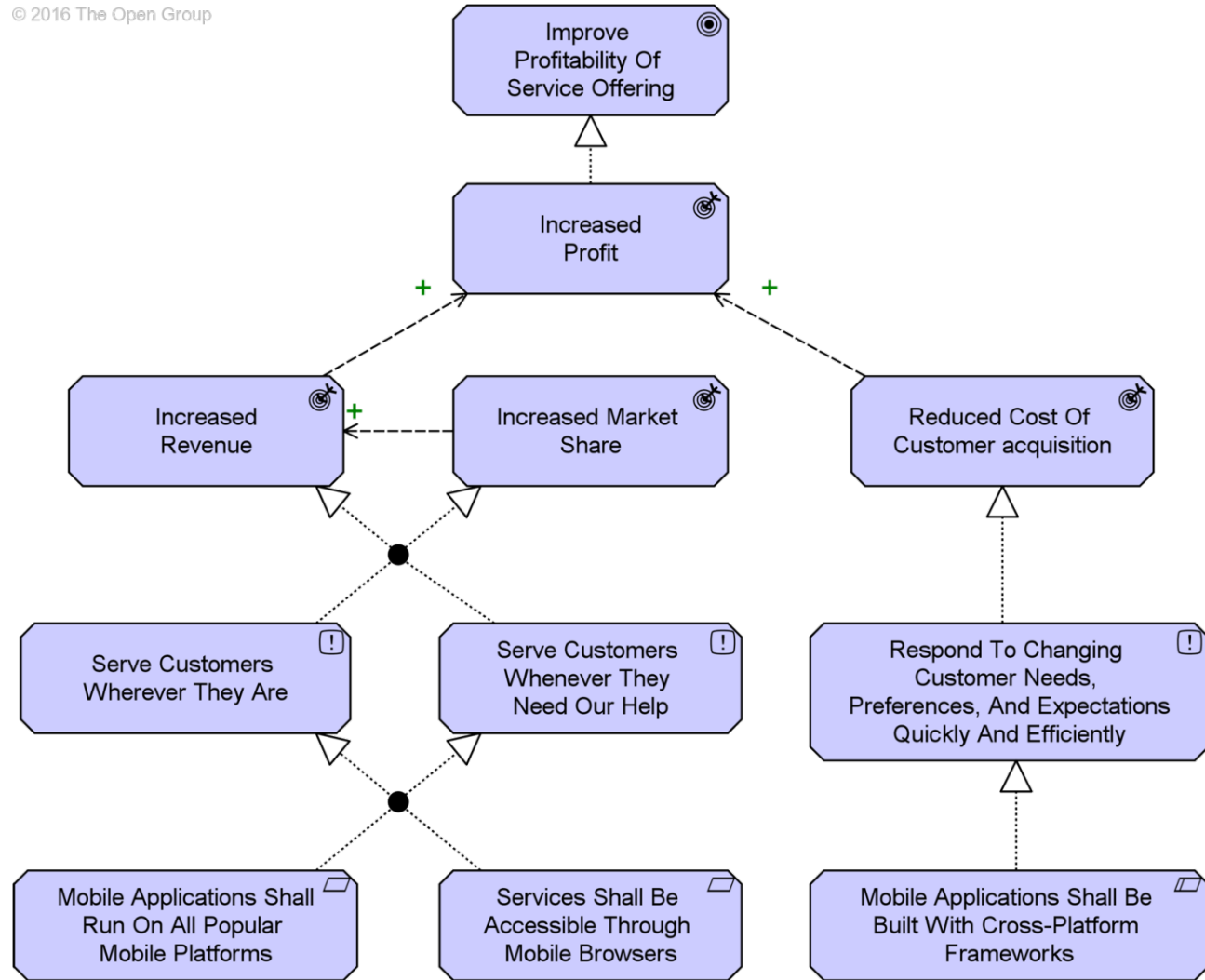
- Outcomes are end results
 - ◆ Goals or requirements are often formulated in terms of outcomes that should be realized.
 - ◆ Capabilities are designed to achieve such outcomes
- Outcomes are tangible, possibly quantitative, and time-related
- Outcome names should consist of a noun identifying the end result followed by a past-tense verb or adjective indicating that the result has been achieved, e.g.
 - ◆ “First-place ranking achieved”
 - ◆ “2015 quarterly profits rose 10% year over year beginning in Q3”

Principles, Requirements, Constraints

- *Principles* are *normative guidelines*. A principle defines a general property that applies to any system in a certain context.
 - ◆ Example: The principle “Data should be stored only once” represents a means to achieve the goal of “Data consistency”.
- Principles are broader in scope and more abstract than requirements.
- A *requirement* defines a property that applies to a specific system.
 - ◆ Example: the requirement “Use a single CRM system” conforms to the aforementioned principle in the context of the management of customer data.
- In contrast to a requirement, a *constraint* does not prescribe some intended functionality, but imposes a restriction on the way a system may be realized

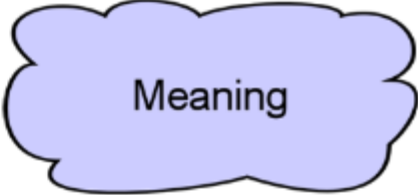
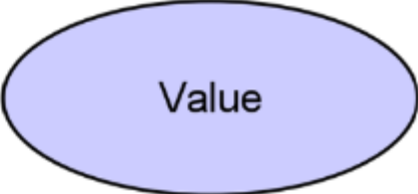
Example: Goal, Outcome, Principle, Requirement, Constraint

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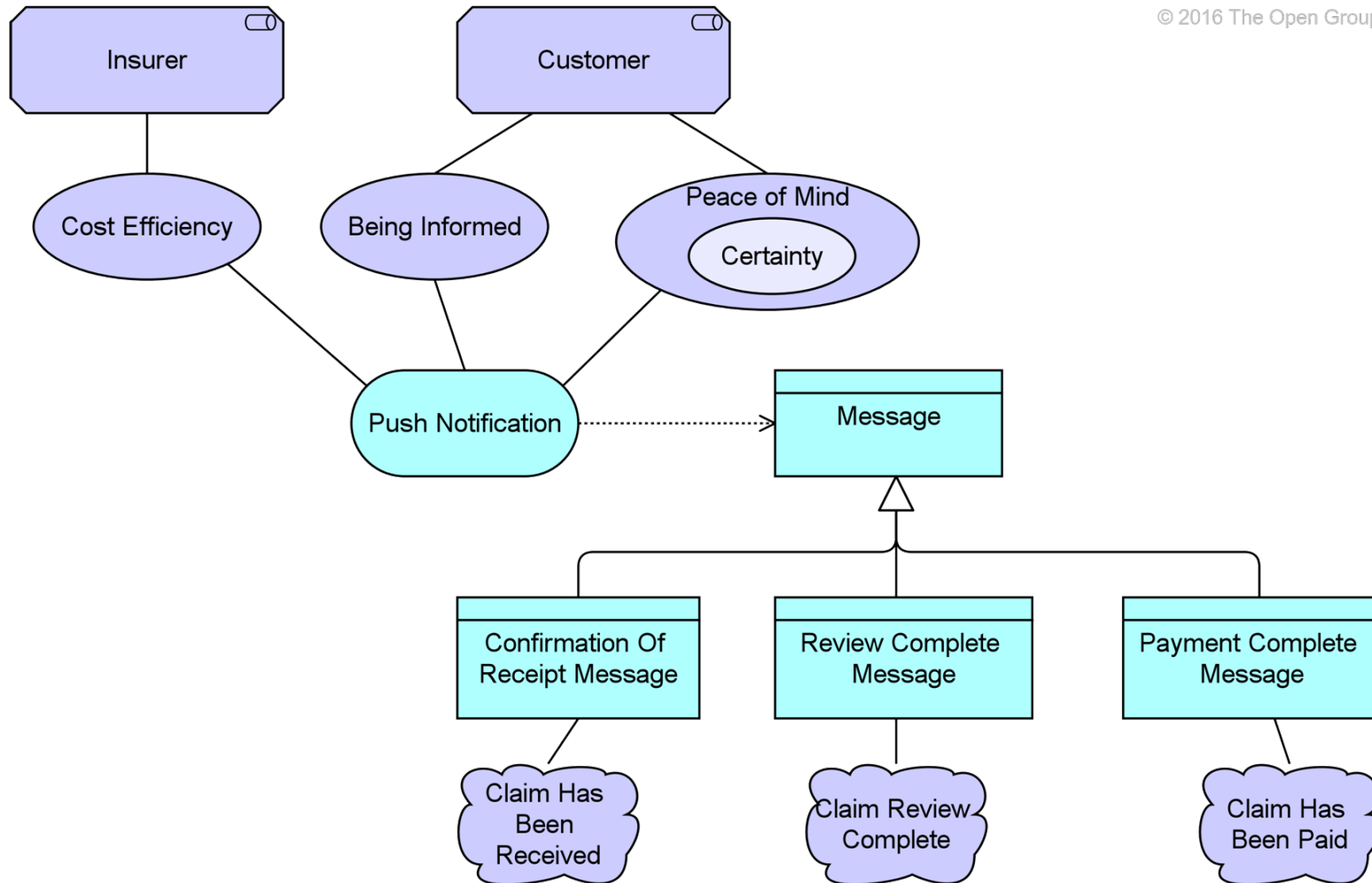
Archimate 3, section 6.3.6

Motivation Elements (III) – Meaning and Value

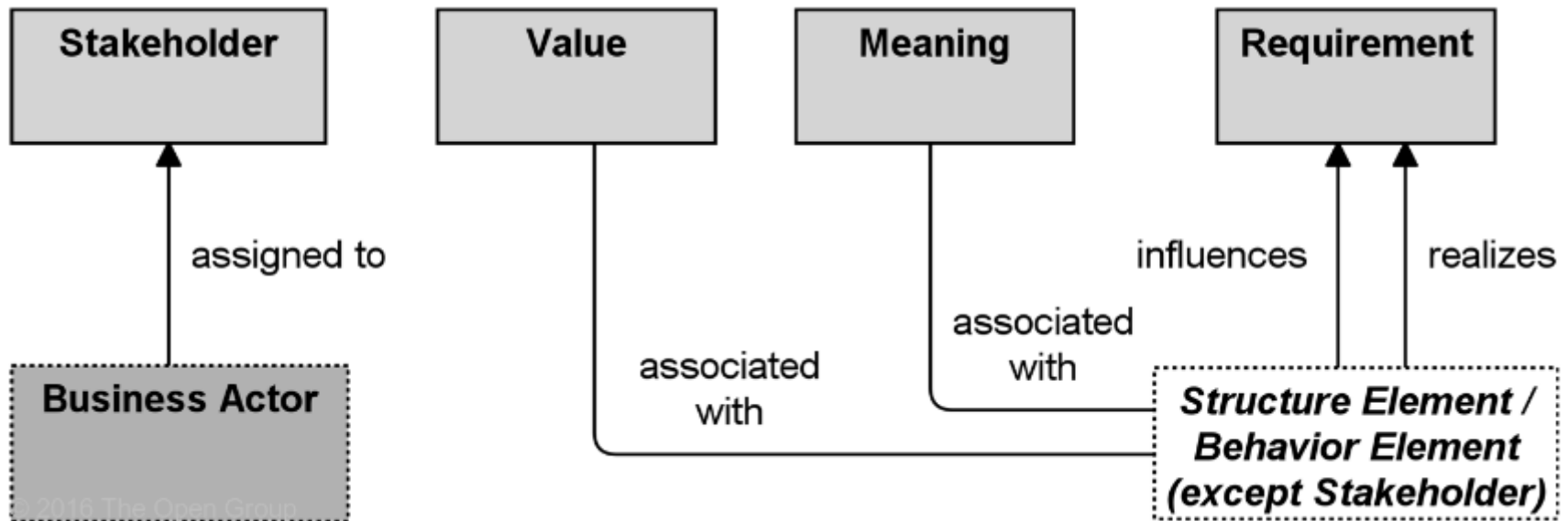
<p>Meaning</p>	<p>The knowledge or expertise present in, or the interpretation given to, a core element in a particular context.</p>	
<p>Value</p>	<p>The relative worth, utility, or importance of a core element or an outcome.</p>	

Example: Meaning and Value

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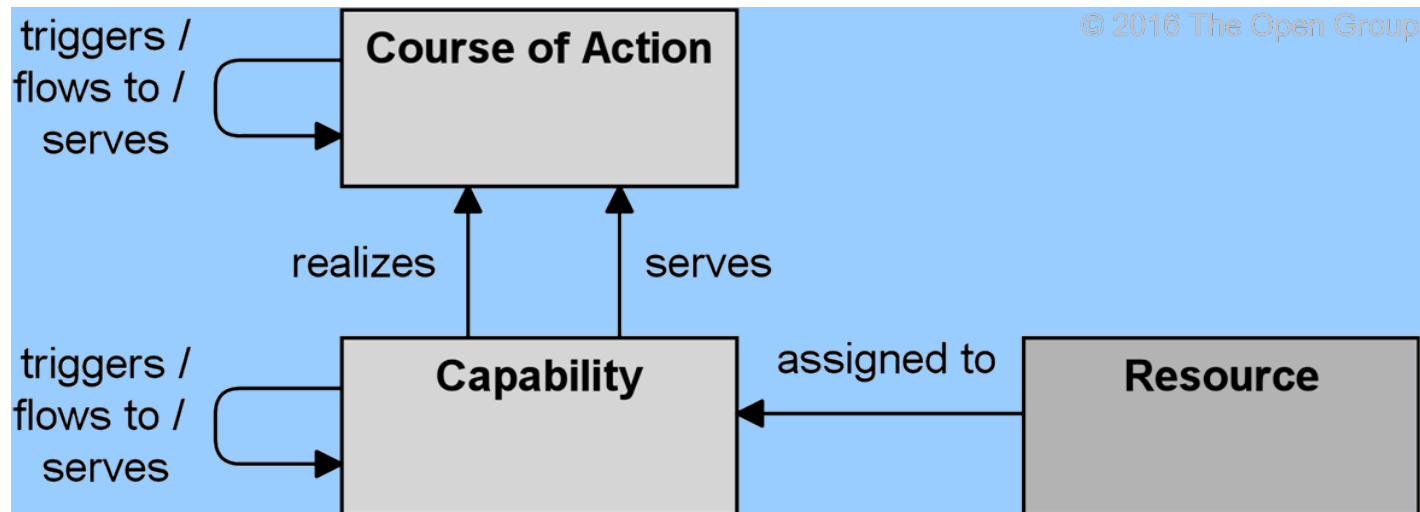


Relationships between Motivation and Core Elements



Strategy Elements

Strategy Elements Metamodel



Capability-Based Planning

- Capability-based planning is a business planning technique that focuses on *business outcomes*.
 - ◆ It is business-driven and business-led
 - ◆ It combines the efforts of all lines of business to achieve the desired capability
- It links ...
 - ◆ *IT vision, architectures and implementation* with
 - ◆ *corporate strategy and line of business plans*


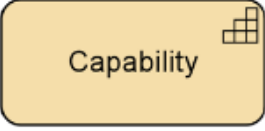
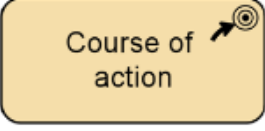
Why are IT Projects not successful?

- Many IT projects are less than successful even though the actual IT implementation was brilliant
 - ◆ associated management tasks (e.g. personnel training) were not satisfactorily addressed by the enterprise architects and planners
 - ◆ IT projects are often described in terms of technical deliverables not as business outcomes
 - difficult for business to appreciate what was being delivered
 - often IT architects lost sight of the ultimate business goal.

Capability-Based Planning as Key for successful Business-IT Alignment

- All of the architectures are *expressed in terms of business outcomes and value* rather than in IT terms.
 - ◆ Example: Setting up a data center is really about consolidating corporate data and providing the related services
- Lead enterprise architects will find themselves
 - ◆ involved *IT architecture tasks* as well as
 - ◆ associated *other management tasks* (business process re-engineering, personnel training, support training etc.)

Strategy Elements

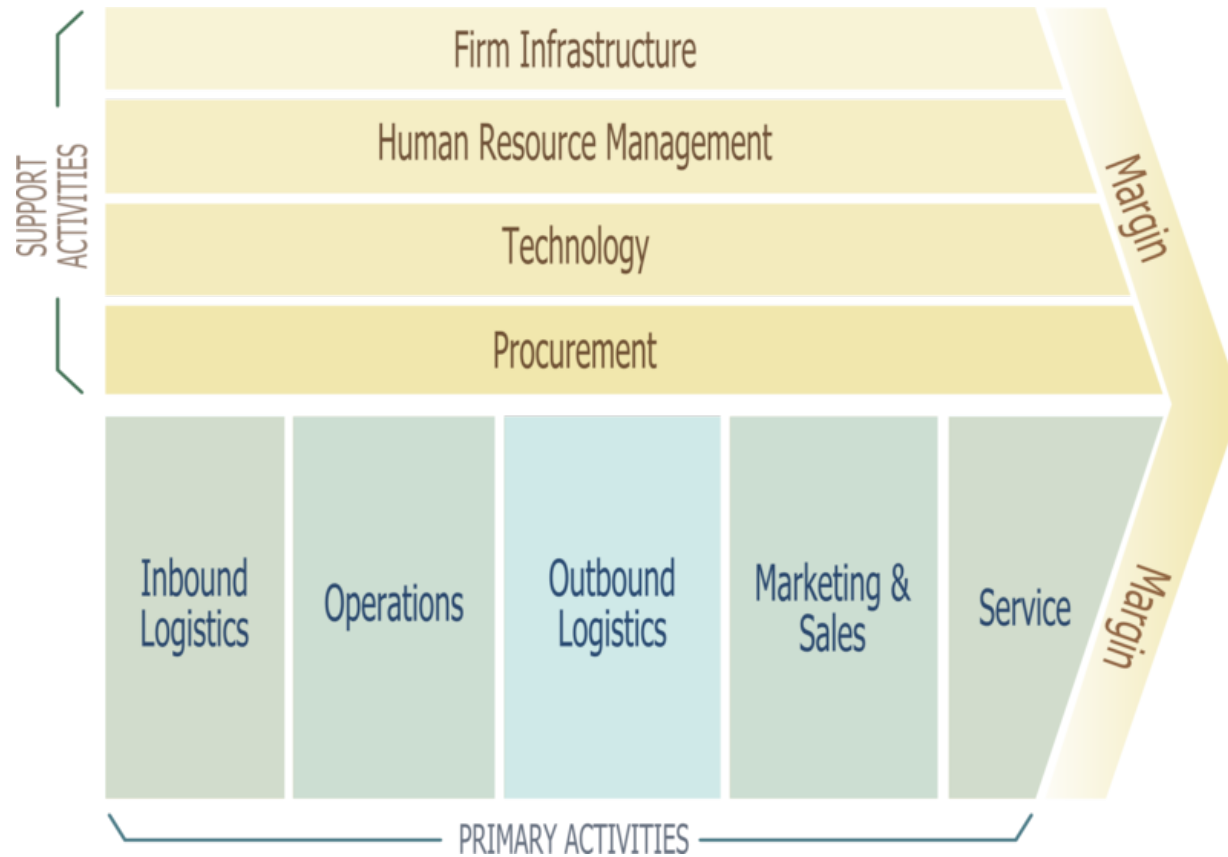
Element	Description	Notation
Resource	An asset owned or controlled by an individual or organization.	
Capability	An ability that an active structure element, such as an organization, person, or system, possesses.	
Course of action	An approach or plan for configuring some capabilities and resources of the enterprise, undertaken to achieve a goal.	

- All behavior elements can realize capabilities
- All structure elements can realize resource

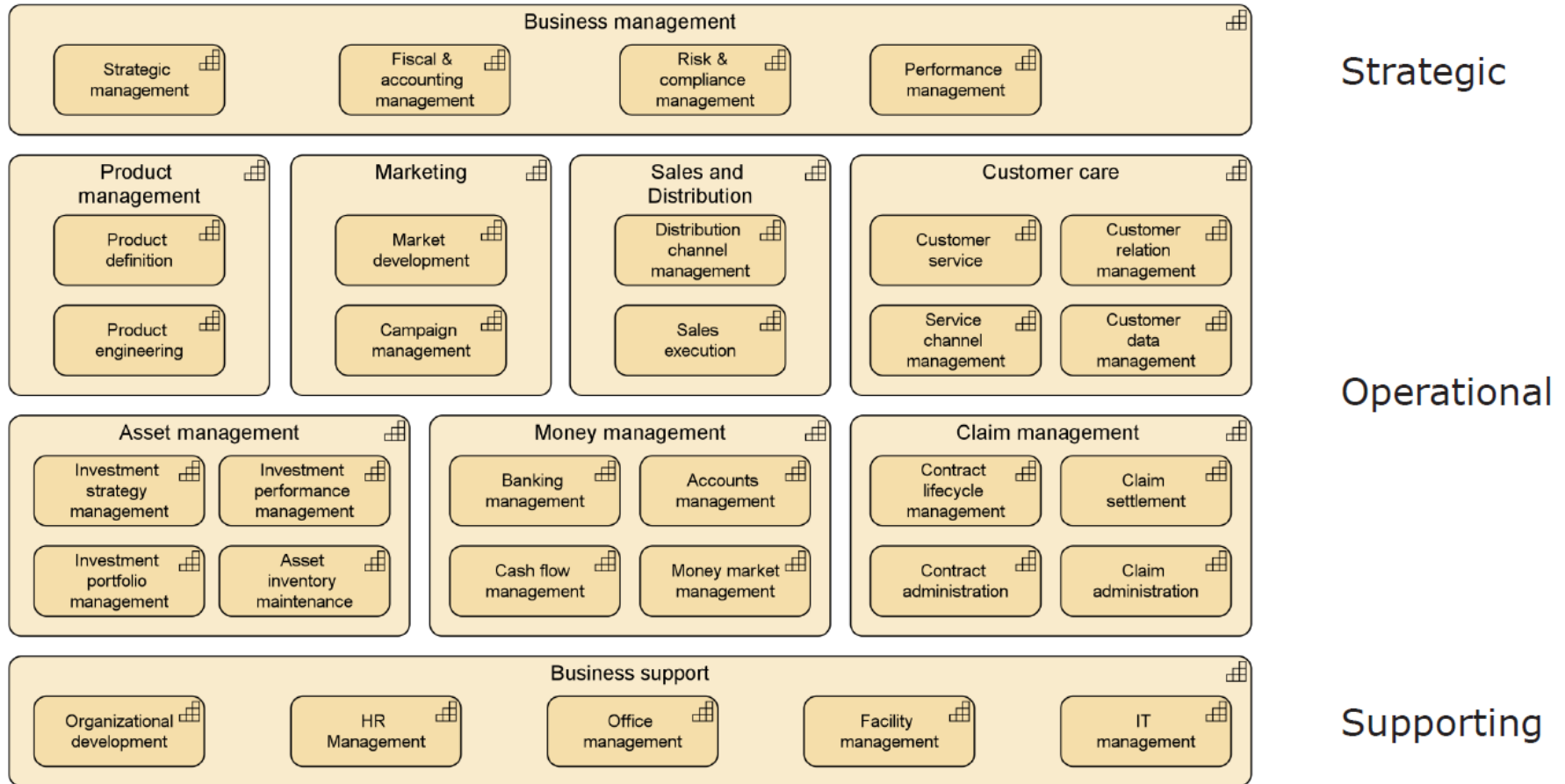
Capabilities

- Long-term goals and strategies are often described on a high abstraction level and are not directly implementable.
- Capabilities help to reduce this gap by focusing on business outcomes.
 - ◆ They provide a high-level view of the current and desired abilities of an organization
 - ◆ They are realized by various elements (people, processes, systems, and so on) that can be described, designed, and implemented using Enterprise Architecture approaches.
- Capabilities are expressed in general and high-level terms and are typically realized by a combination of organization, people, processes, information, and technology

Porter's Value Chain



Example of a Capability Map



Inspired by Panorama360 reference model

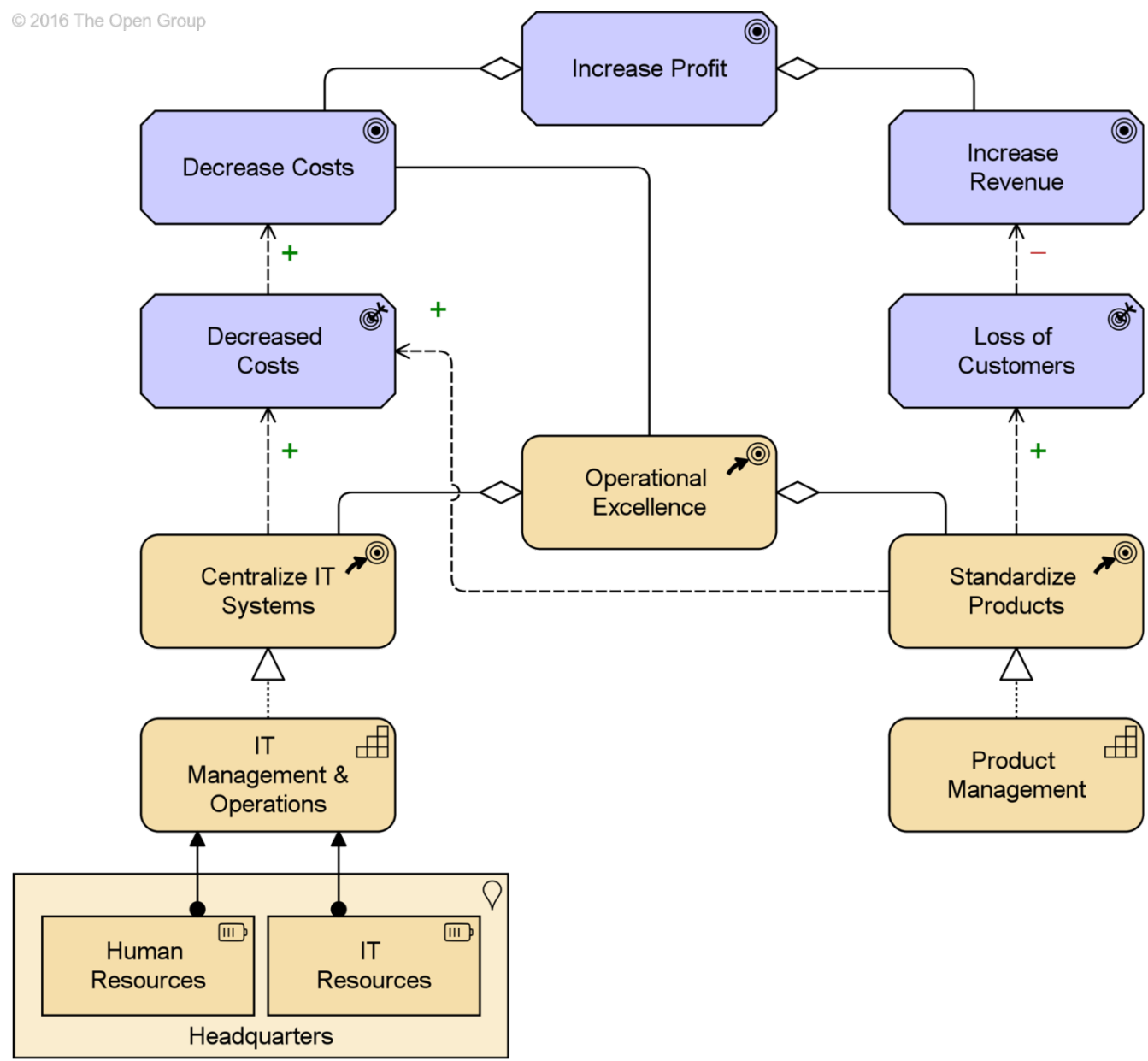
Resources

- Resources often considered, together with capabilities, to be sources of competitive advantage for organizations.
- Resources are analyzed in terms of strengths and weaknesses
- Resources can be classified into
 - ◆ tangible assets
 - financial assets, e.g., cash, securities, borrowing capacity
 - physical assets, e.g., plant, equipment, land, mineral reserves
 - ◆ intangible assets
 - technology; e.g., patents, copyrights, trade secrets
 - reputation; e.g., brand, relationships; culture
 - ◆ human assets
 - skills/know-how, capacity for communication and collaboration, motivation

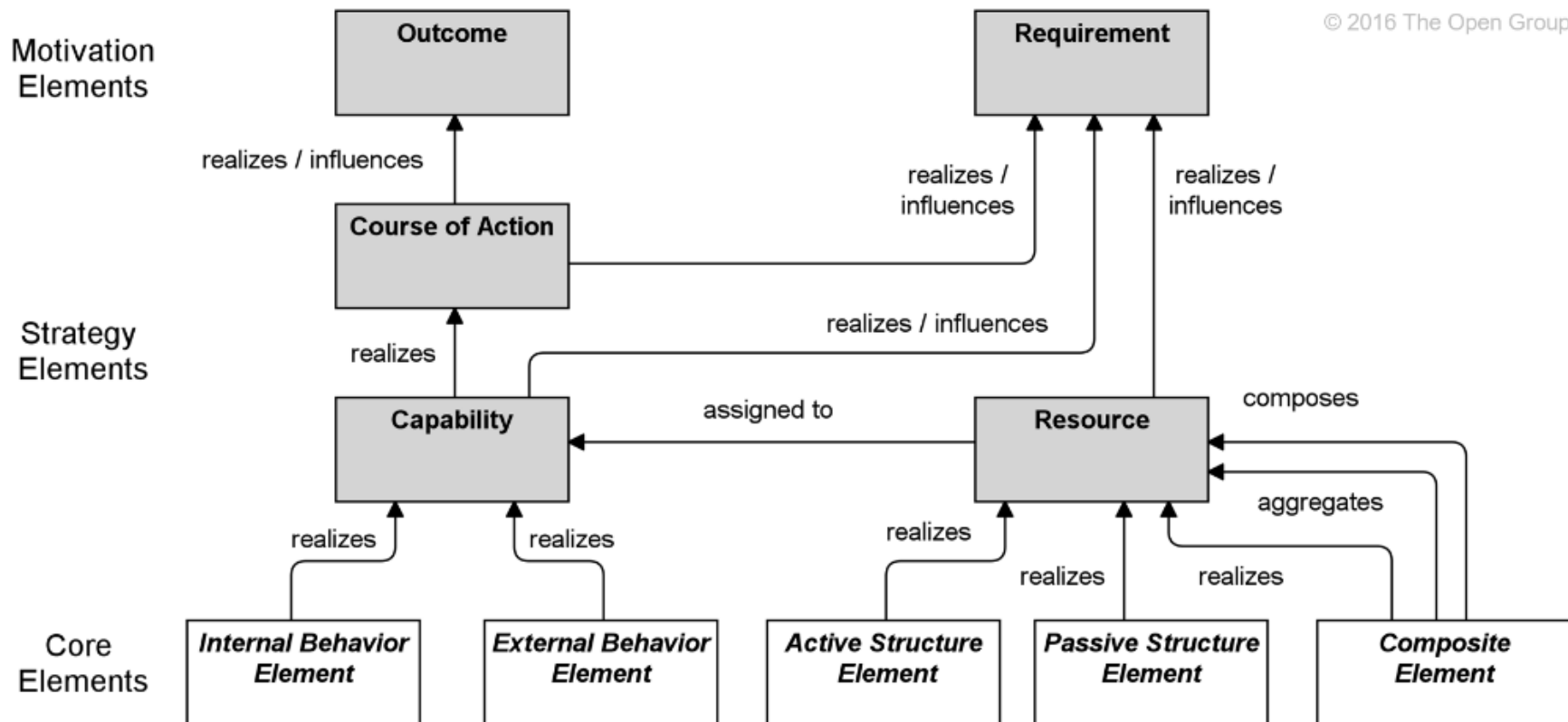
Course of Action: Strategy or Tactic

- A course of action represents what an enterprise has decided to do.
- Courses of action can be categorized as *strategies* and *tactics*.
- It is not possible to make a hard distinction between the two, but
 - ◆ strategies tend to be long-term and fairly broad in scope
 - ◆ tactics tend to be shorter-term and narrower in scope.

Example



Relationships between Strategy Elements and Motivation and Core Elements



Reference

- The ArchiMate 3 specification is available at <http://pubs.opengroup.org/architecture/archimate3-doc/>
- It is referenced in this presentation as ArchiMate 3