

Using OMG Standards with TOGAF

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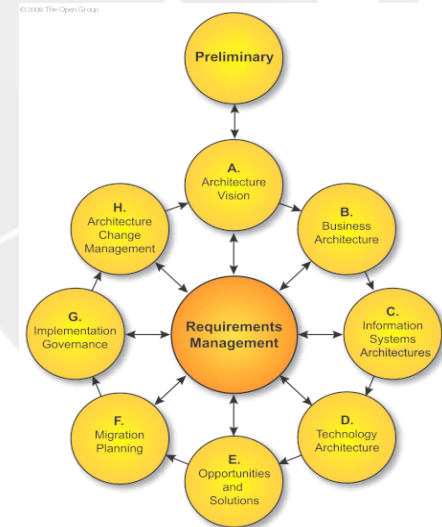
Enterprise Architecture needs standard practices

- Enterprise Architecture is a major practice that still needs to be generalized
- Many enterprises are defining their own Enterprise Architecture approach
 - Specific concepts, Specific notations, ...
- Historically, EA dedicated tools used proprietary notation
- Enterprises may be puzzled by the standard proliferation:
 - TOGAF, MODAF, DODAF, UPDM, CMMi, COBBIT, ITIL, UML, BPMN, BMM, SysML, ...



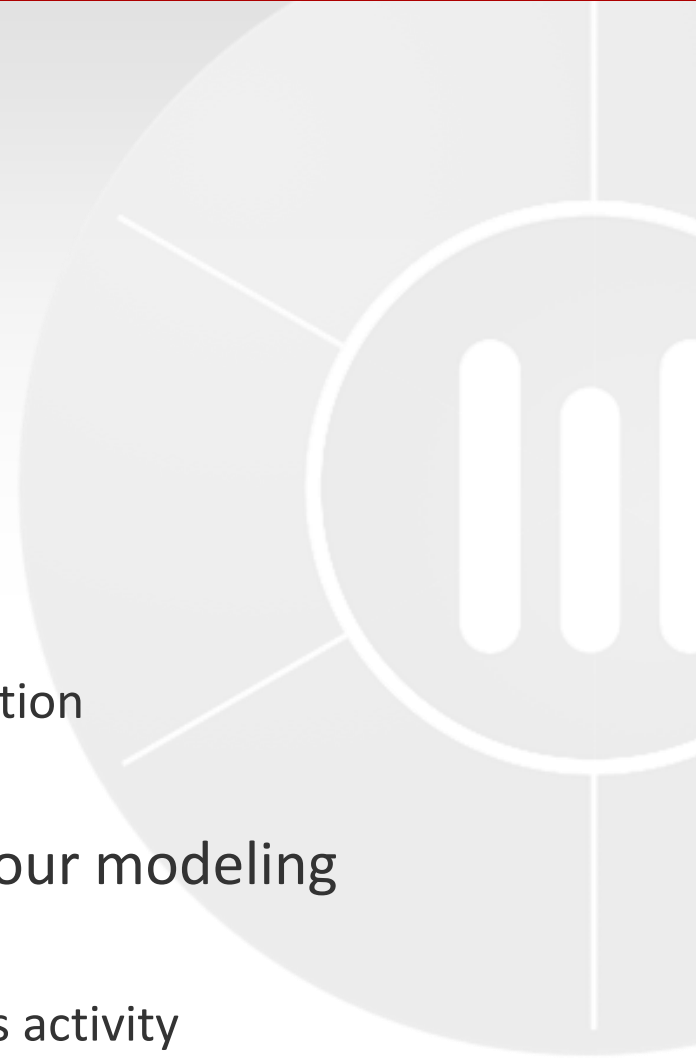
TOGAF : The most renowned solution for EA

- TOGAF : a Framework for EA which provides a comprehensive approach for designing, planning, implementation, and governance of an enterprise Information Architecture.
- TOGAF is the most used Enterprise Architecture standard within enterprises.
- Why not just using TOGAF?



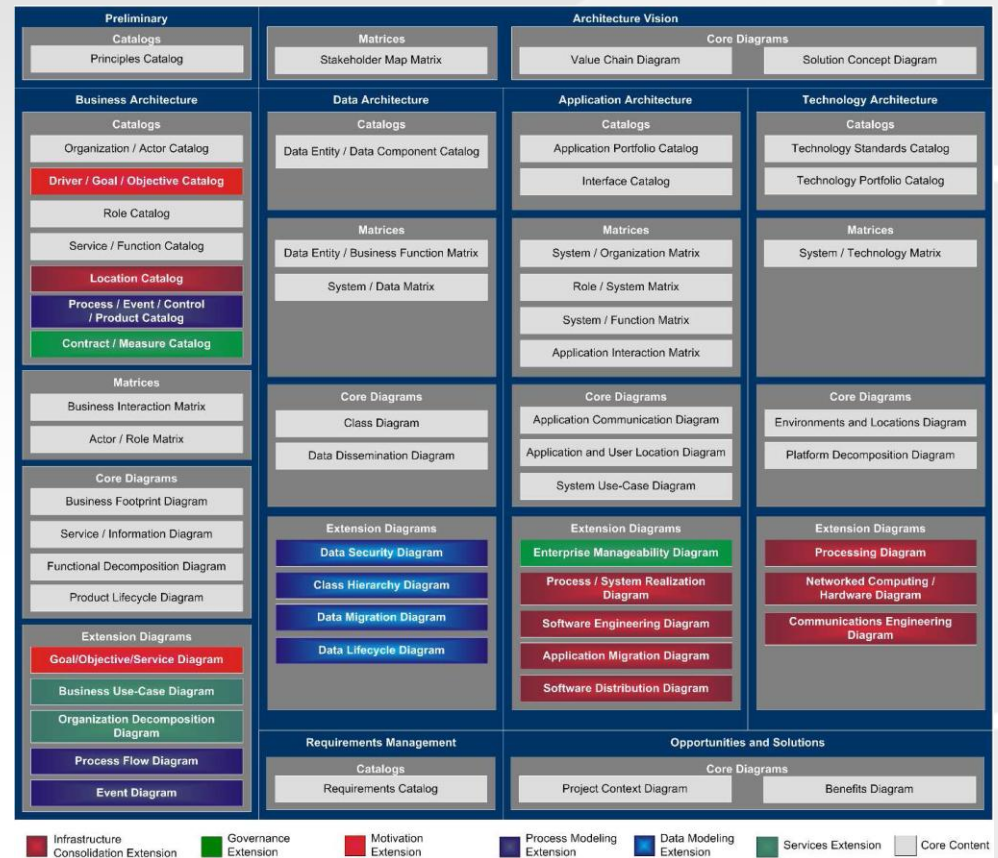
A Framework is not (quite) an off the shelf solution

- The TOGAF framework provides:
 - A terminology
 - A generic life cycle
 - Best practices
 - It does not provide
 - A modeling notation
 - An EA approach adapted to your organization
- ➔ You need to find your approach and your modeling technique for TOGAF
- TOGAF's “preliminary phase” includes this activity



Where can OMG standards help?

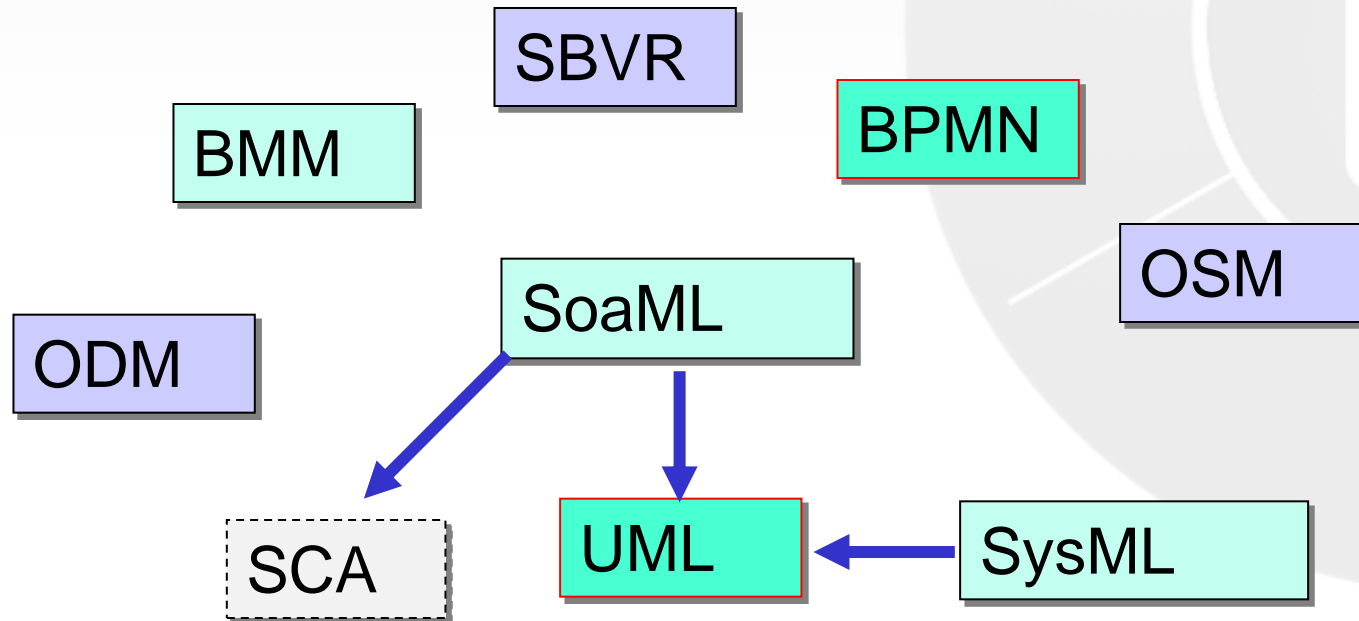
- Viewpoints and artefacts defined by TOGAF
 - Diagram, Catalogs, Matrixes



- OMG standards can provide modeling support for TOGAF

Useful OMG Standards

- TOGAF does not enforce the usage of any other standard or practice
- TOGAF recommends
 - using UML and BPMN
 - Using an SOA based architecture

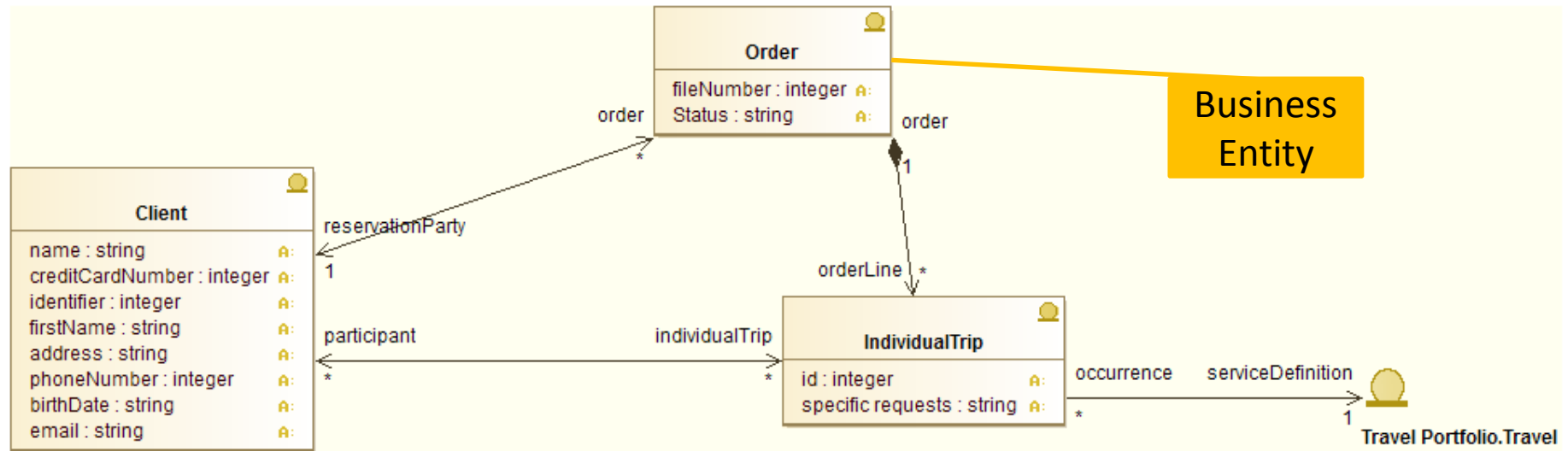


OMG Standards Contributions to supporting TOGAF

- UML : Business and system Use Cases, Data Architecture (class models, business entities), Product & entities state diagrams
- BPMN : Flow diagrams, Business process modeling
- UML/SoaML : Application Architecture
- SysML : Requirement analysis and modeling
- BMM : Vision, Goal analysis
- UML Profiles : all other modeling activities

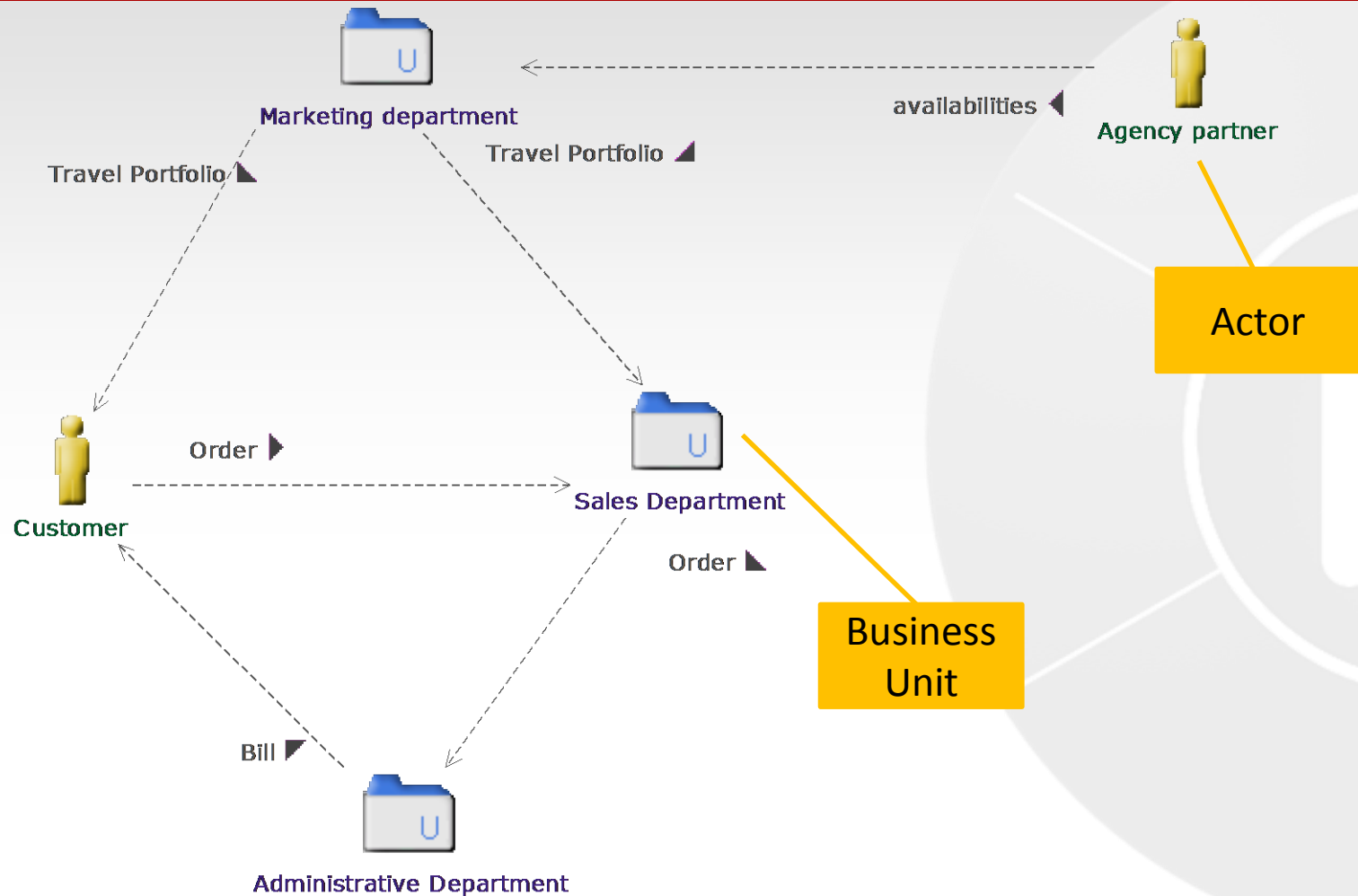


Example : Modeling Business Entities



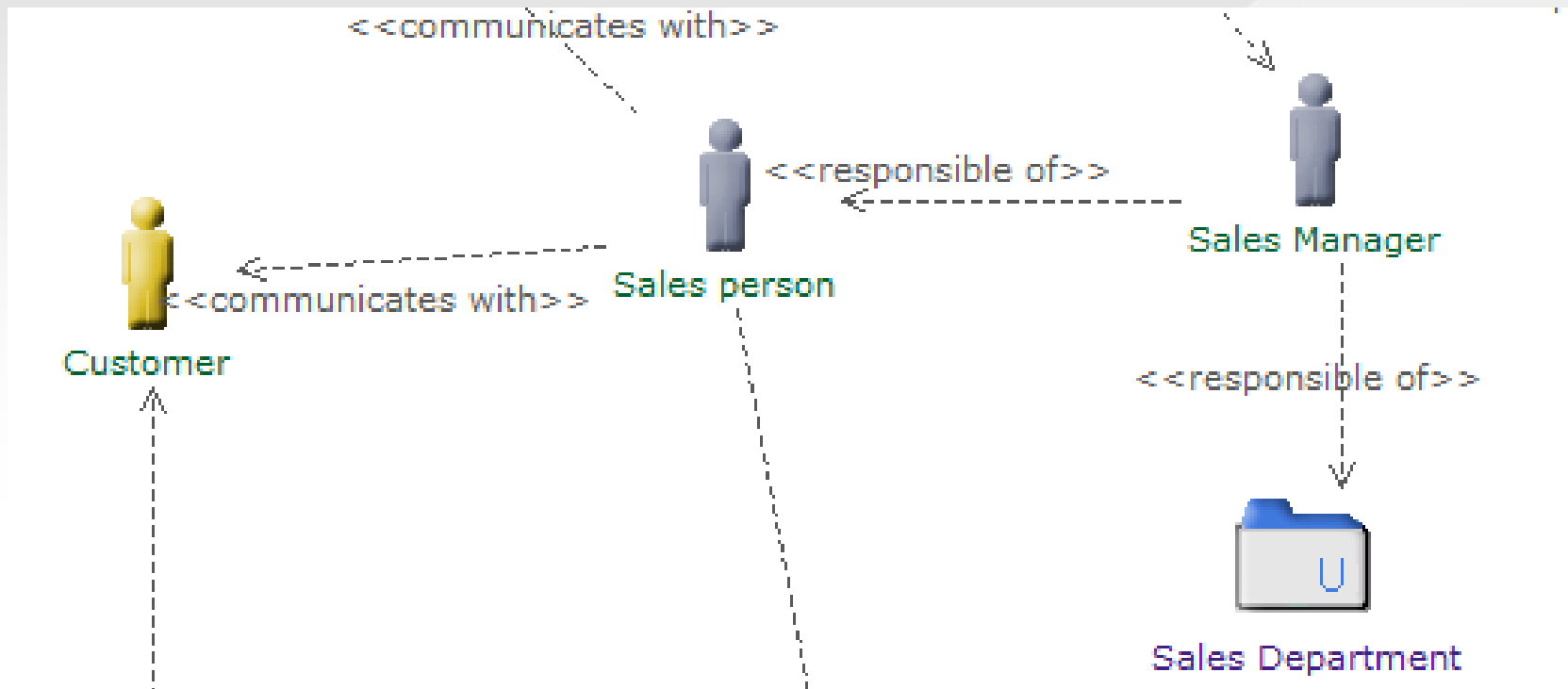
The key purpose of the Class diagram is to depict the relationships among the critical data entities (or classes) within the enterprise.

Modeling Organization



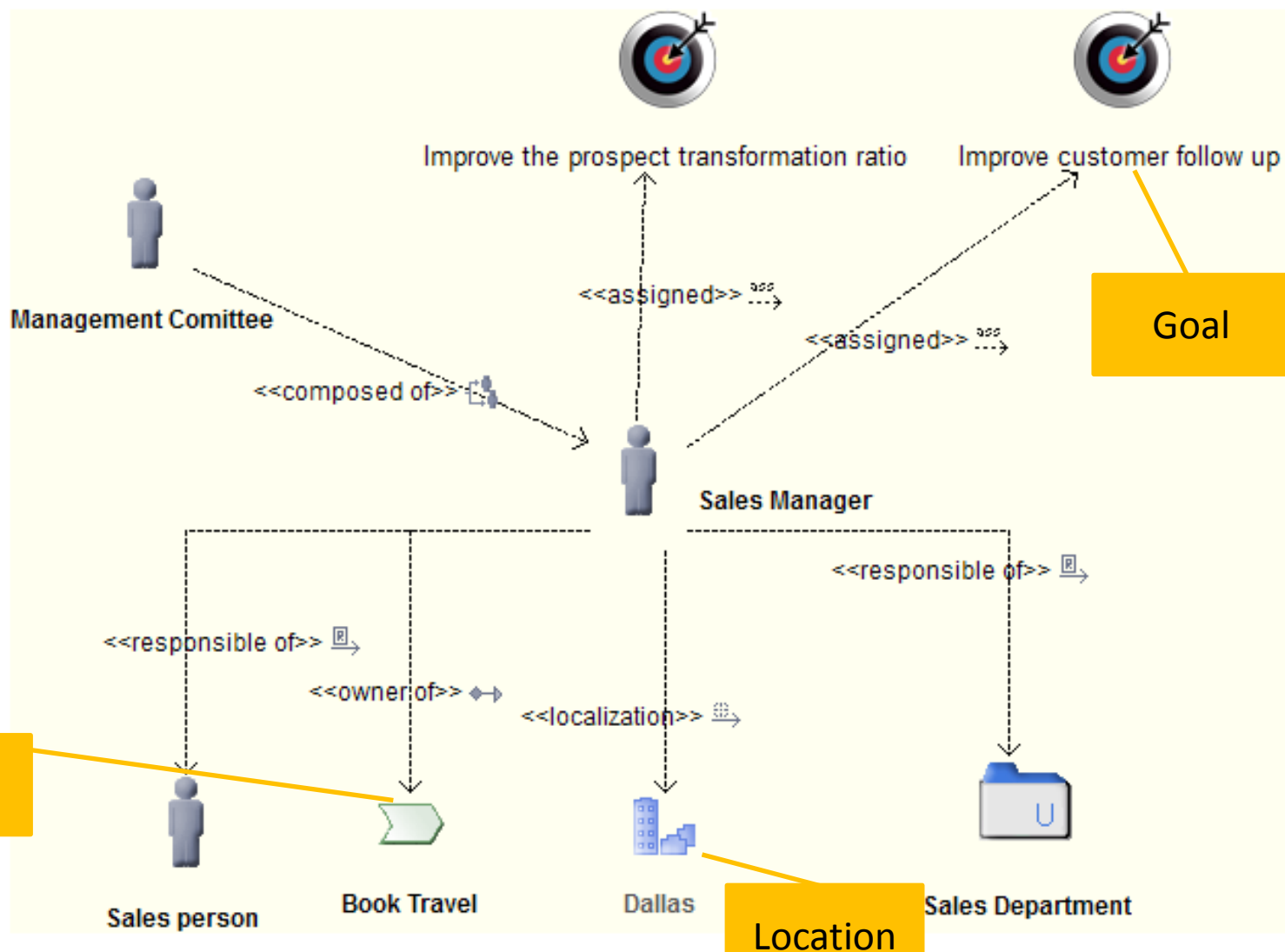
Organization decomposition diagram (UML Profile)

Modeling Organization (2)

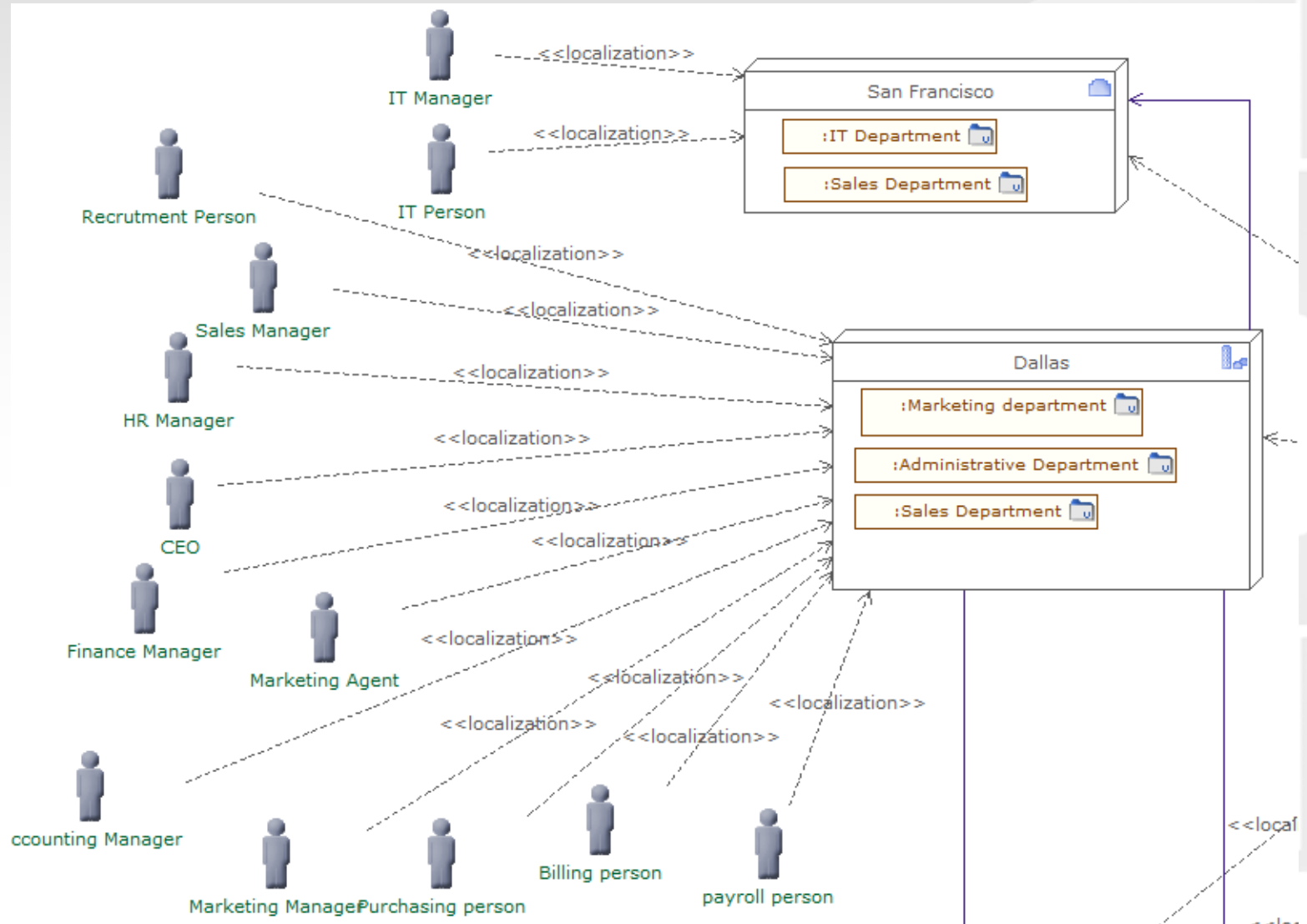


Organization role diagram

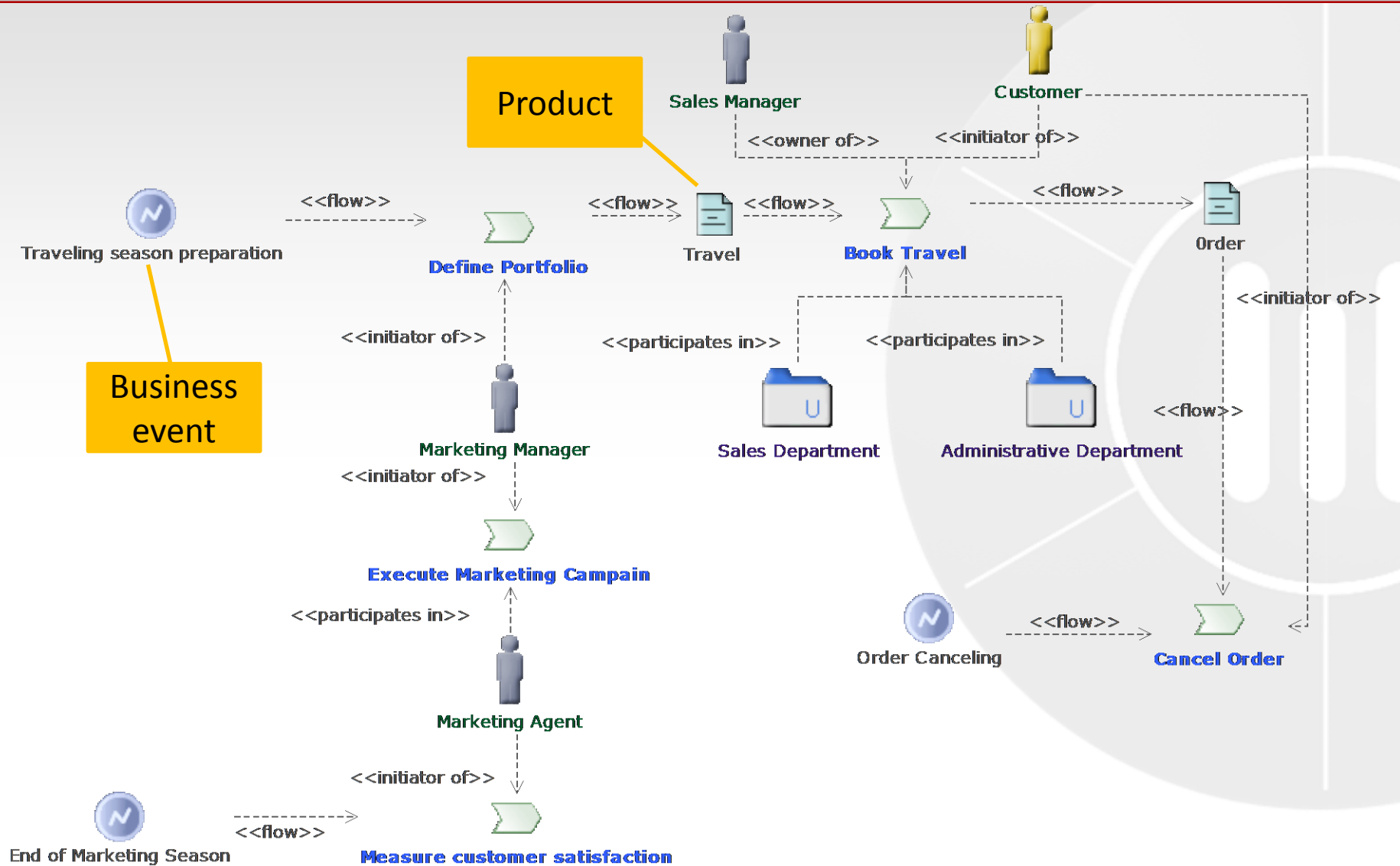
Organization modeling : Actor focus



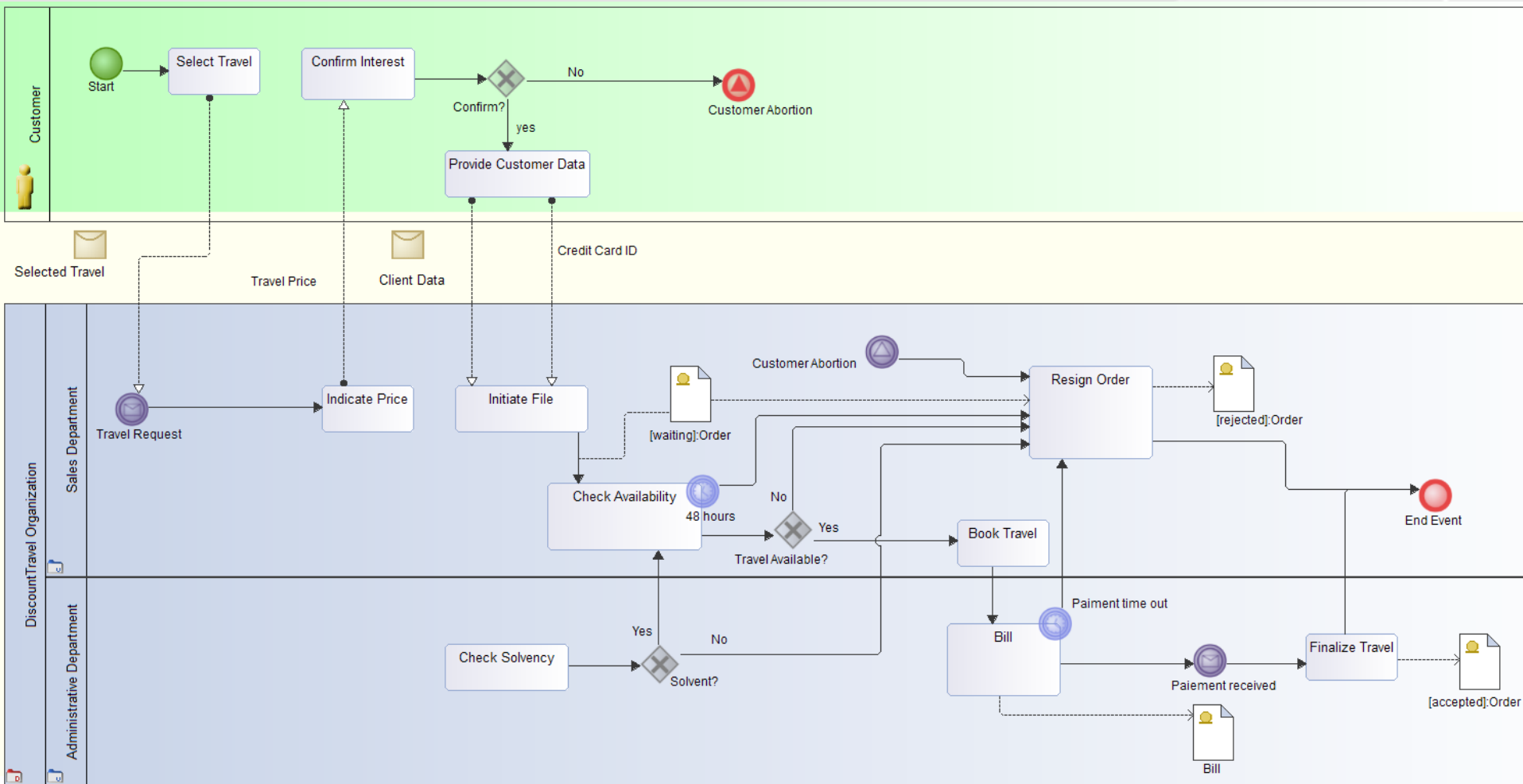
Modeling the location of roles



Event diagram : Process map, processes overview

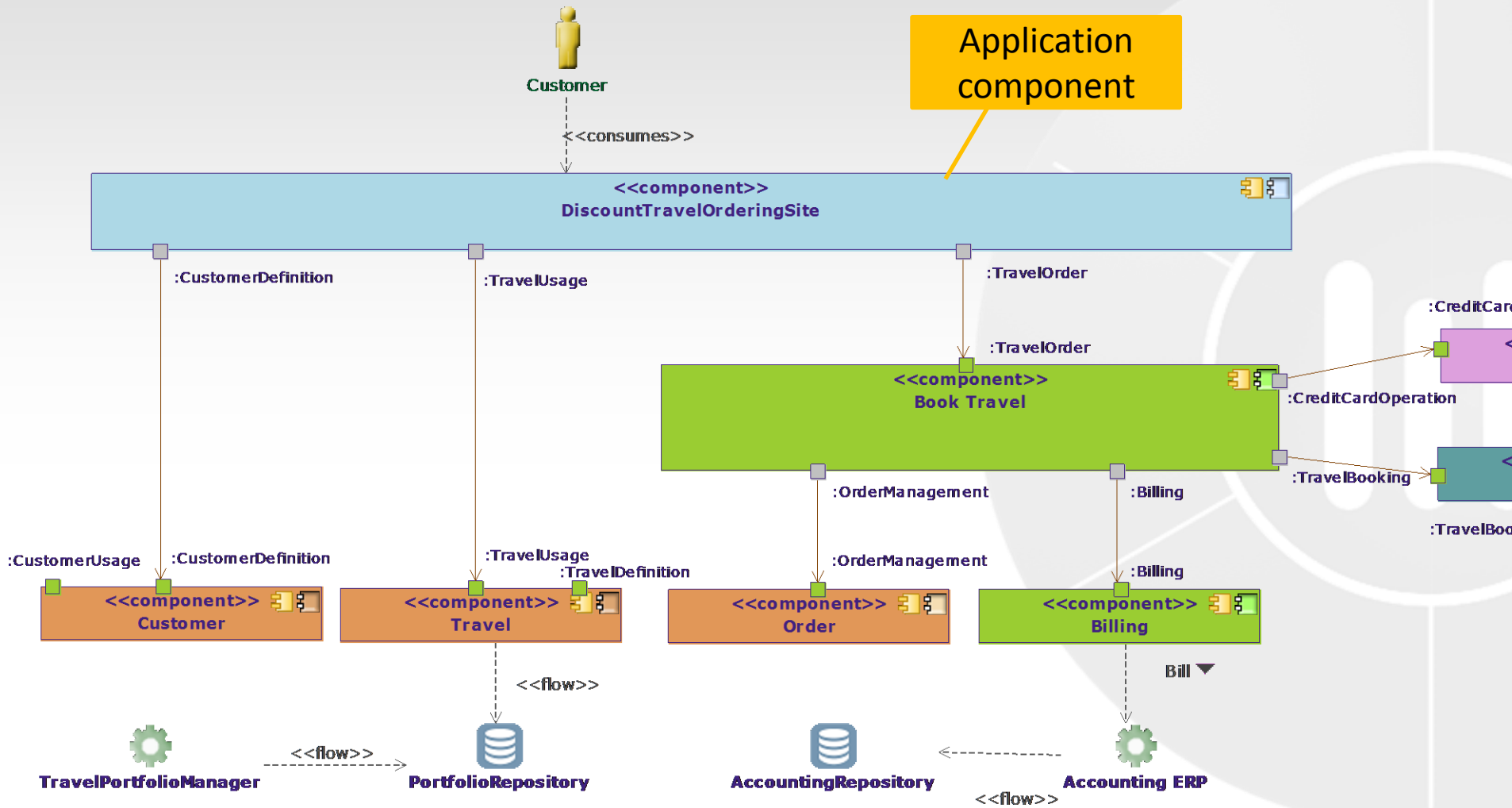


Business process modeling



BPMN integrated with UML

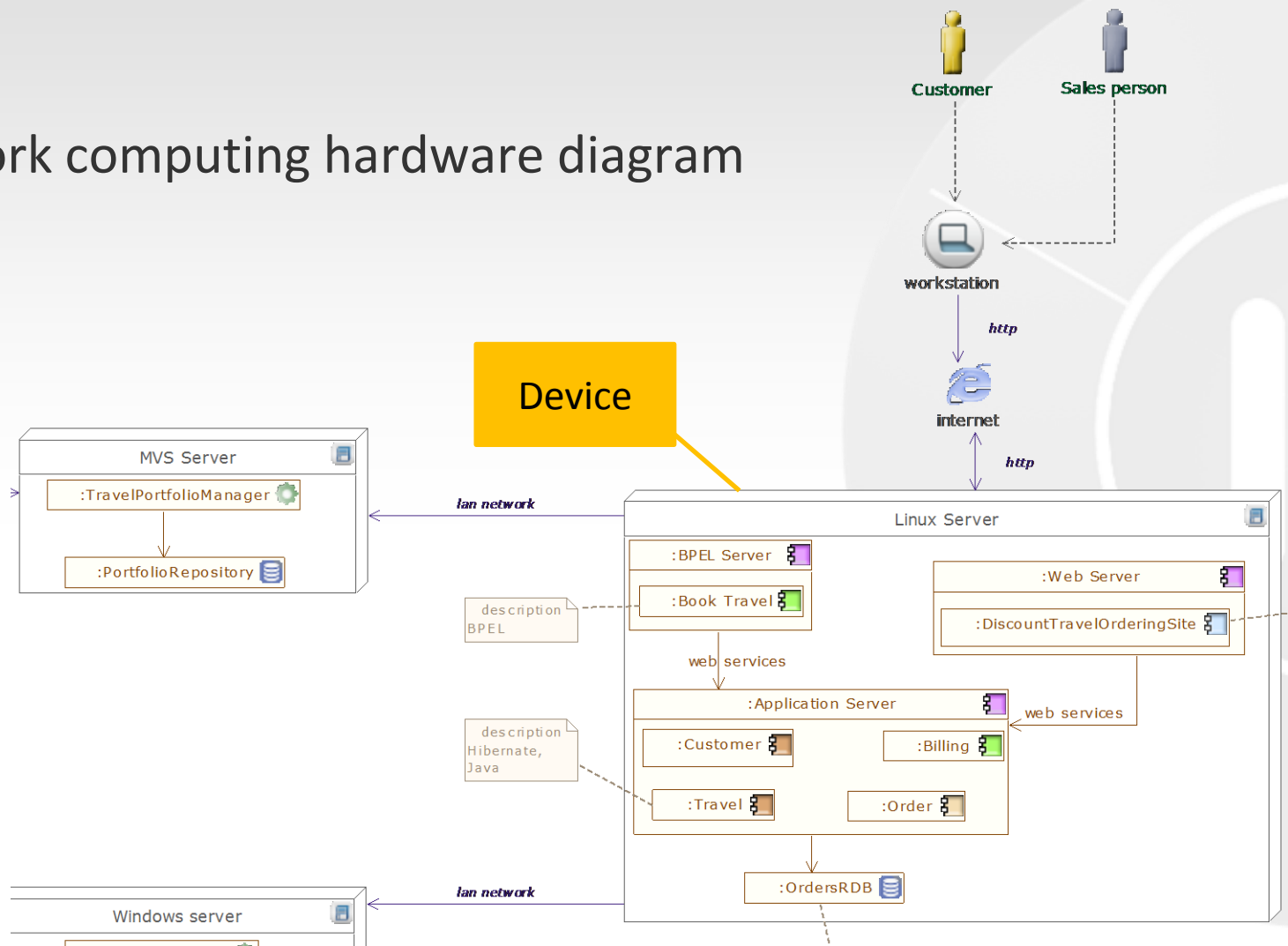
Modeling Application Architecture



Application Communication Diagram

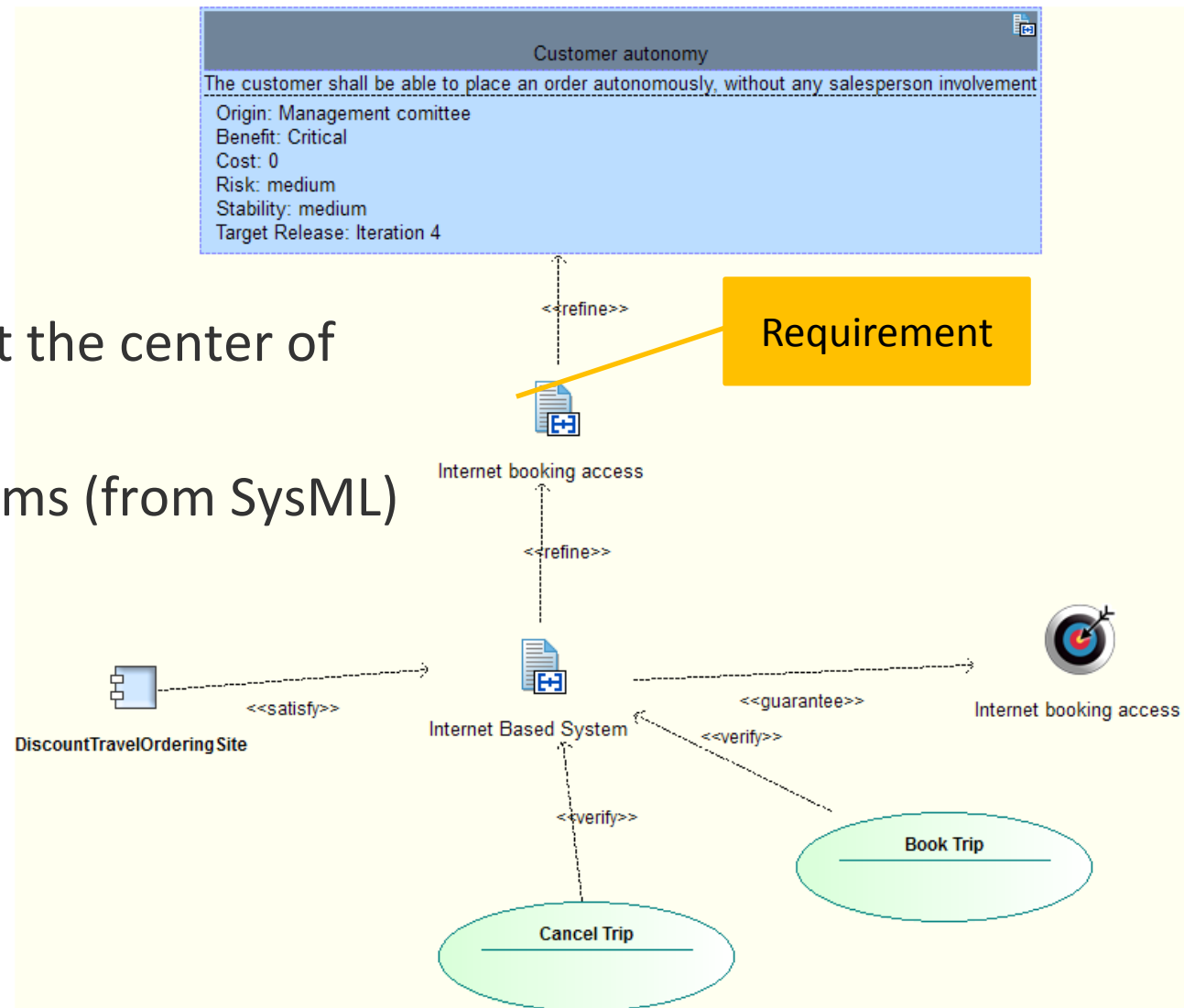
Technology Architecture

Network computing hardware diagram

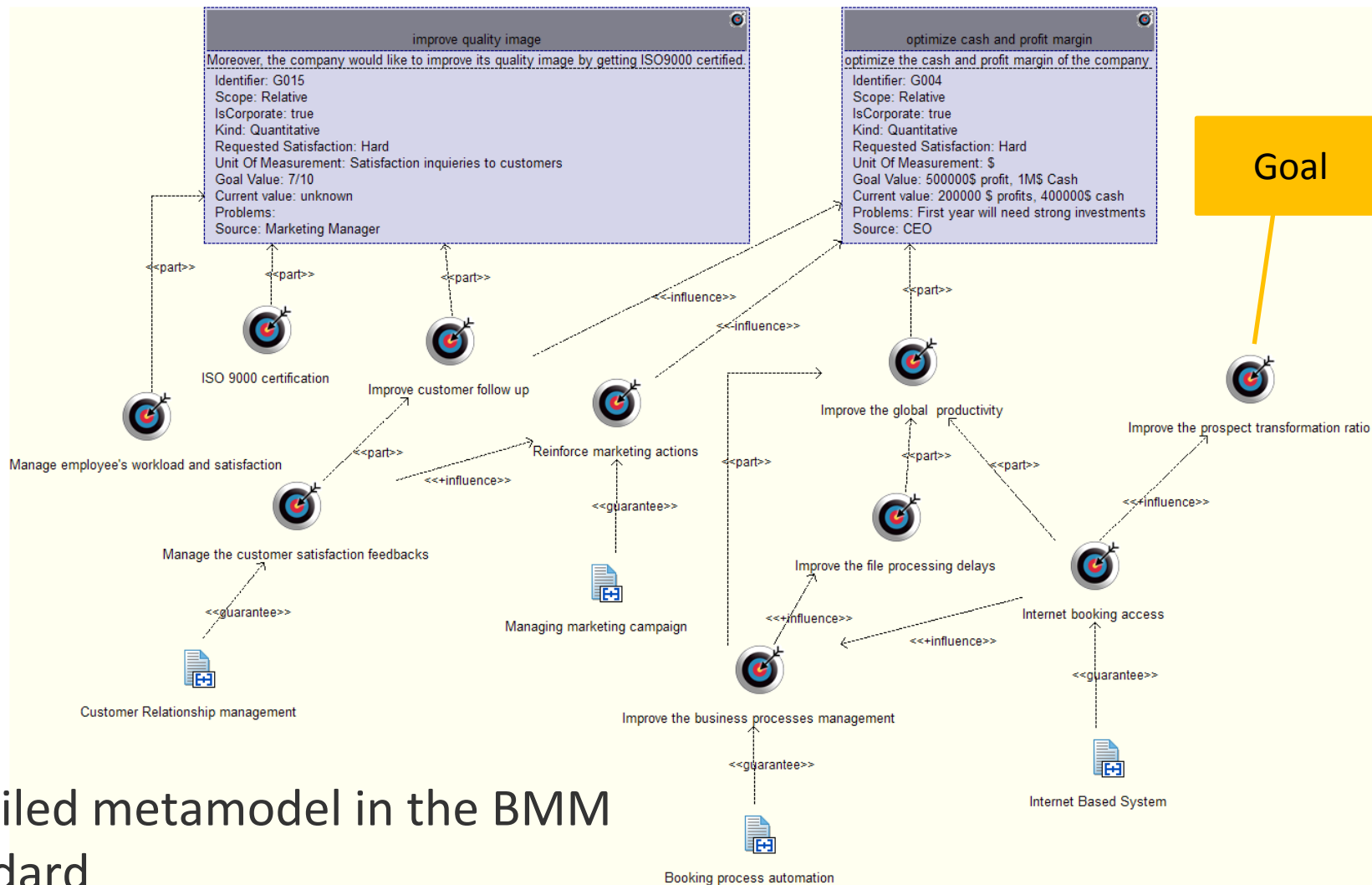


Requirement Analysis

- Requirements are at the center of the TOGAF's ADM
- Requirement diagrams (from SysML)

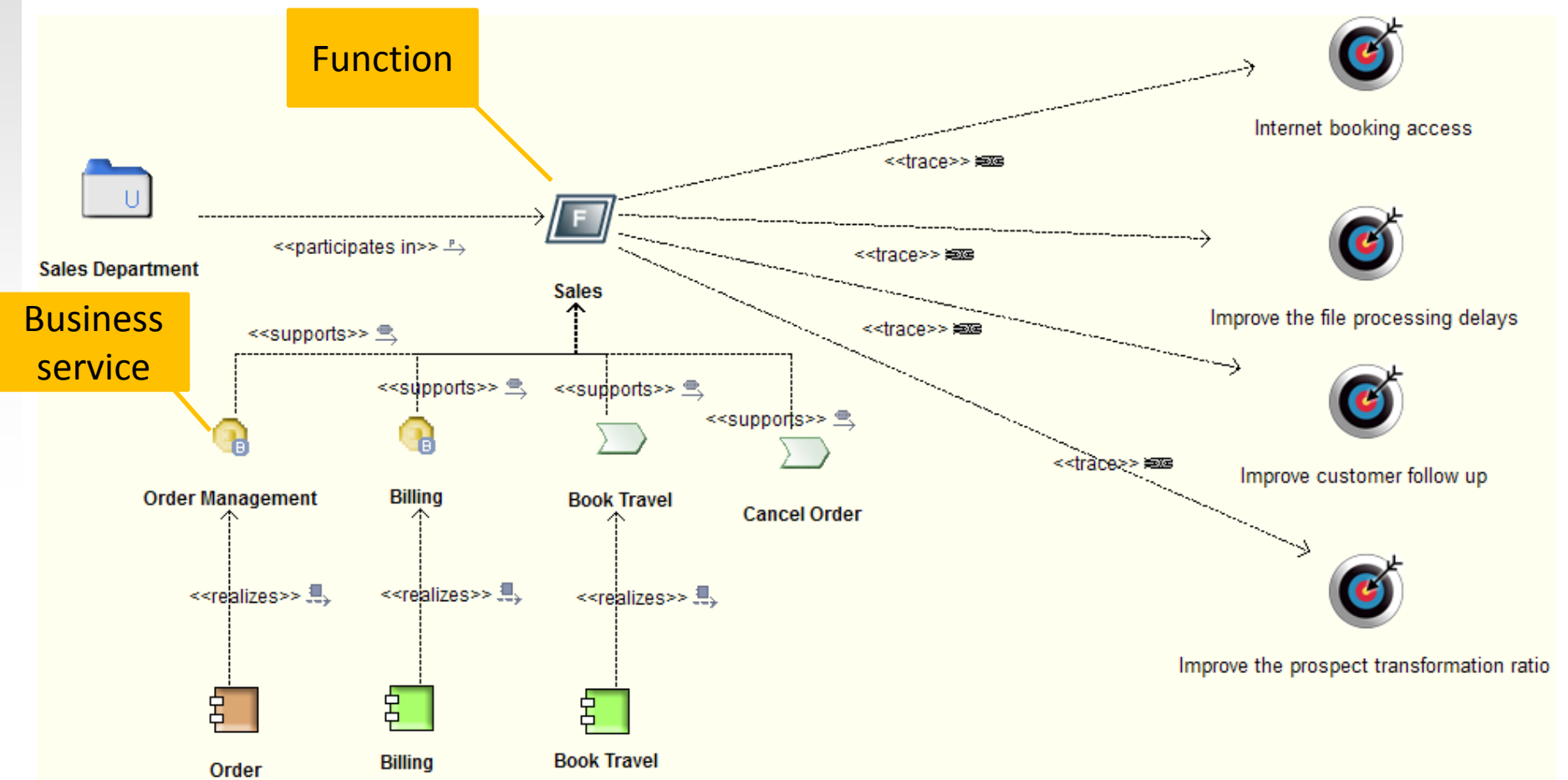


Goal Analysis



- Detailed metamodel in the BMM standard

Business Footprinting diagram



Gives an overview of the strategy, starting from goals

Why should we use OMG Standards to implement TOGAF?

- On the shelf solutions to built TOGAF artifacts
- Supported by several modeling tools :
UML2/BPMN2
 - Powerful, and affordable
 - Extensible,
- Learning curve made easier for newcomers
- Mastered semantics of modeling languages
- Most advanced tools (Modelio) integrate Goal analysis, Glossary support and requirement analysis & modeling.



More information

- www.omg.org – see the mentioned standards
- www.modeliosoft.com : download whitepapers, evaluate Modelio TOGAF Architect
- www.modelio.org : an open source edition of Modelio and TOGAF modeling support
- www.togaf-modeling.com : TOGAF modeling examples
- Book to be published (Q1 2012) :

MISE EN PRATIQUE DE TOGAF

Modélisation de l'architecture d'entreprise.

P. Desfray – G. Raymond

(TOGAF in practice: Modeling Enterprise Architecture)

