

# *Alignment of Business and IT*

*Knut Hinkelmann*



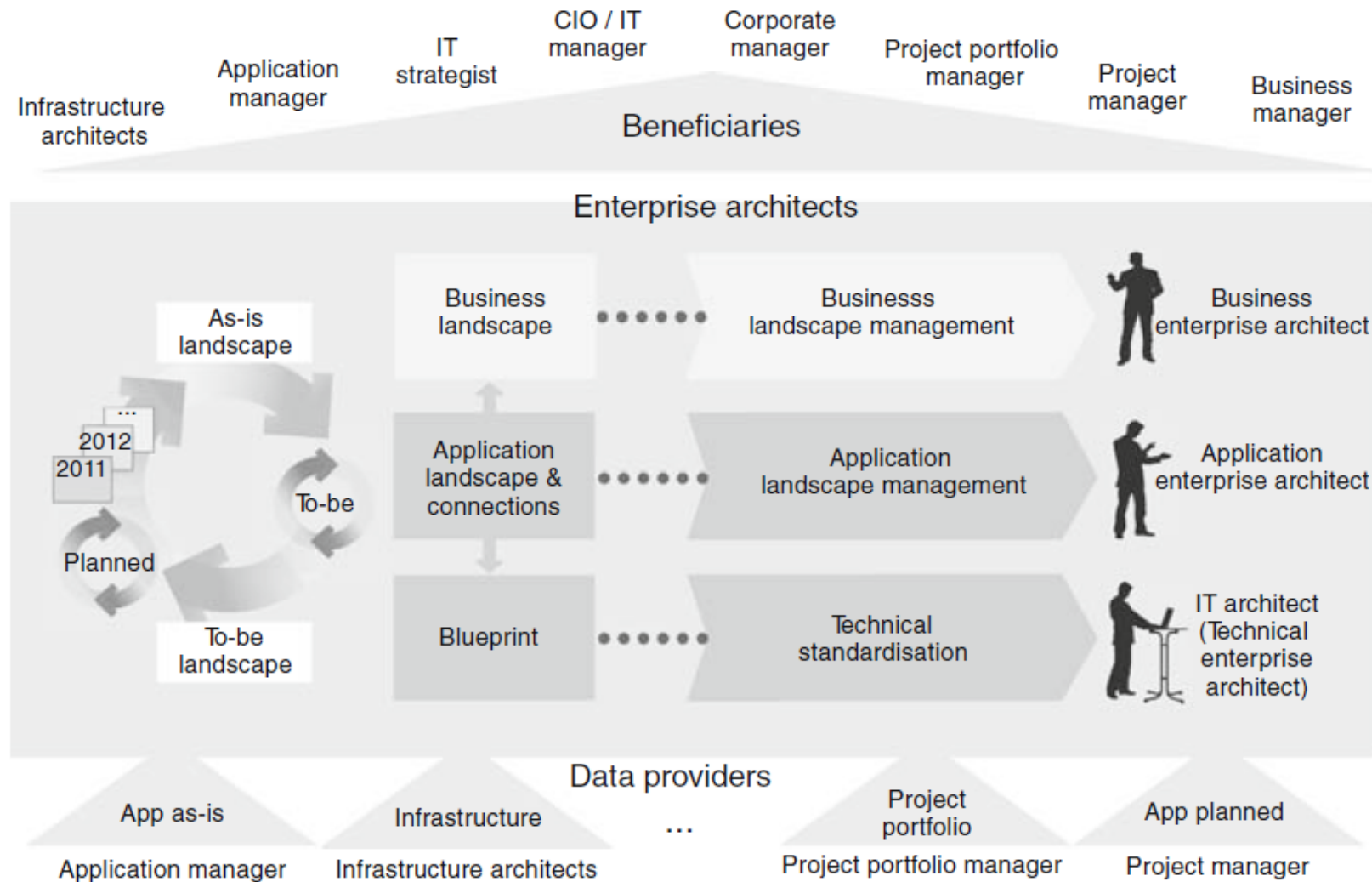
# *Literature*

This chapter is based on the following literature:

- Hanschke, Inge. (2010). *Strategic IT Management, Chapter 4*. Berlin Heidelberg: Springer-Verlag.

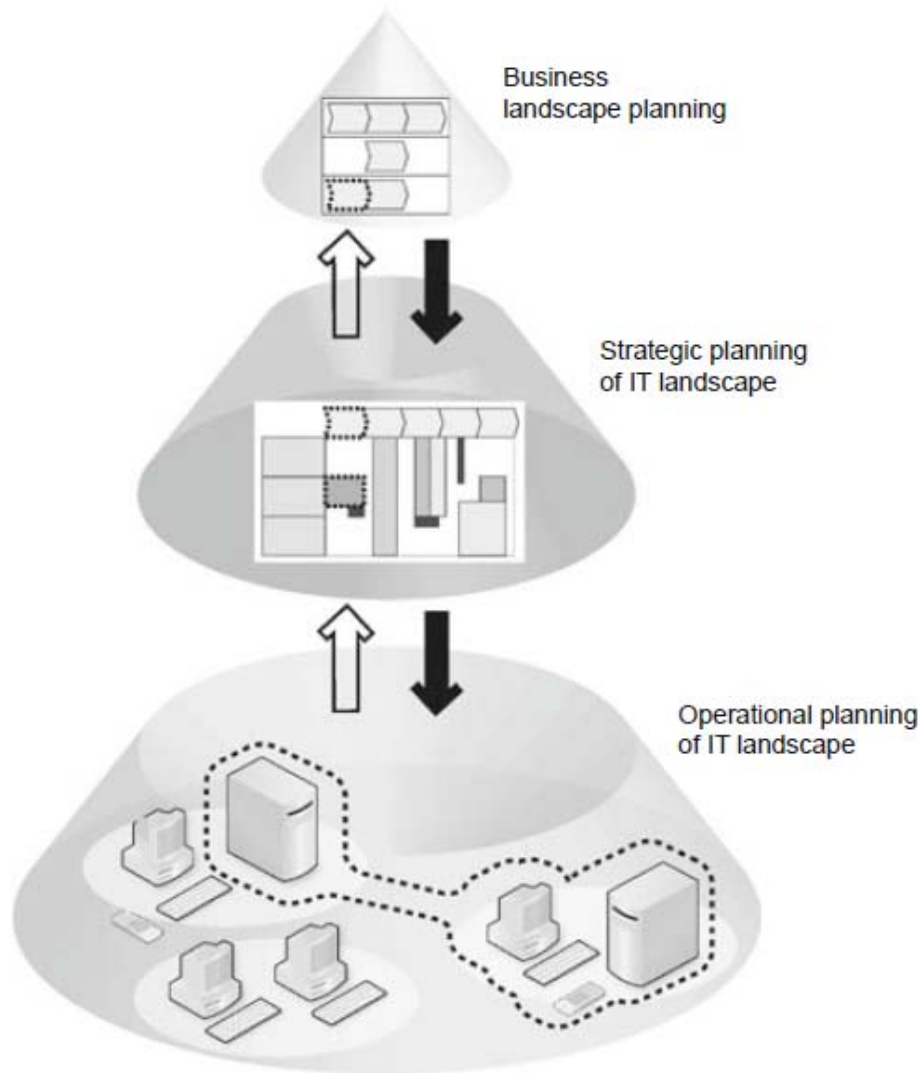
For further details have a look at the referenced sources.

# Perspectives on the Enterprise Architecture



(Hanschke 2010, p. 99)

# Planning Levels in the Enterprise Architecture

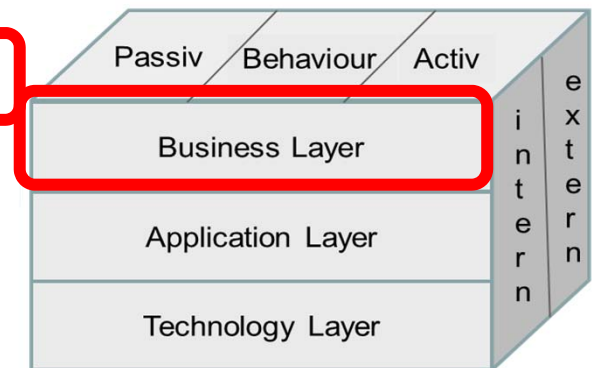
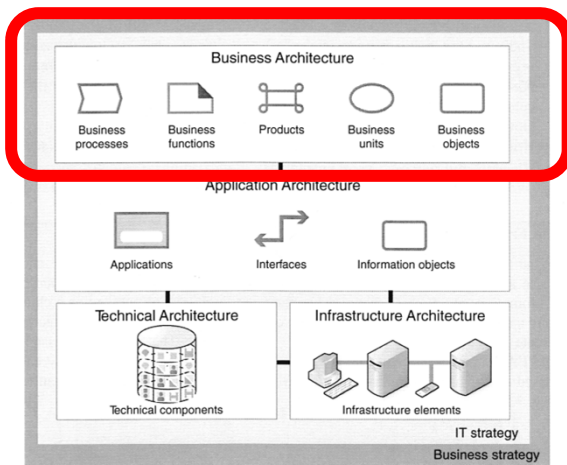


- The enterprise architecture stakes out the basic structure of the business and IT and the links that exist between them
- **Business landscape planning** documents the current and future business
- The business landscape is key input for **strategic planning of the IT landscape**
- Processes act as a bridge between business landscape planning and IT planning

(Hanschke 2010, p. 108f)

# Business Landscape

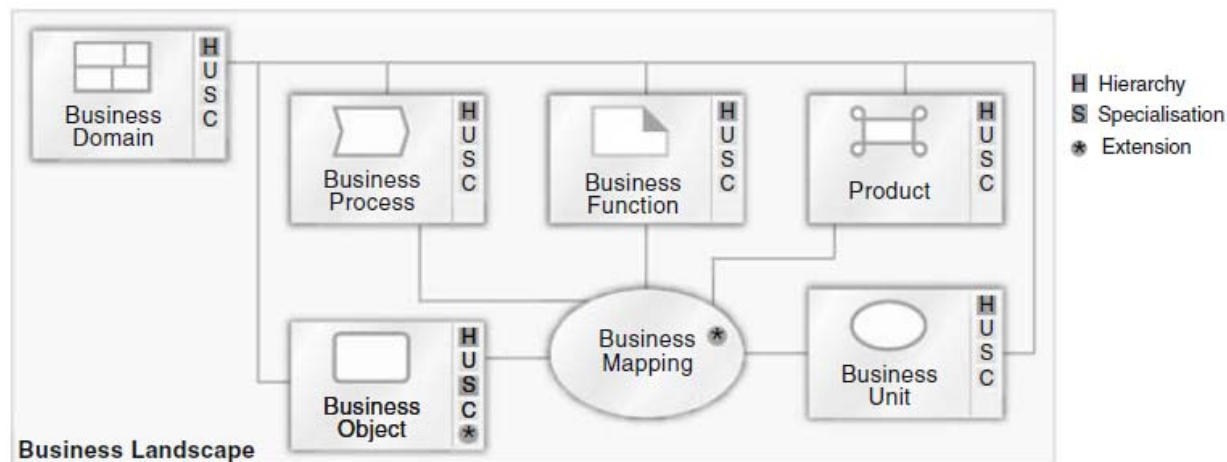
- The business landscape corresponds to
  - ♦ the Business Architecture of the best practice enterprise architecture
  - ♦ the second row of the Zachman Framework
  - ♦ the Business Layer of ArchiMate and TOGAF





# Business Landscape Management

- The task of business landscape planning is to document the current and future business
  - ◆ describe business processes, business functions, products, and business units
  - ◆ interactions between them



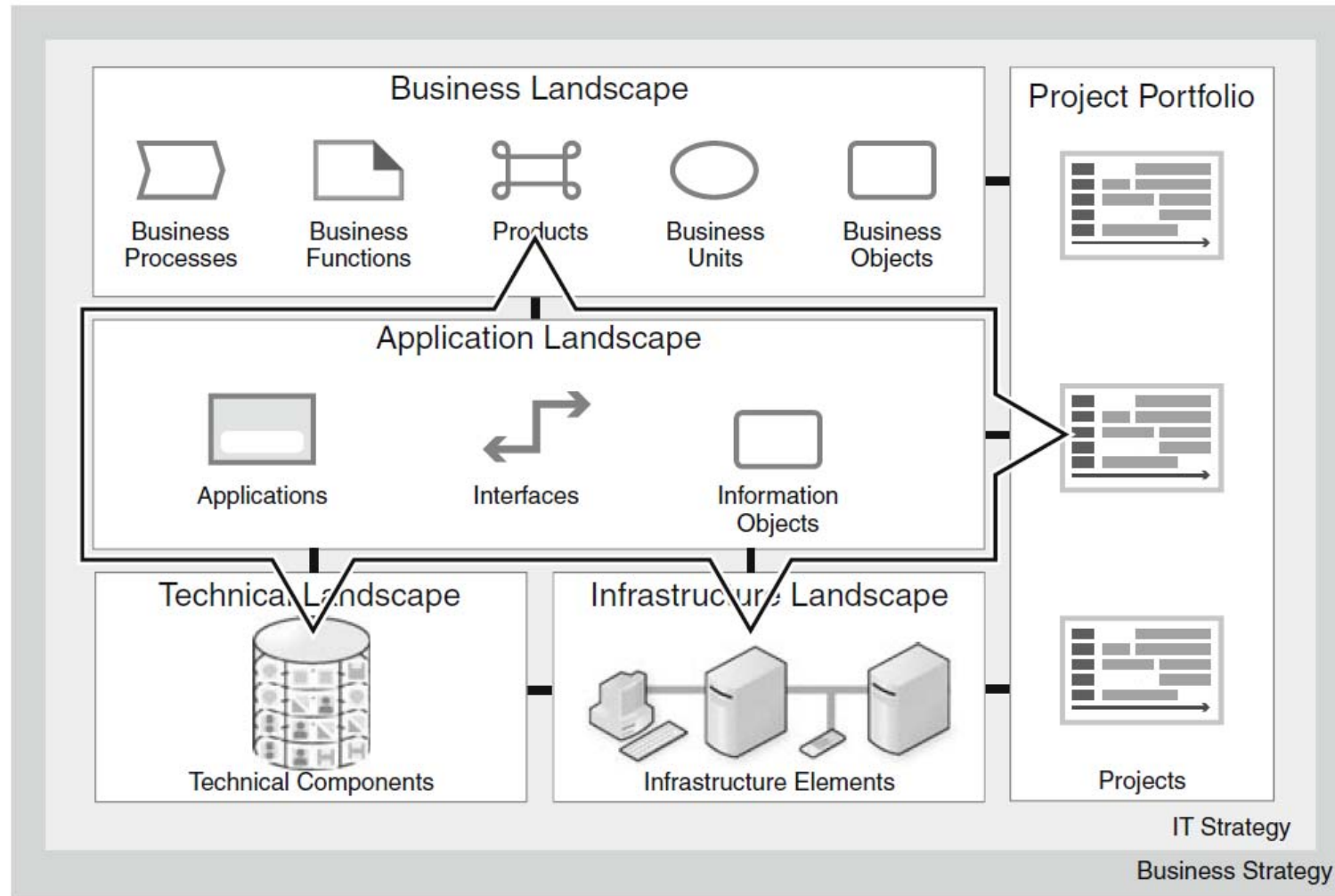
(Hanschke 2010, p. 91)

# *Interaction of IT Landscape with Enterprise Architecture*

- The enterprise architecture stakes out the basic structure of the business and IT and the links that exist between them
- As such, it provides key input for strategic management of the IT landscape
- IT landscape management documents and shapes the
  - ◆ application landscape
  - in interaction with
  - ◆ business, technical and infrastructure landscape
  - and with the
  - ◆ project portfolio

(Hanschke 2010, p. 109)

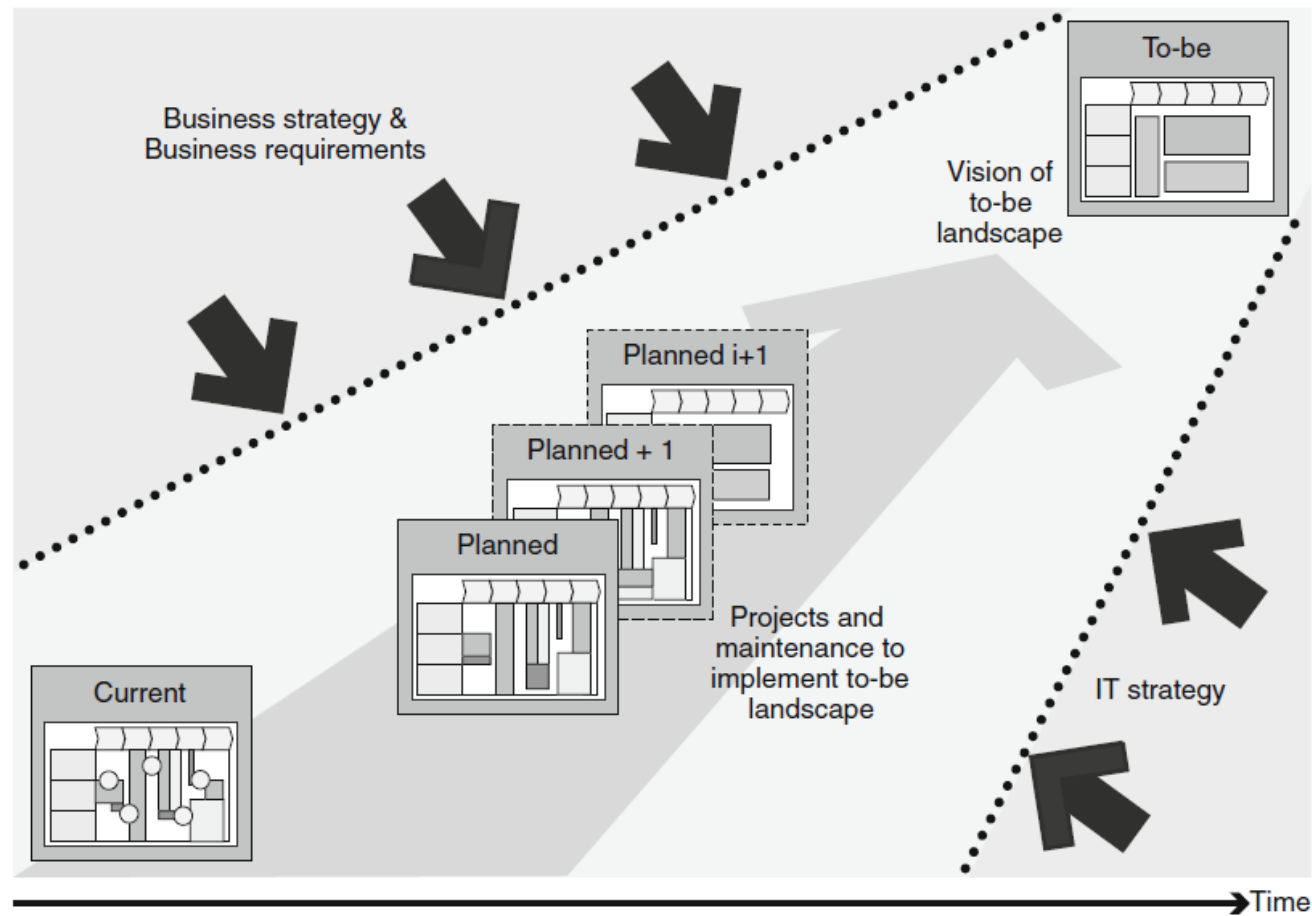
# Interaction of IT Landscape with Enterprise Architecture



(Hanschke 2010, p. 107)



# Projects Change the Enterprise Architecture (Business and IT Landscape)

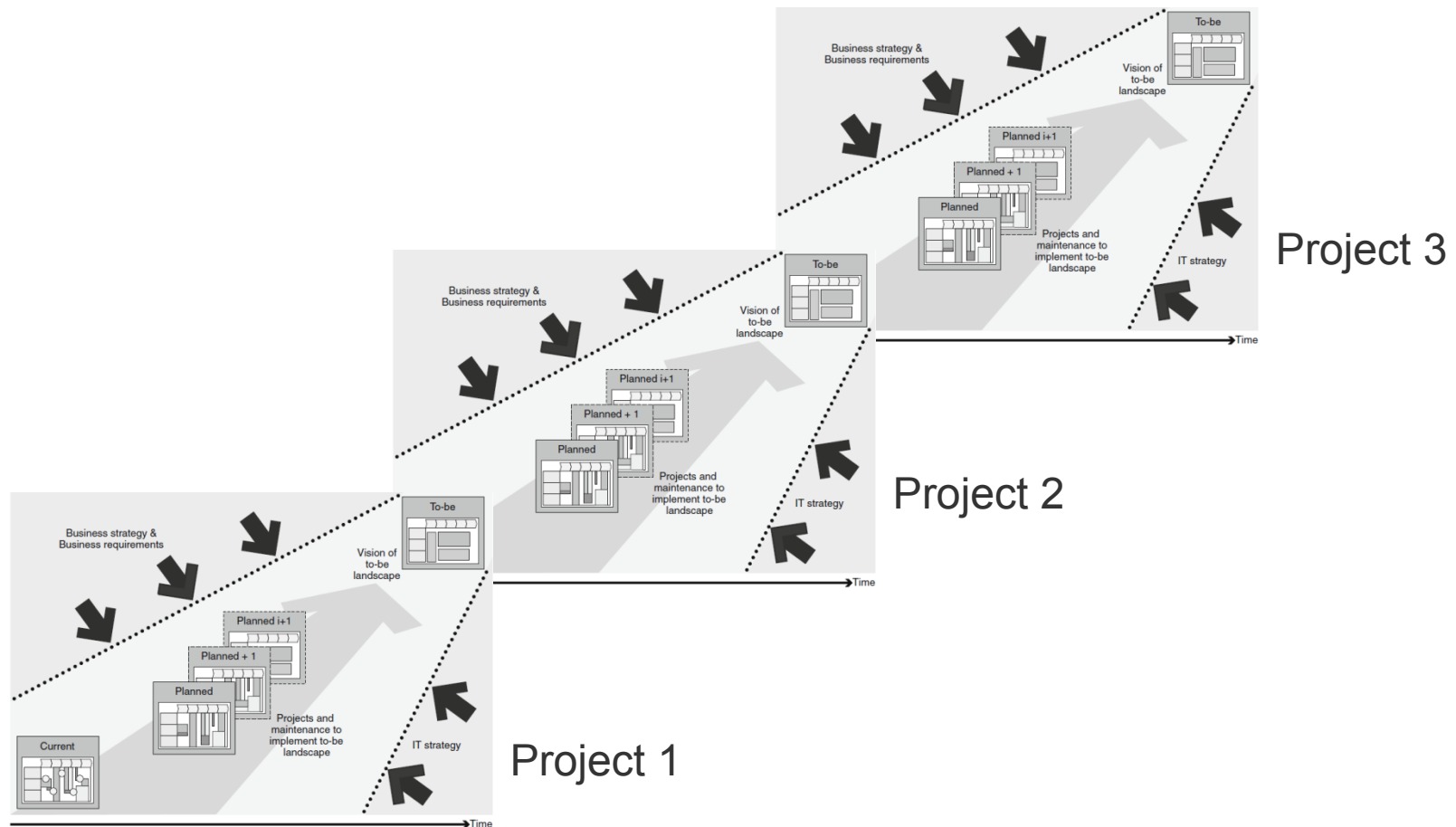


(Hanschke 2010, p. 165)

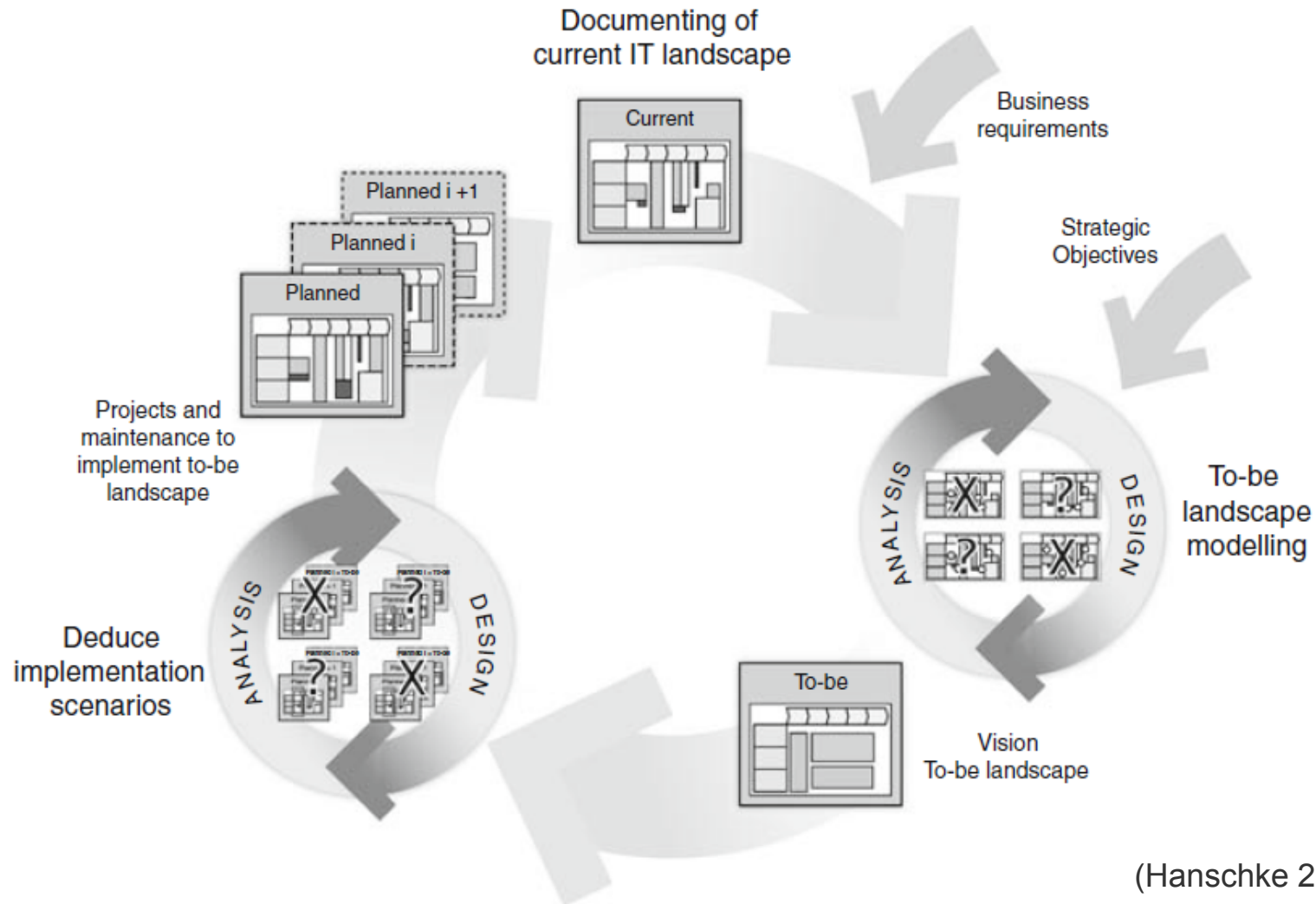
# *Incremental Development of an Enterprise Architecture*

- Transformation of an enterprise takes place in projects.
- Enterprise architecture are typically developed incrementally in these transformation projects:
  - ◆ A project typically starts with an "as-is" landscape
  - ◆ The result is modeled in the "to-be" landscape.
  - ◆ This landscape is retained as the current state of the enterprise architecture
  - ◆ The next project starts with the former "to-be" landscape and extends or modifies it appropriately.
  - ◆ etc.

# Incremental Development of an Enterprise Architecture



# IT Landscape Planning as Ongoing Process



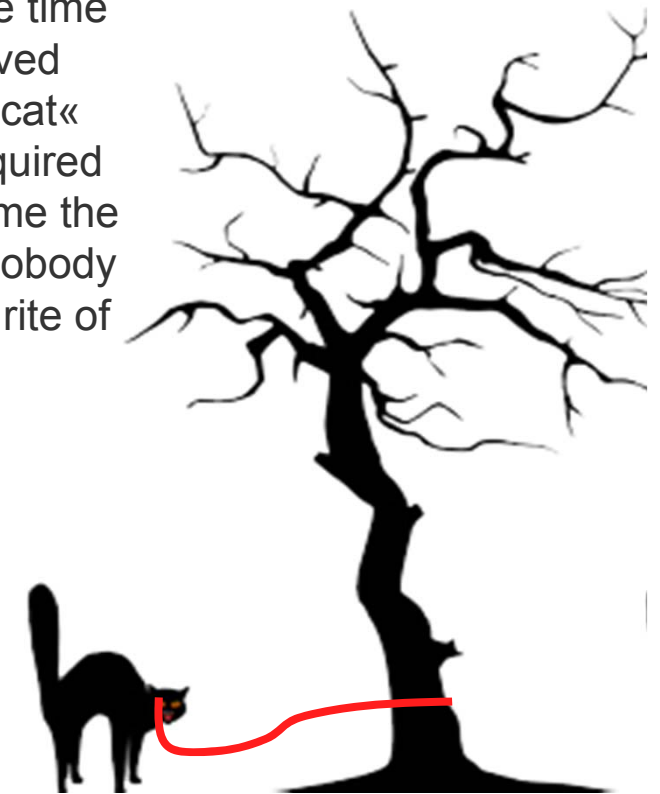
(Hanschke 2010, p. 158)

# *Projects and Business Motivation*

- The project portfolio represents information about the projects which correspond to the business motivation model
  - ◆ Each project changes specific sections of the IT landscape
  - ◆ EA decisions in projects are based on project goals
- Modelling the dependencies of EA decisions on projects in a motivation model provides a solid basis for future projects:
  - ◆ When developing the to-be landscape it can be important to know the reasons for the as-is landscape in order
    - not to change parts of the IT landscape which are essential for other processes or applications
    - not to keep elements of the as-is landscape that are not useful anymore

# 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 this time. So one could meditate undisturbed from there again. But the time passed. The guru died and got a successor. 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. With the time the evening meditation, however, completely came out of use itself; nobody was interested in it anymore. But with the greatest probability the rite of the binding a cat in the evening was kept at least – There may be tradition similar to this one which have come completely lost their original justification and thus their meaning.

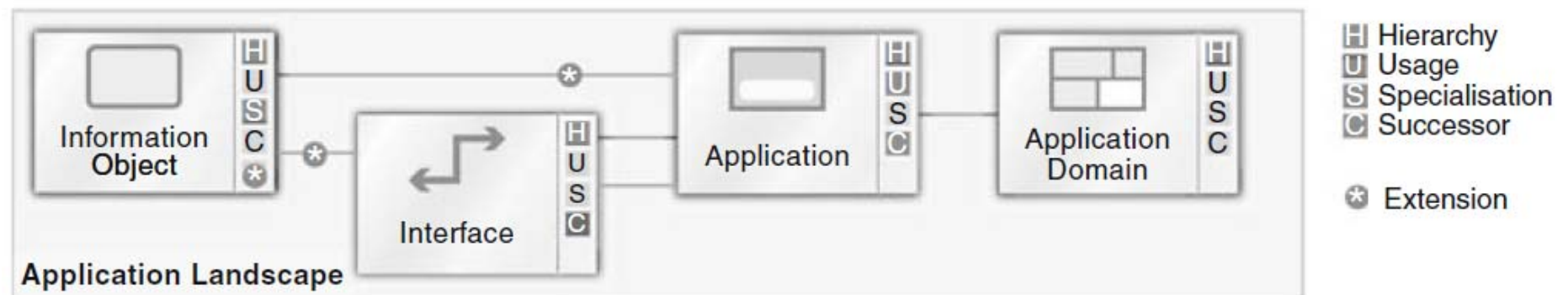


Translated from: Peter Knauer (2002). Handlungsnetze – Über das Grundprinzip der Ethik. Frankfurt



# Constituents of the IT Landscape

- IT landscape management documents and shapes the application landscape model in terms of its interplay with the business, technical and infrastructure landscape models and the project portfolio.
- The core constituents of IT landscape management are the application landscape model itself, and the relationships to the other landscape models, and with the project portfolio.



(Hanschke 2010, p. 115f)

# *Elements of IT Landscape Management*

Examples of attributes for IT landscape elements:

## ■ Application

- ◆ **Name**, e.g. "ACTAC"
- ◆ **Release No**, e.g. "ACTAC 2.3"
- ◆ **Description**, e.g. "sales management and support for private clients"
- ◆ **Planning status**, e.g. "as-is", "planned", "to-be"
- ◆ **Required security level**
- ◆ **Assignment to Interfaces**
- ◆ **Assignment to Information Objects**
- ◆ ...

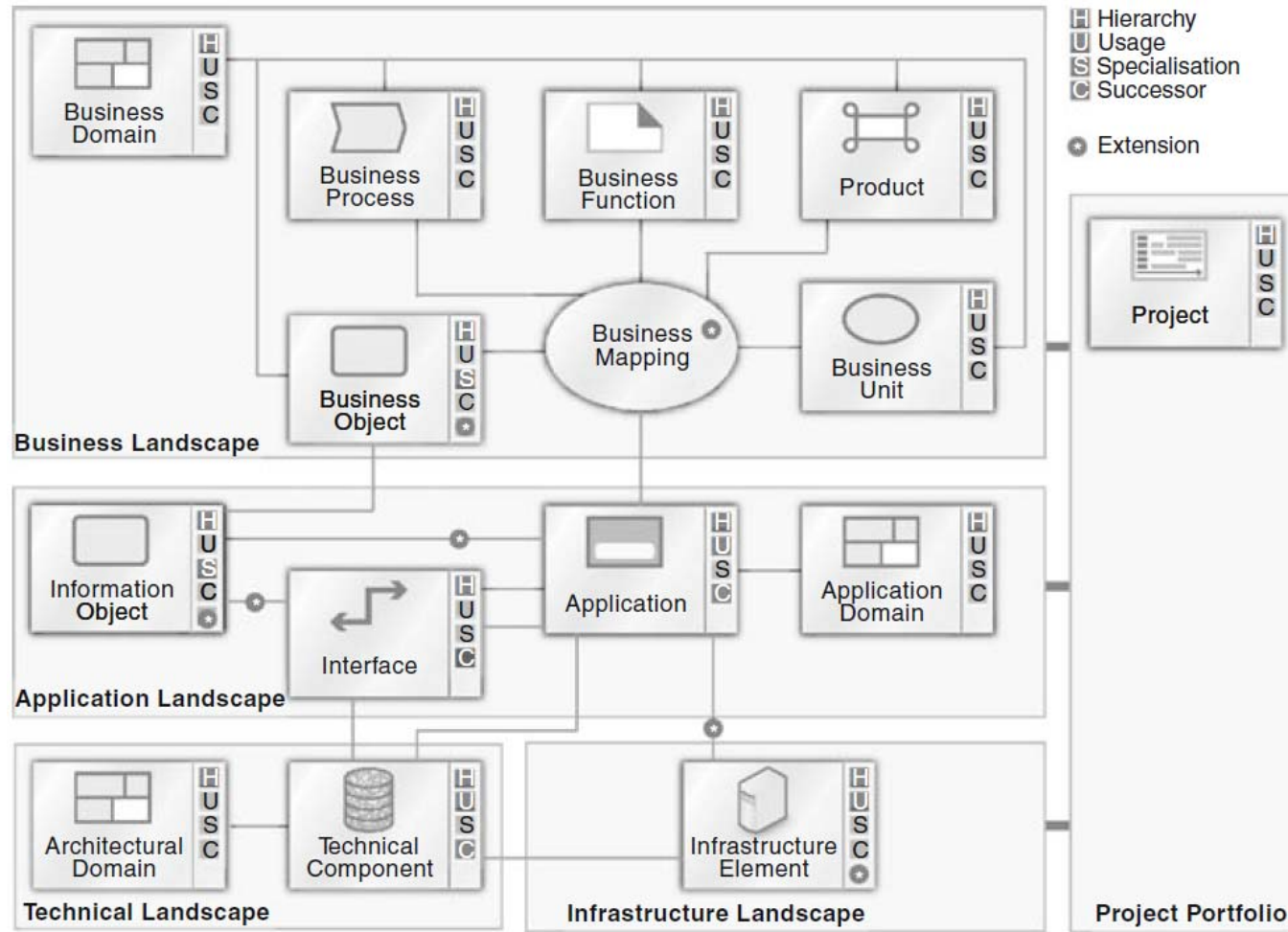
## ■ Interface

- ◆ **Name**, e.g. "Interface1"
- ◆ **Release No**, e.g. "Interface 1, Release 2.3"
- ◆ **Description**
- ◆ **Planning status**
- ◆ **Assignment to Applications**
- ◆ **Assignment to Information Objects**
- ◆ ...

## ■ Information Object

- ◆ **Name**, e.g. "ACTACCustomer"
- ◆ **Description**
- ◆ **Assignment to Applications**
- ◆ **Assignment to Interfaces**
- ◆ ...

# Relationships in Application Landscapes



(Hanschke 2010, p. 125)

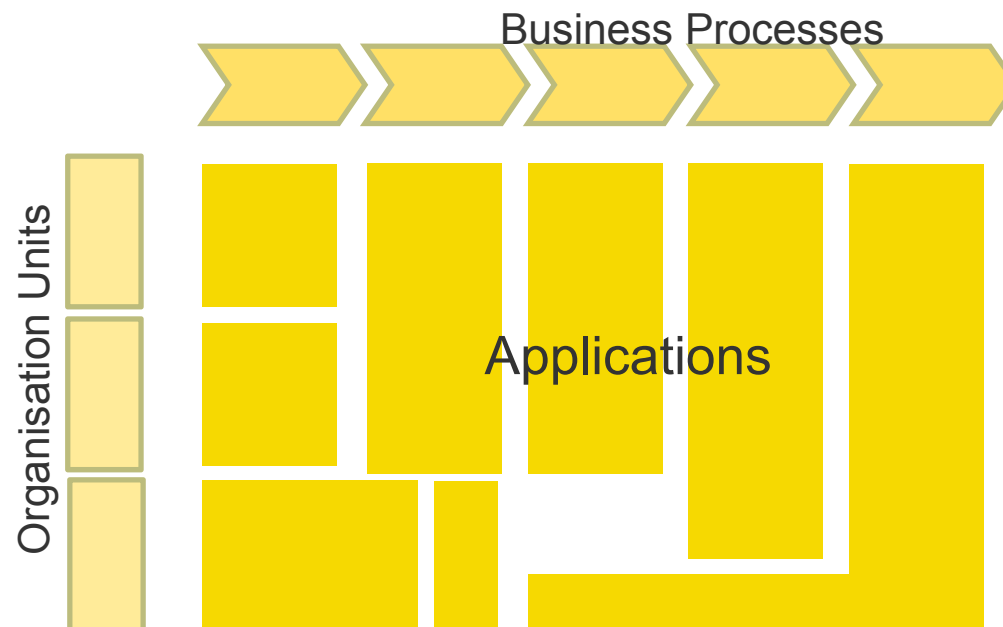
## *Relationships of the Application Landscape Model to the Business Landscape Model*

- Applications can be assigned to business processes, business functions, products, business units or business objects
- The assignment can be made on different levels of granularity
  - ◆ assigning applications to activities in a process model – this is the finest level of detail
  - ◆ Application usage diagrams in ArchiMate assign applications to processes or subprocesses
  - ◆ in landscape diagrams essentially give a big-picture view; they model how applications fit into the value chain

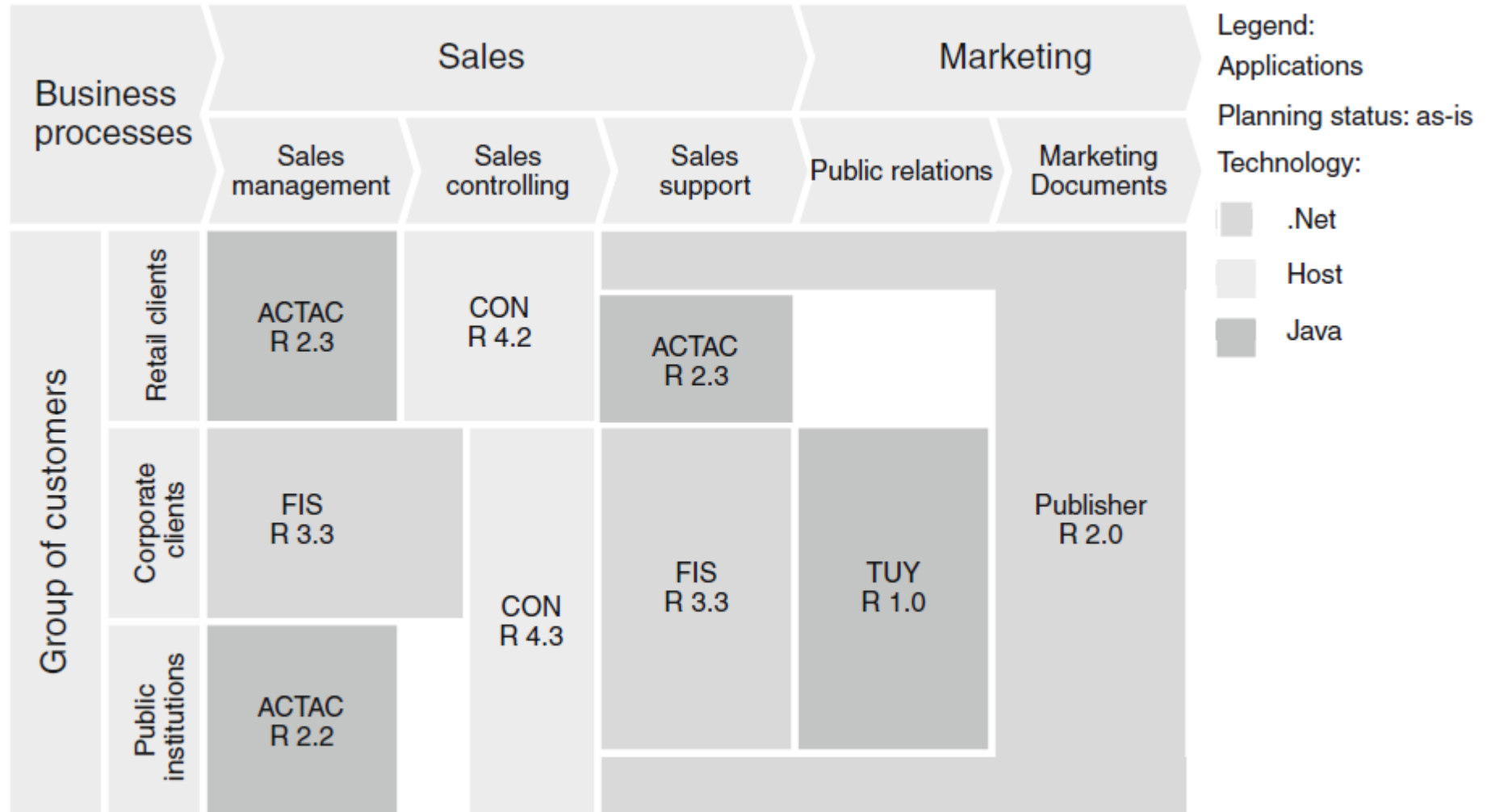
(Hanschke 2010, p. 126)

# Landscape Diagrams

- A landscape diagram is a highlevel diagram describing associations between different aspects of an EA
- For example, it can model, which applications are assigned to business processes and organisation units



# Another example of a Landscape Diagram

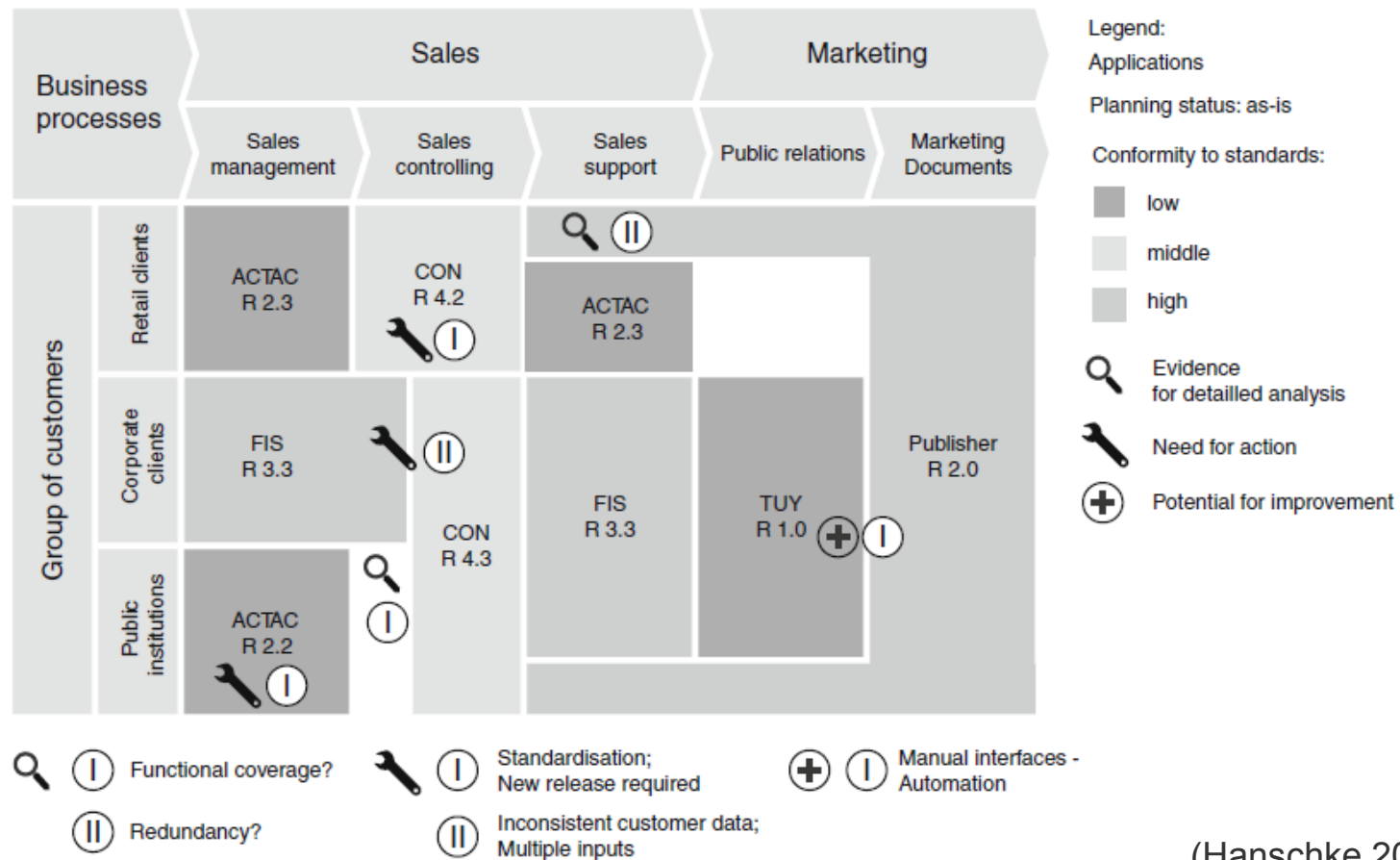


(Hanschke 2010, p. 144)



# Extensions of a Landscape Diagram

- This landscape diagrams highlights needs for action and potential for improvements



(Hanschke 2010, p. 150)