

Alignment of Business and IT

Introduction

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BRITISH AIRWAYS



Speaking to the Triple i Convention, Paul Coby, CIO of British Airways, said, "Baroque complexity was killing us: 72 selling classes, 15 types of passenger, 10 ways to pay. [There were] different sources of information, and therefore not always the same answers to questions.

"The airline industry had been based on not telling you what your choice was - but that was blown apart by Easyjet."

Believing IT can be an effective driver of business transformation, Coby said he re-engineered the customer systems and processes. He used four rules, which, he says, turned IT architecture into business strategy:

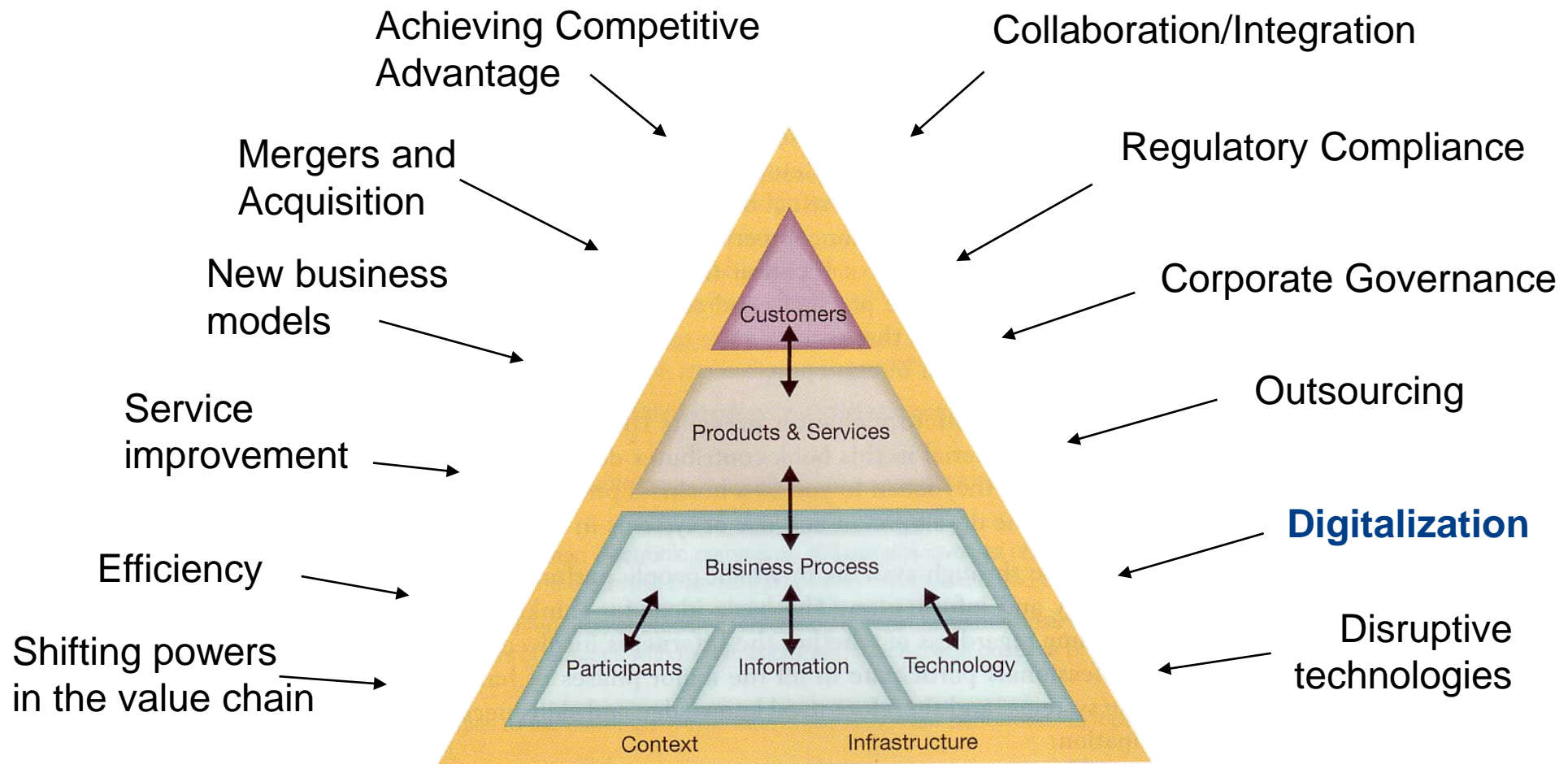
- ◆ Have a simple and compelling customer proposal
- ◆ Design processes for use by customers
- ◆ Do it right first time
- ◆ Have a single solution across all departments.

The proposal, agreed at the highest level, resulted in clear targets, including 100% e-ticketing, 50% self-service check in, 80% self-service customer transactions and 100% self-service executive club.

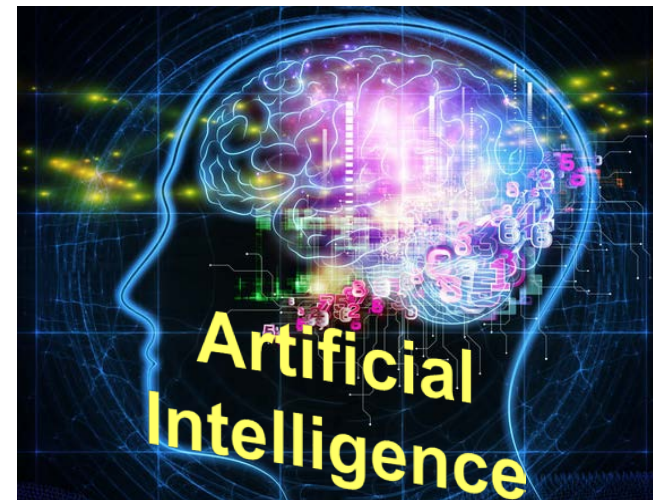
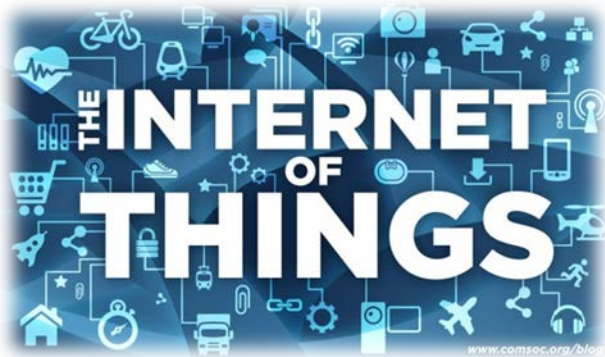
Results so far include elimination of many BA processes ("you can't have a drop-down menu with 60 choices," said Coby), a big increase in e-ticket sales, and a substantial reduction in fares, which also made upselling, for example to first class, easier.

Business Transformation

Increasingly dynamic environment: Challenges confronting an Enterprise



Technology Trends



Drivers for Change can be internal and external – Business and IT

■ External Drivers

- ◆ Demand for new services and products
- ◆ Competitors with new business models
- ◆ Market Opportunities
- ◆ Disruptive Technologies
- ◆ New regulations

Seize **Opportunities**
React on **Threats**

■ Internal Drivers

- ◆ Business Process Optimisation
- ◆ Increase flexibility
- ◆ Reorganisation
- ◆ Migration of Information Systems
- ◆ Changes in IT infrastructure

Exploit **Strengths**
Eliminate **Weaknesses**



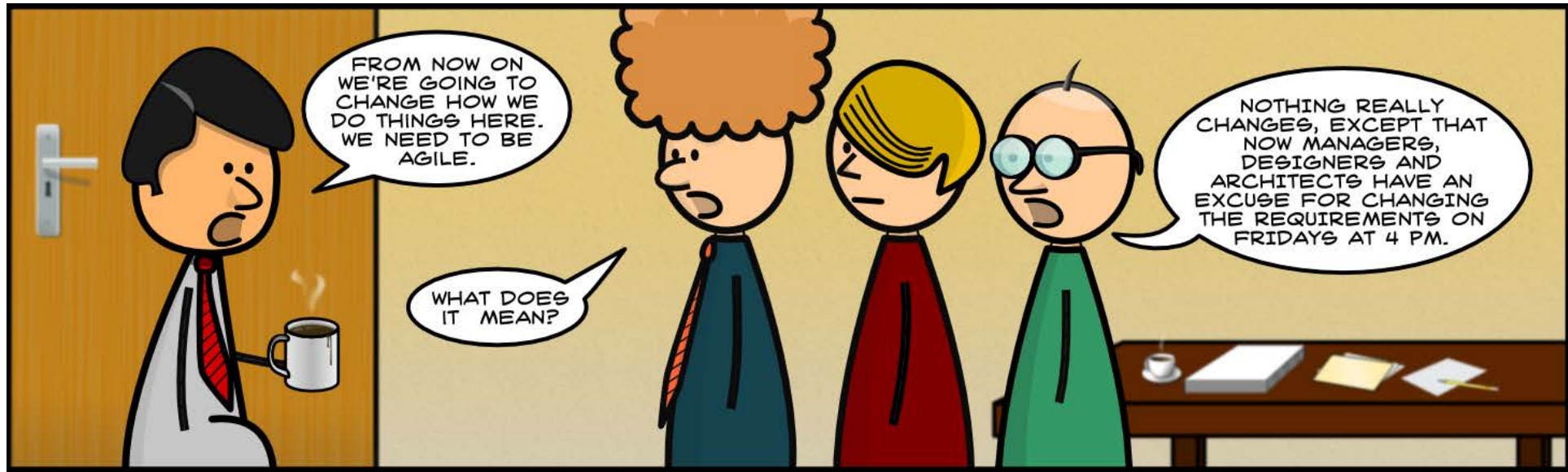
Agility: Demand for Continuous Change

- To improve their chances of survival, enterprises need to be agile.
- Agility is the ability of enterprises to
 - ◆ quickly **adapt themselves to changes** in their environment and
 - ◆ **seize opportunities** as they avail themselves
 - ◆ have **flexibility** to deal with individual customer requirements, to reduce response time to external demands, and to react on events

Source: Op 't Land, M.; Proper, E.; Waage, M.; Cloo, J. and Steghuis, C.: Enterprise Architecture - Creating Value by Informed Governance, Springer-Verlag 2009, page 6. <http://www.springerlink.com/content/k8jp3r/#section=132347&page=2&locus=10>



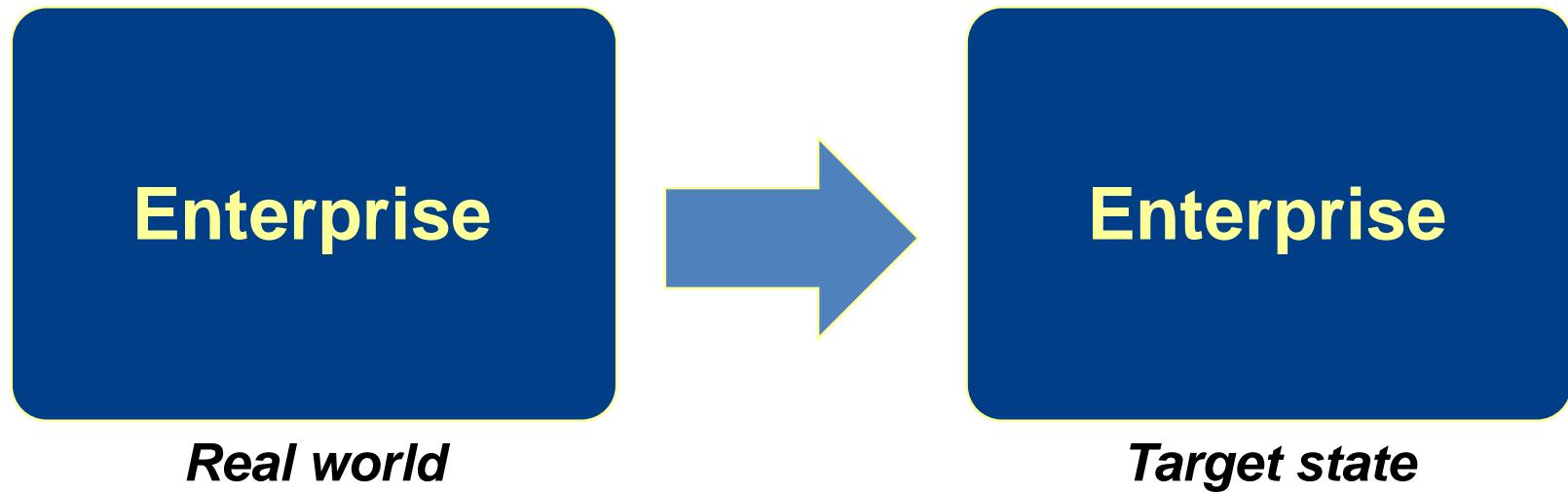
Agility



#113 - "AGILE DEVELOPMENT, EXPLAINED" - BY SALVATORE IOVENE, FEB. 21ST 2009

[HTTP://WWW.GEEKHEROCOMIC.COM/](http://www.geekherocomic.com/)

Business Transformation



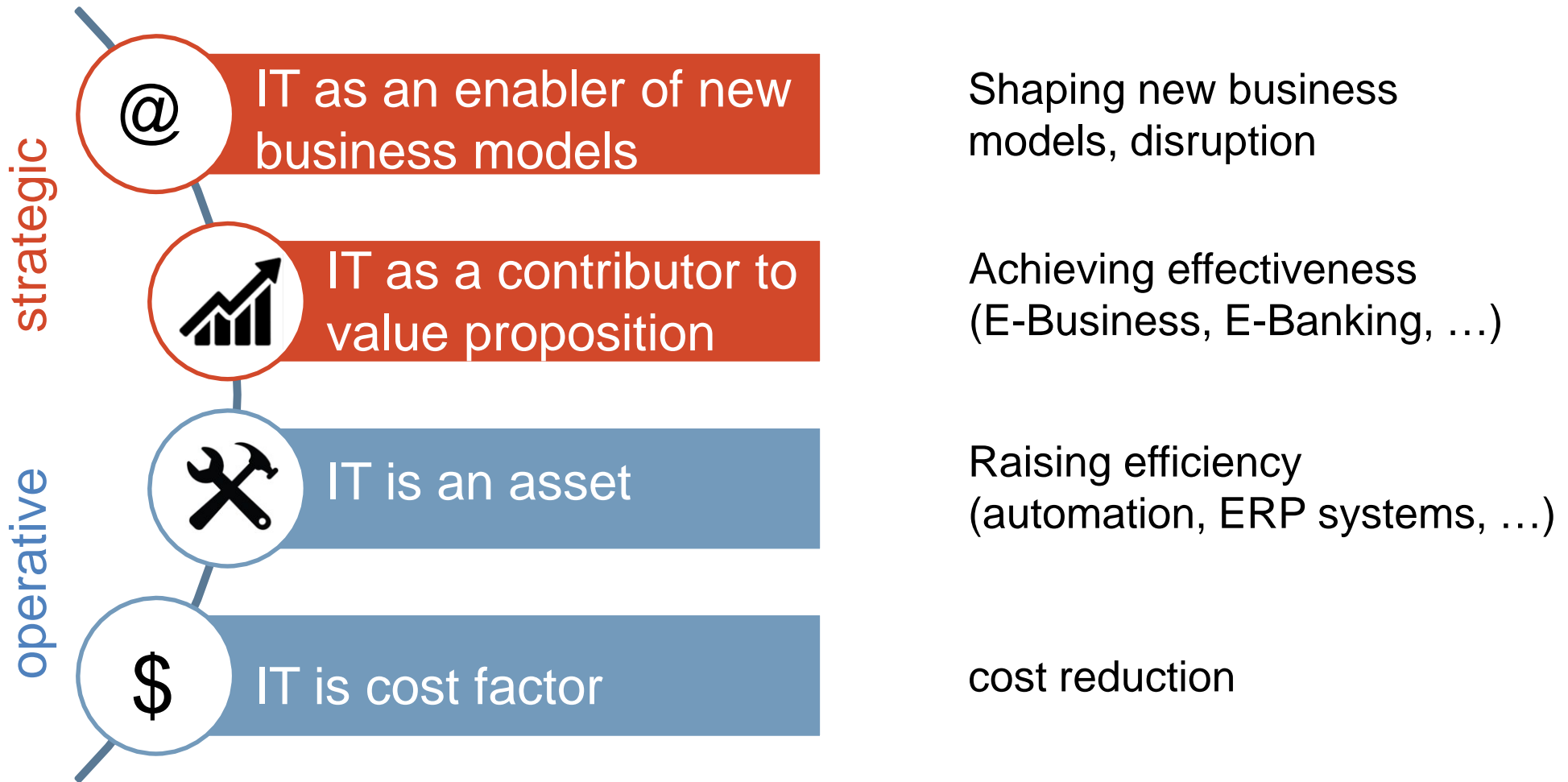


Alignment of Business and IT

Business-IT Alignment

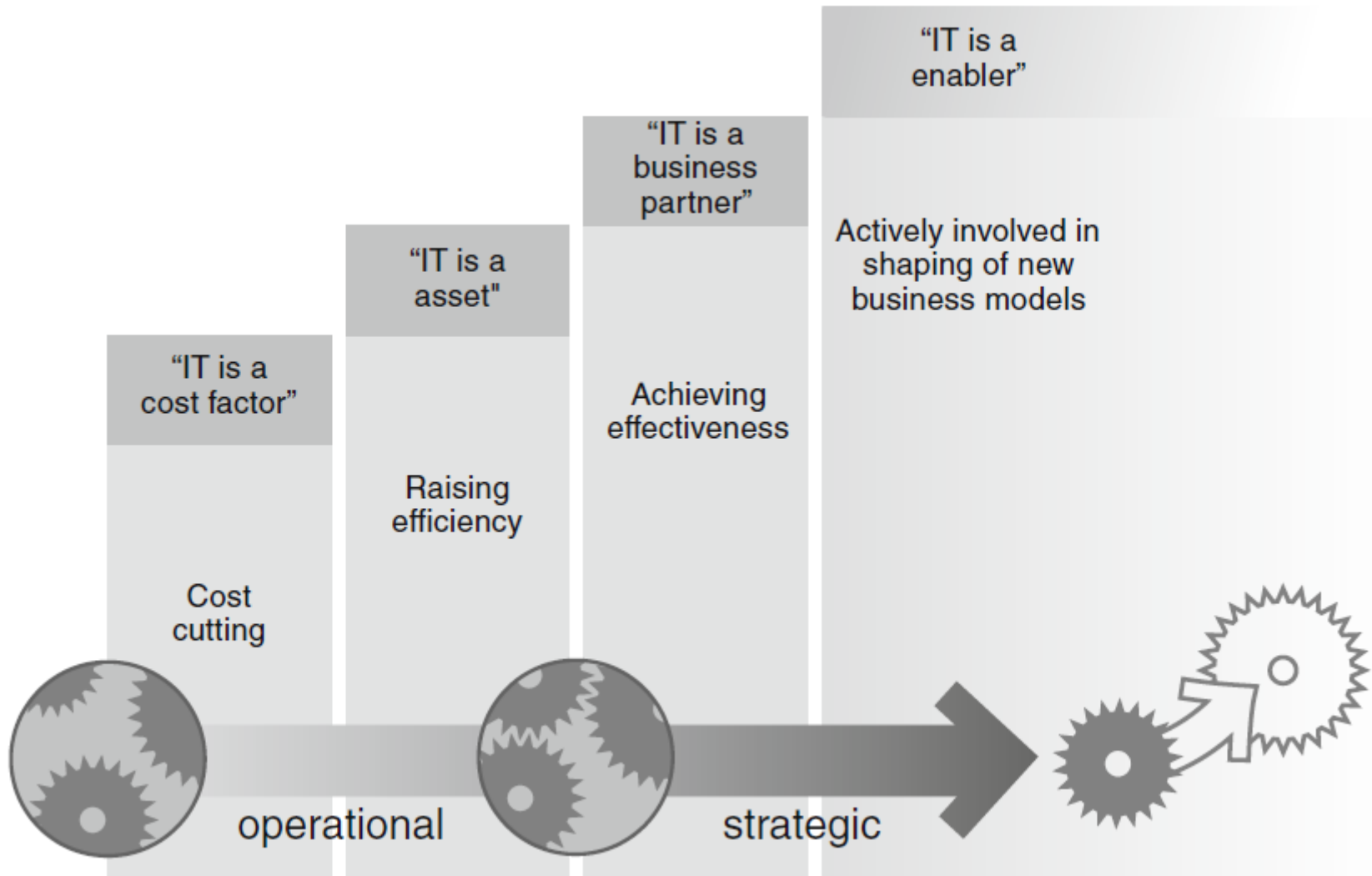
Business-IT alignment is a dynamic state in which a business organization is able to use information technology (IT) effectively to achieve business objectives

Role of IT Enterprises



Source: (Hanschke 2013, S. 27ff)
N. Tschichold, ELCA

The Role of IT



(Hanschke 2010, p. 12)

The Different Roles of IT - Portfolio

IT is ...

Cost factor

Asset

Business partner

Enabler

Product and service portfolio

Commodity IT, such as provision of peripheral equipment and operating standard software

Securing business operation through reliable, cost-effective basic IT
 Fulfilment of security and compliance requirements

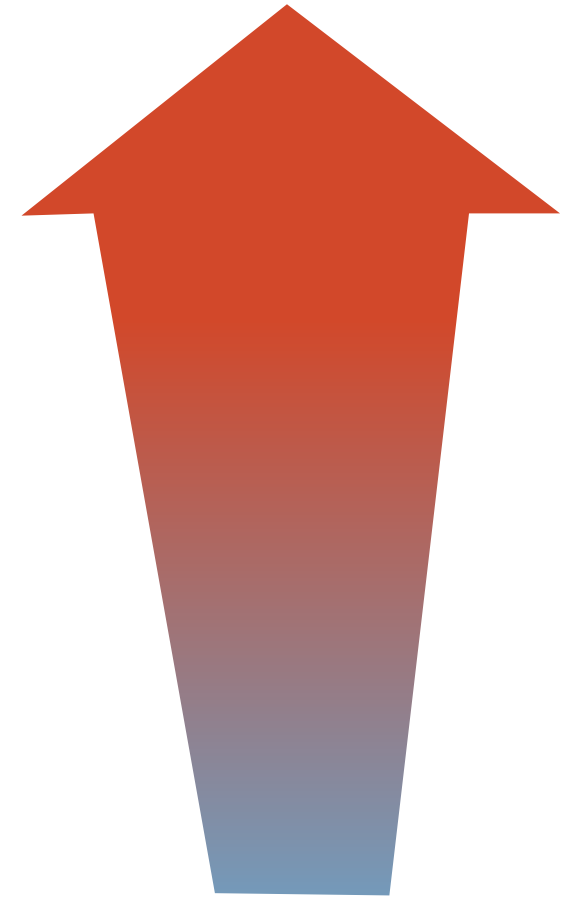
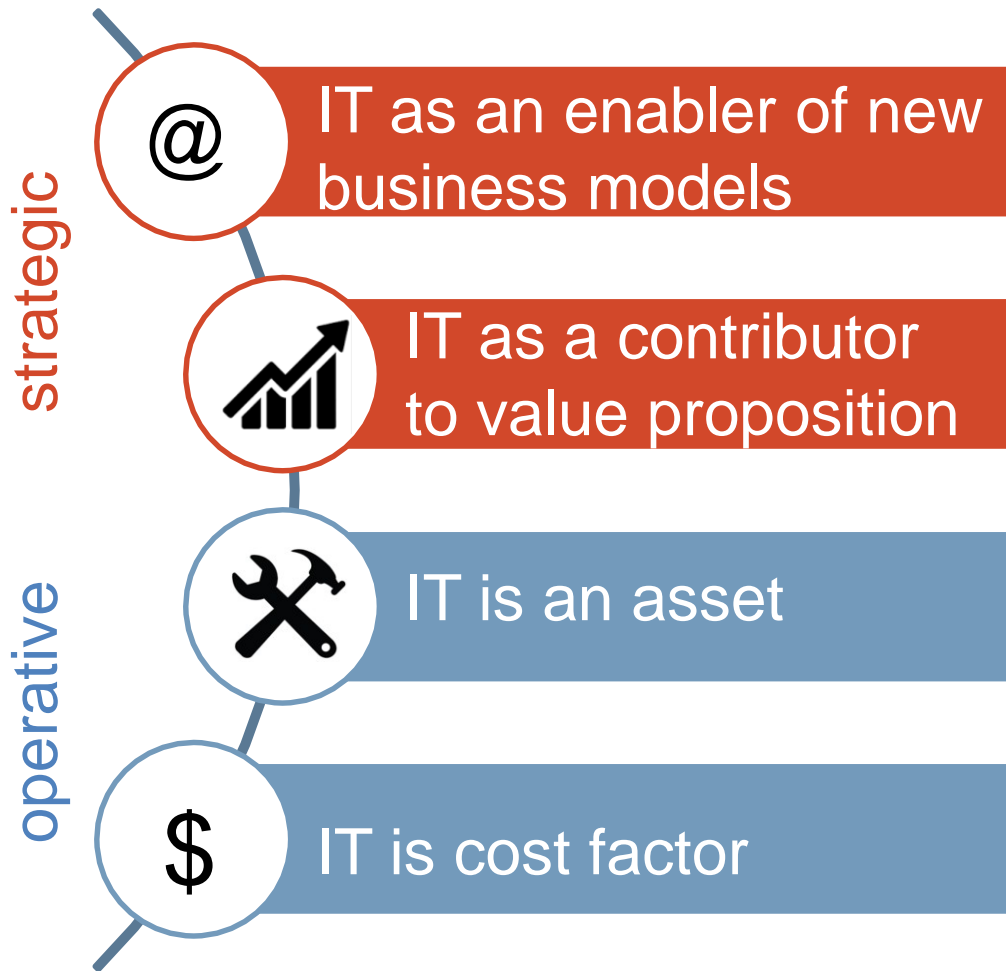
Business-relevant IT products e.g. focused on business processes or the enterprise's products
 Reliable, cost-effective basic IT

Impetus for business through new technologies and business-relevant IT products
 Reliable, cost-effective basic IT

(Hanschke 2010, p. 14)

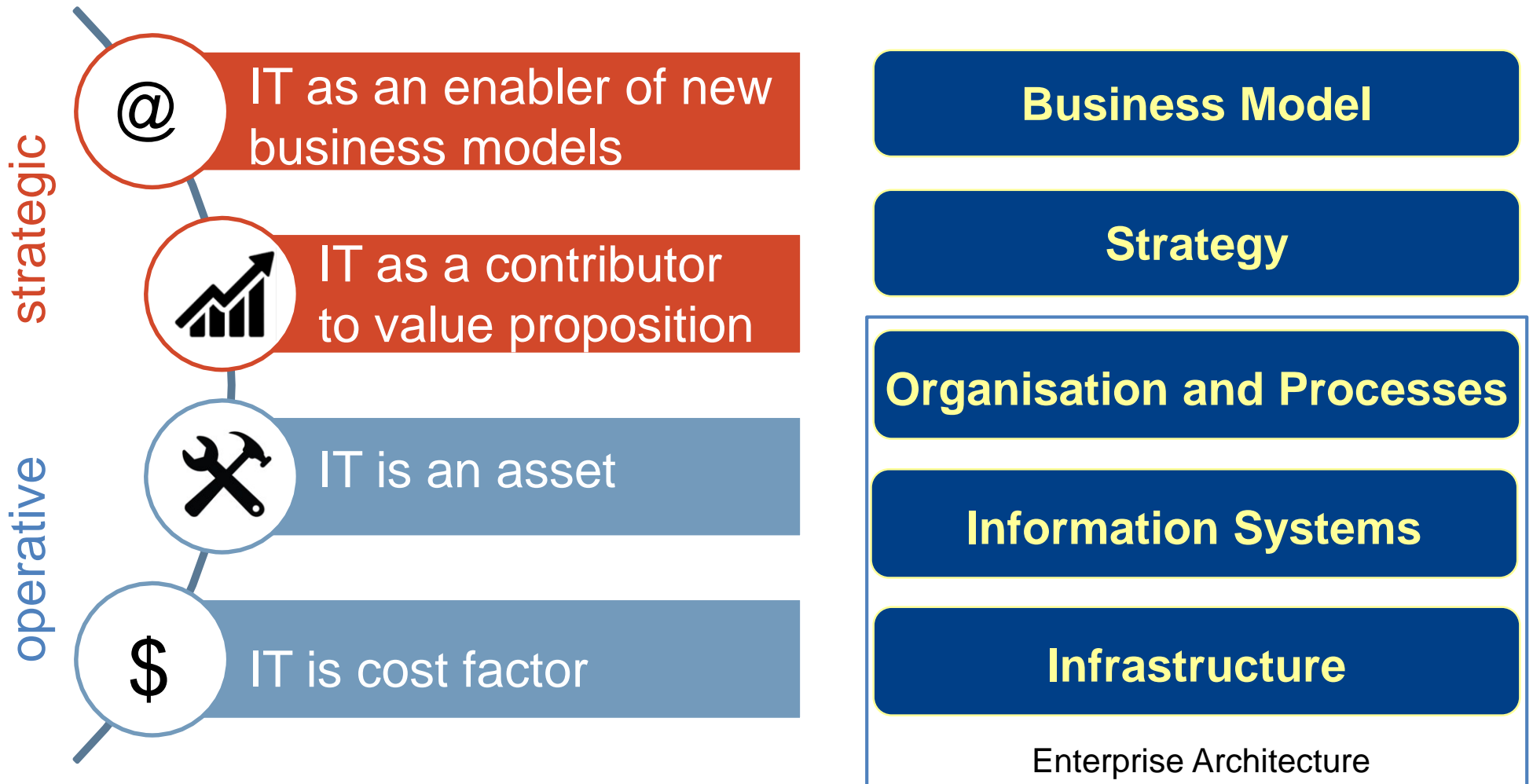


Strategic Importance of IT



Source: (Hanschke 2013, S. 27ff)
N. Tschichold, ELCA

Role of IT and affected Parts of the Enterprise



Mutual Dependencies between Business and IT

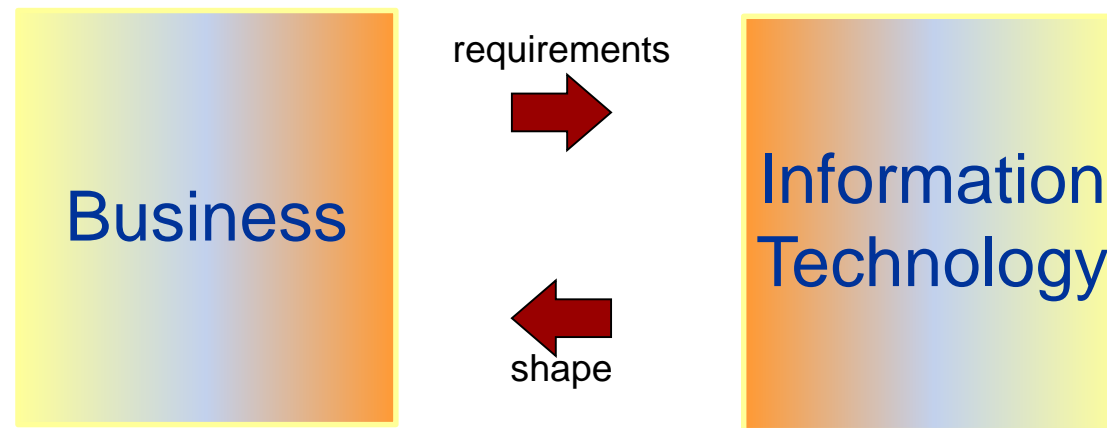
- Almost all processes have become IT reliant, if not fully automated.
- Thus, there is a mutual influence between information systems and the design of the business
 - ◆ New IT may lead to new business models, strategies, or business process (re-engineering).
 - ◆ A (re-)design of a business process often demands changes in the IT
 - ◆ Changes in IT applications and information systems can demand a re-design of business processes

**"There are no IT projects,
only business projects."**

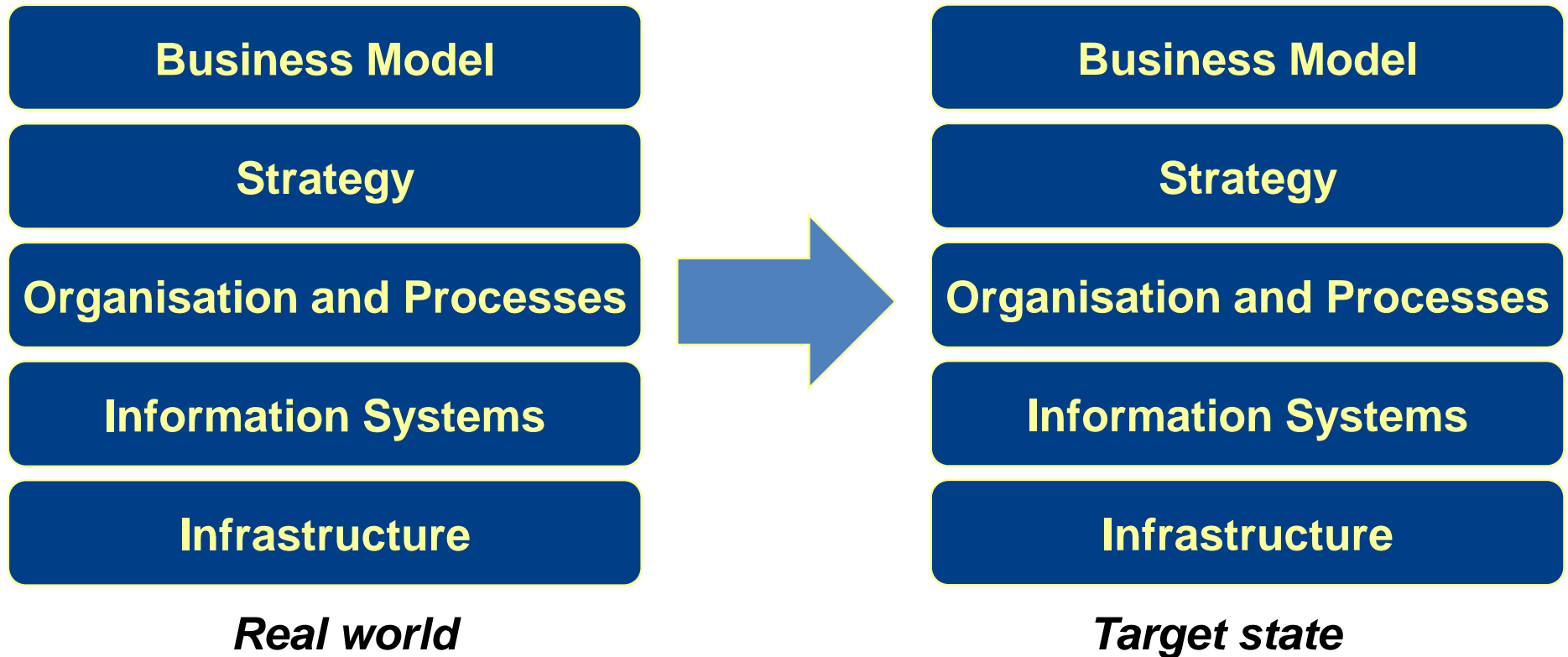
(Paul Coby, CIO of British Airways)

Business-IT Alignment

- The alignment of business and IT has to create an environment in which the IT department and the CIO ...
 - ...are not merely installing technology to support business processes but
 - ...are also using technology to shape the business.



Business Transformation



The Role of Modeling



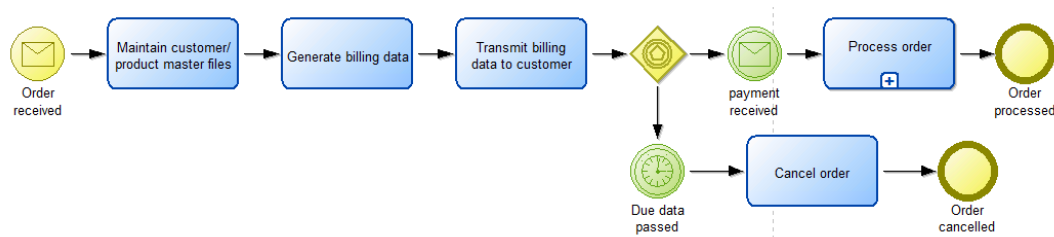
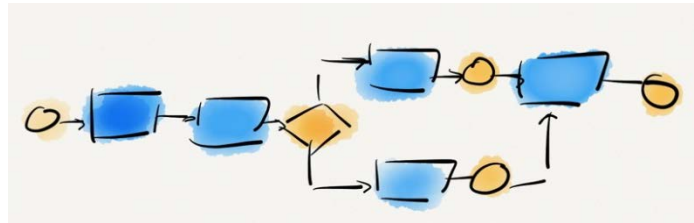
Models



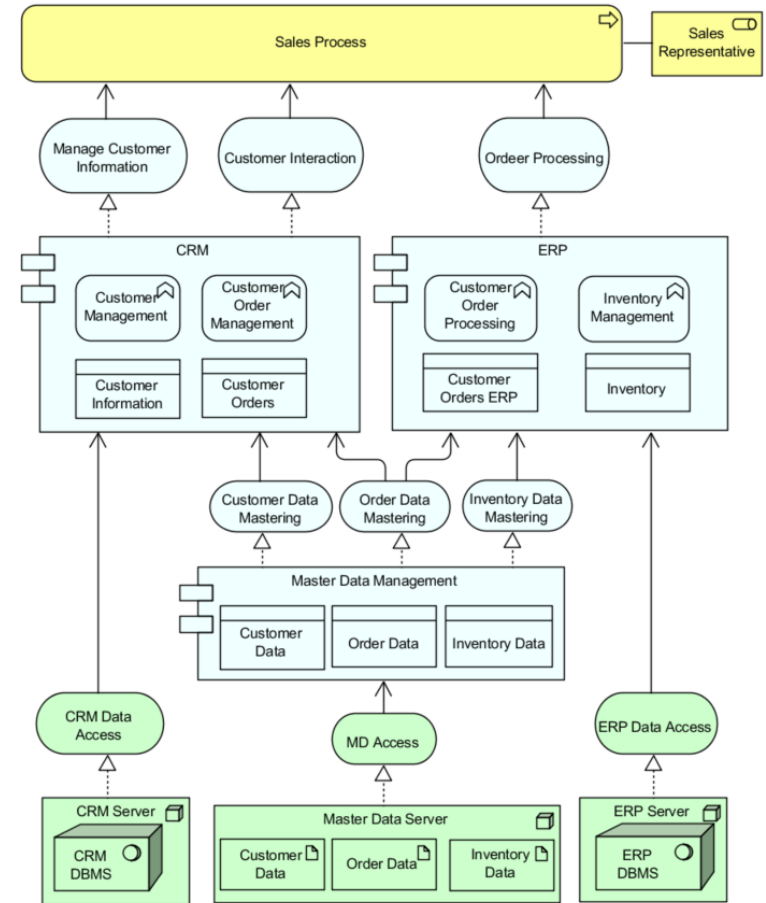
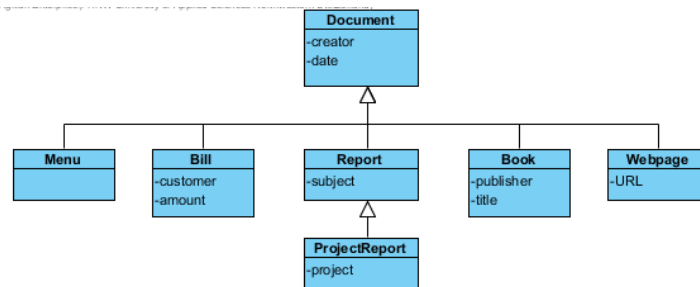
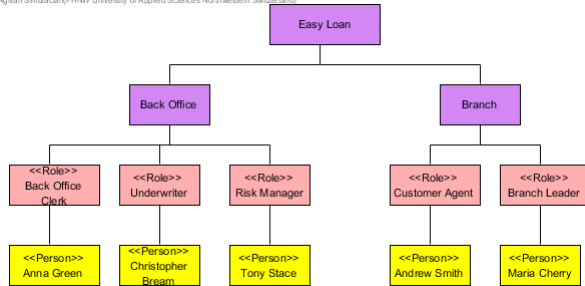
not what
we are
dealing with



Models



Agilan Simulacran/ETHW University of Applied Sciences Northwestern Switzerland



Dealing with Complexity and Change



- If the object you want to create or change is simple, and it is not likely to change, then you can do it directly.



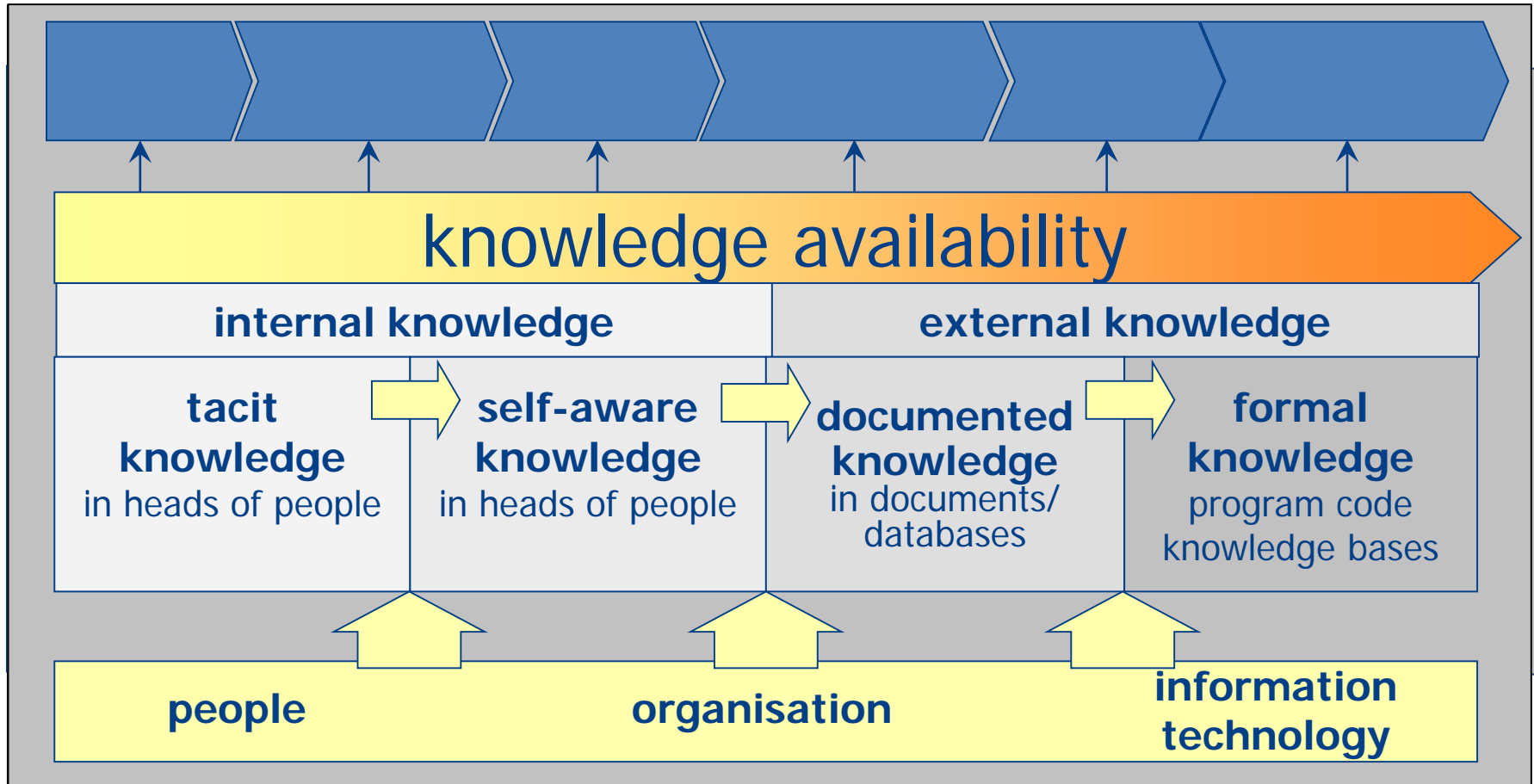
- On the other hand, if the object is **complex**, you can't see it in its entirety at one time and it is likely to **change** considerably over time, you need a description or **model**.

(John Zachmann, 2012)

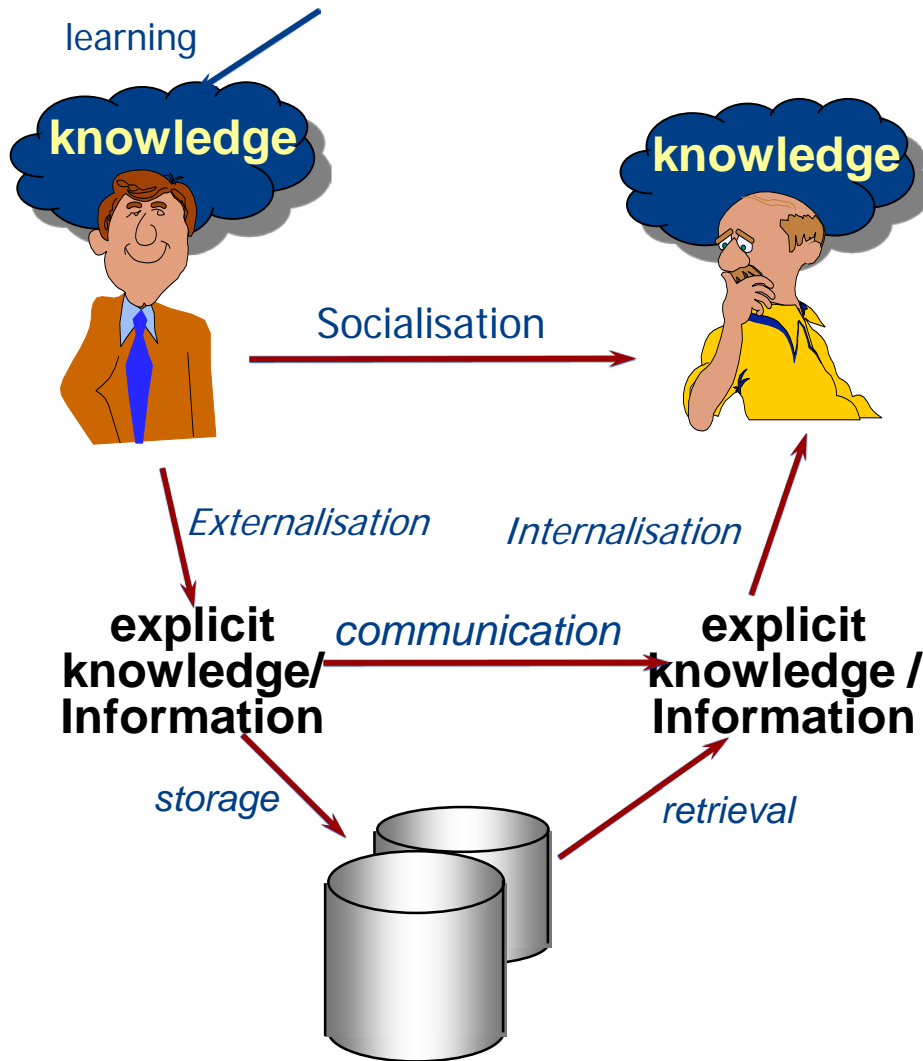
Business Value of Modeling

- **Communication between people**
- **Knowledge management and reuse**
- Training and learning
- **Persuasion and selling**
- **Analysis of a business situation**
- Compliance management
- Development of software requirements
- Direct execution in software engines

Knowledge in Enterprises



Knowledge Transfer and Sharing



Knowledge Generation

- ◆ experience
- ...

Transfer via ...

... Socialisation

- ◆ project teams
- ◆ coaching
- ...

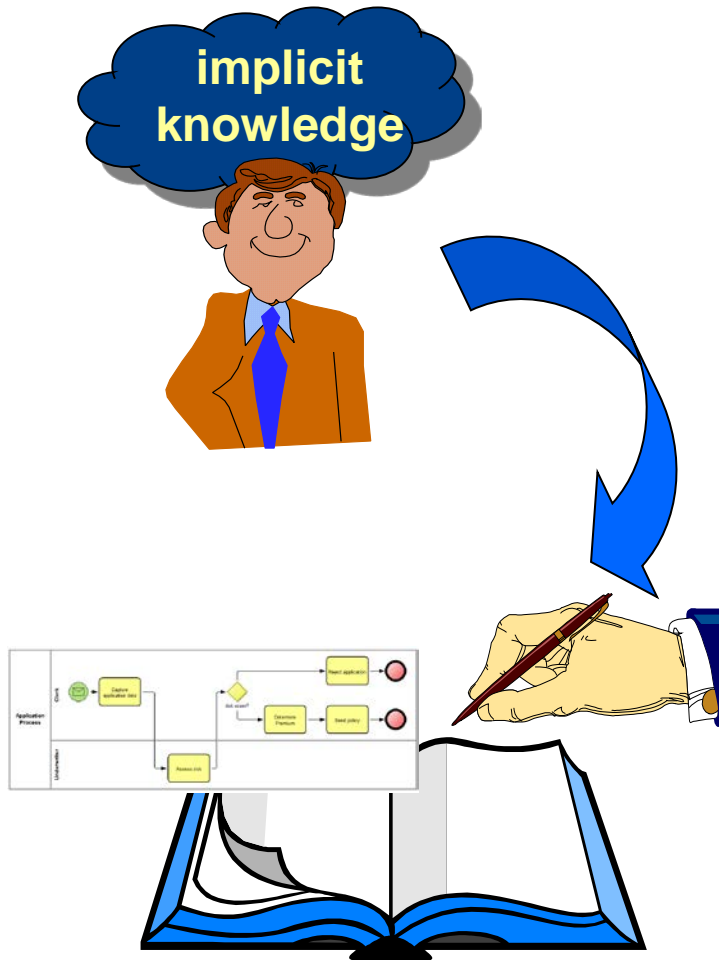
... Communication

- ◆ face to face
- ◆ meeting
- workshops
- ◆ phone, email
- ...

... knowledge repository

- ◆ books
- ◆ documents, files
- ◆ information systems
- ...

Implicit vs. explicit Knowledge



- Implicit Knowledge
 - ◆ subjective
 - ◆ in the mind of people
 - ◆ based on experience, intuition

- Explicit Knowledge
 - ◆ based on rationality
 - ◆ text, models, rules

- By making knowledge explicit it can be ...
 - ...commonly agreed upon
 - ...preserved independent of people, e.g. if expert leaves company

Communication

- A picture is worth a thousand words



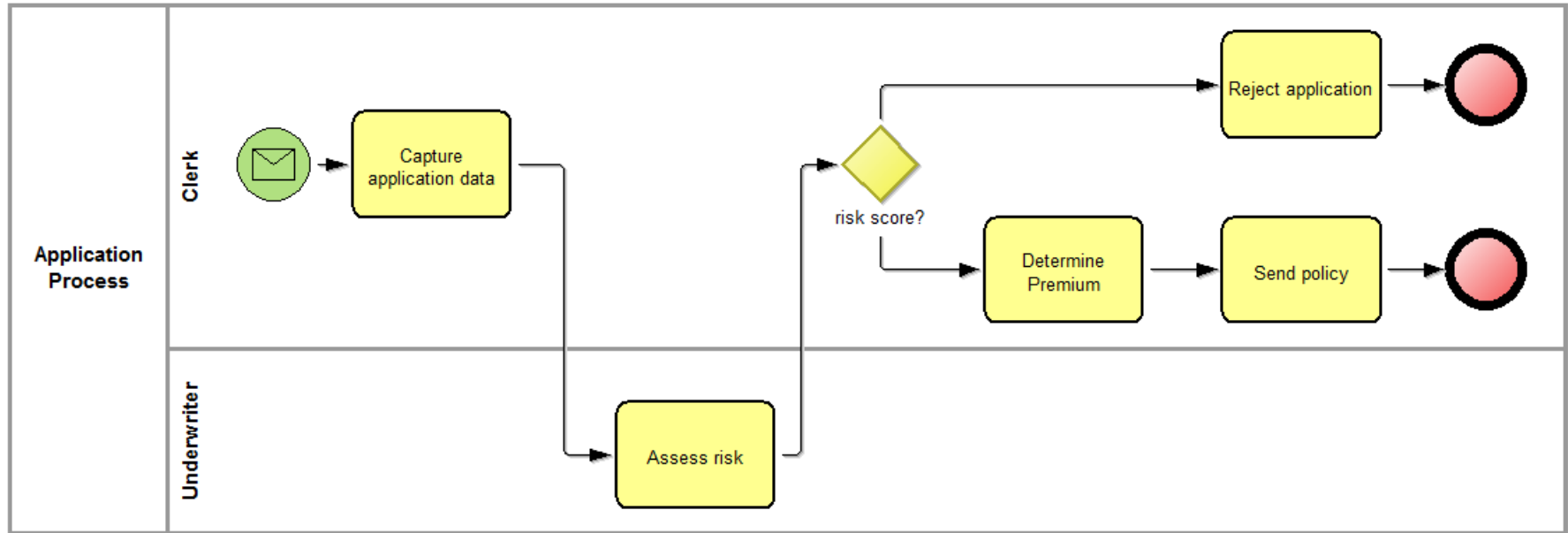
Experiment: Text vs. Model (1)

Process description:

In the business process for health insurance, first the application data are captured by the clerk. Then the underwriter makes the risk assessment is made by the underwriter. Depending on the risk score, the clerk determines the premiums and sends the policy or the application is rejected.

- Is «application data are captured» a task or an event?
- Which tasks are executed in parallel?
- Which activity is first: «determine premium» or «reject application»

Experiment: Text vs. Model (2)



- Is «application data are captured» a task or an event?
- Which tasks are executed in parallel?
- Which activity is first: «determine premium» or «reject application»

Business Transformation

