

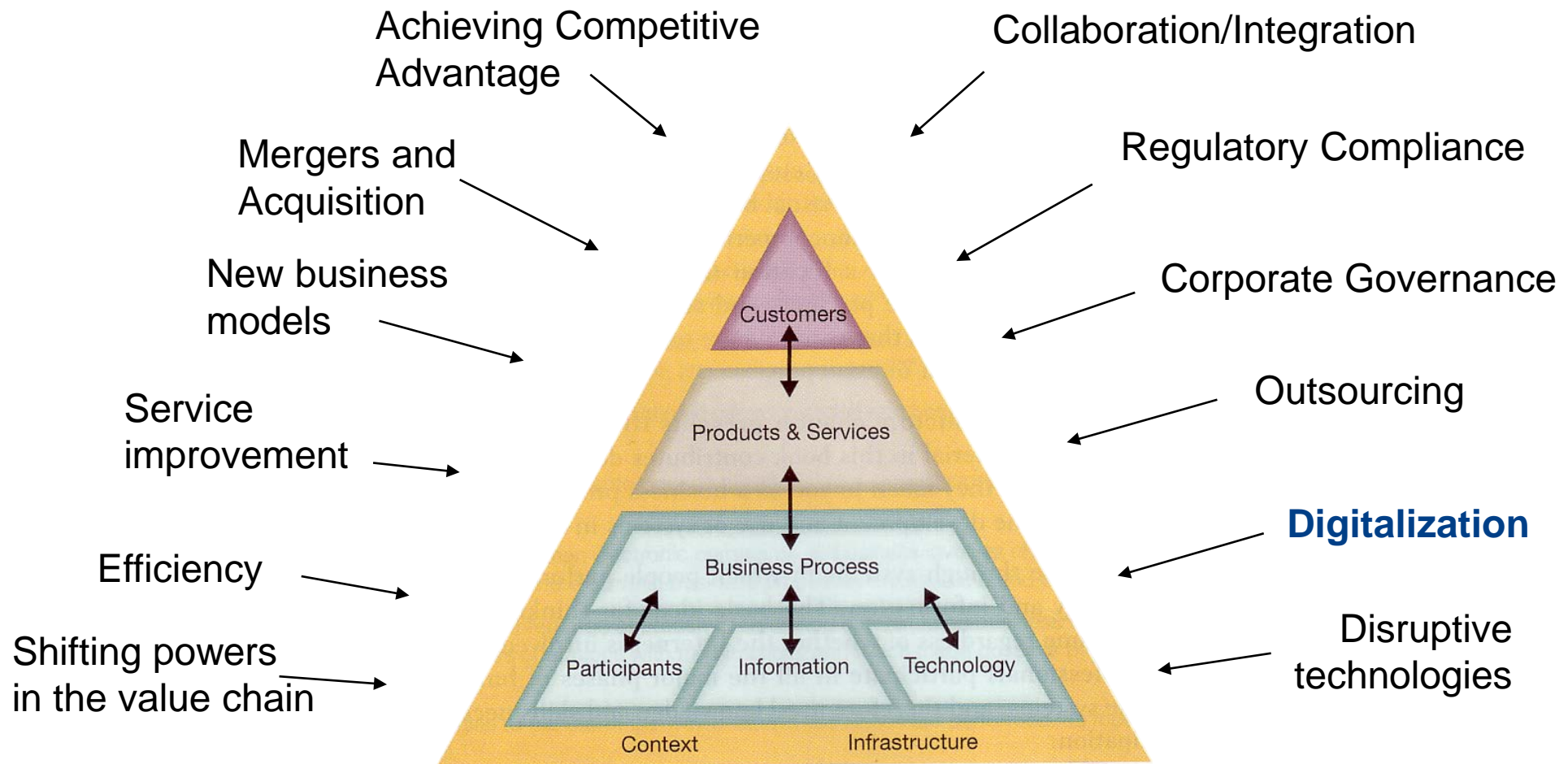


Alignment of Business and IT Introduction

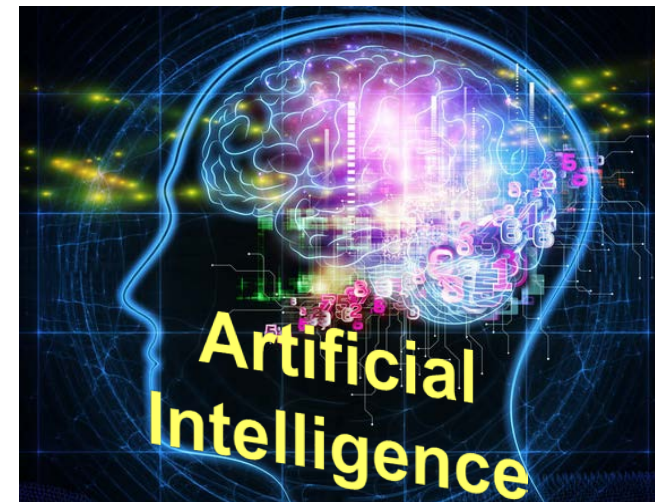
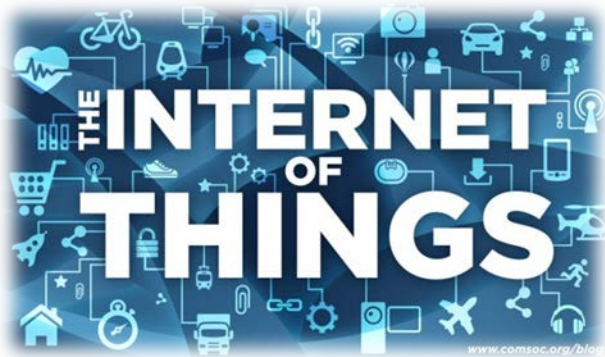
Prof. Dr. Knut Hinkelmann



Increasingly dynamic environment: Challenges confronting an Enterprise



Technology Trends



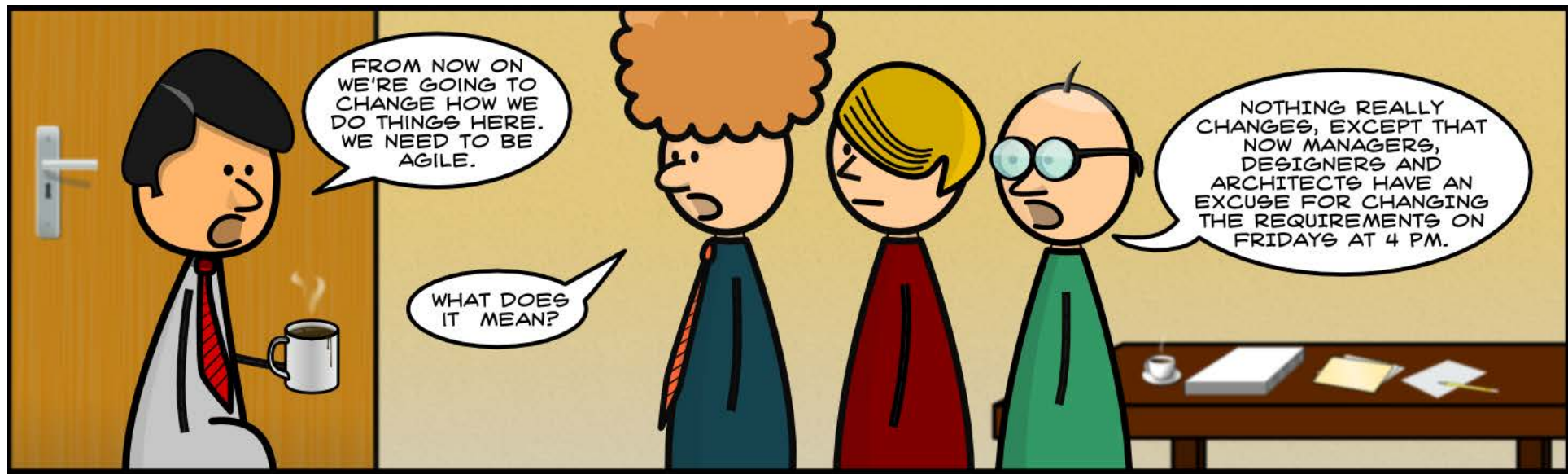
Demand for Continuous Change

- 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>



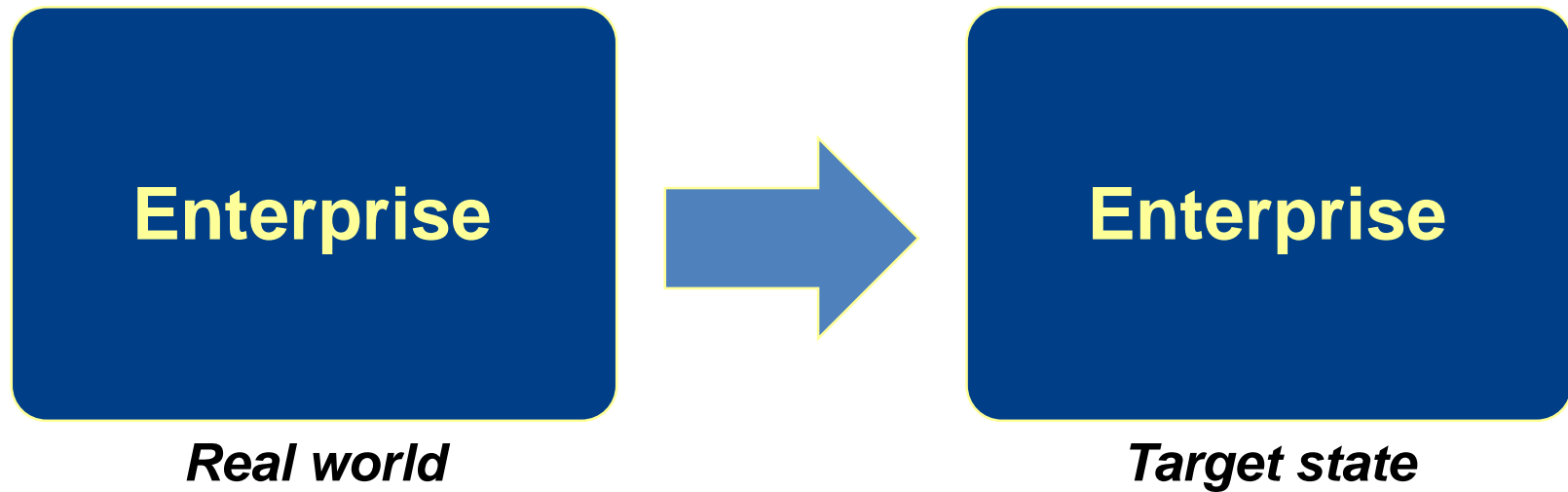
Agility



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

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

Change



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**

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

(Paul Coby, CIO of British Airways)

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

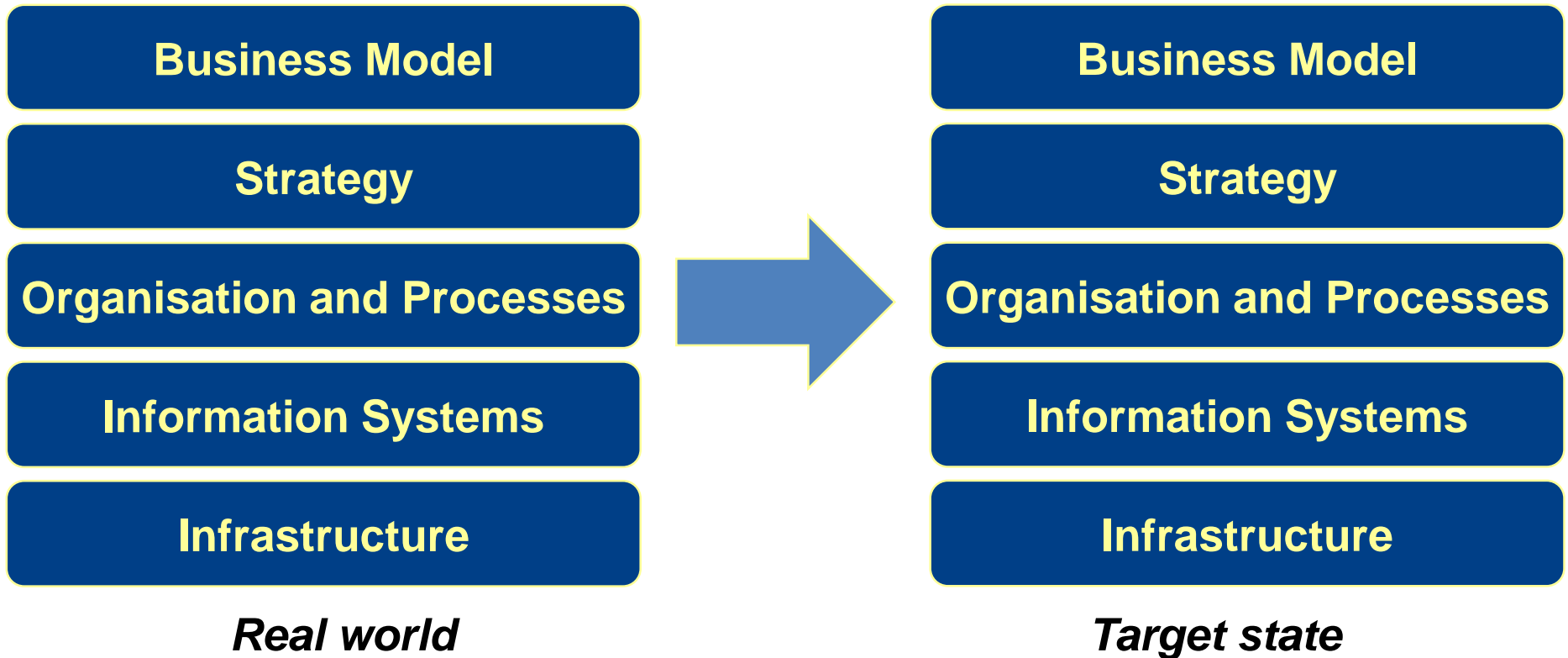
Business Transformation – Operational Level

- Value must come not just from the IT tools that are selected, but also in **the way that they are used** in the organization.
- For this reason, the scope of Business-IT Alignment also includes **business transformation**, in which organizations **redesign how work is accomplished** in order to realize efficiencies made possible by new IT.
- Thus, implementing IT to achieve its full potential for business value includes not only a technical component, but also an **organizational change management** component

Business Transformation – Strategy Level

- The organization must view information technology as an instrument to transform the business. This includes exploring other revenue streams and integrating other facets of their business into each other.
- Business-IT alignment integrates the information technology to the business model, goals and strategy the organization.

Business Transformation



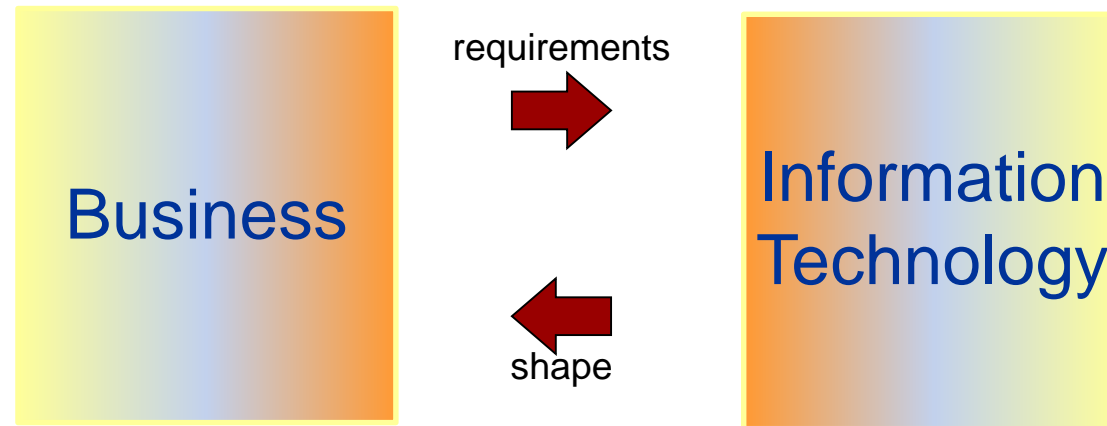


Mutual Dependencies between Business and IT

- 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

Business-IT Alignment

- The alignment of business and IT has to create an environment in which information technology...
 - ...not merely supports business processes but
 - ...is also used to shape the business.



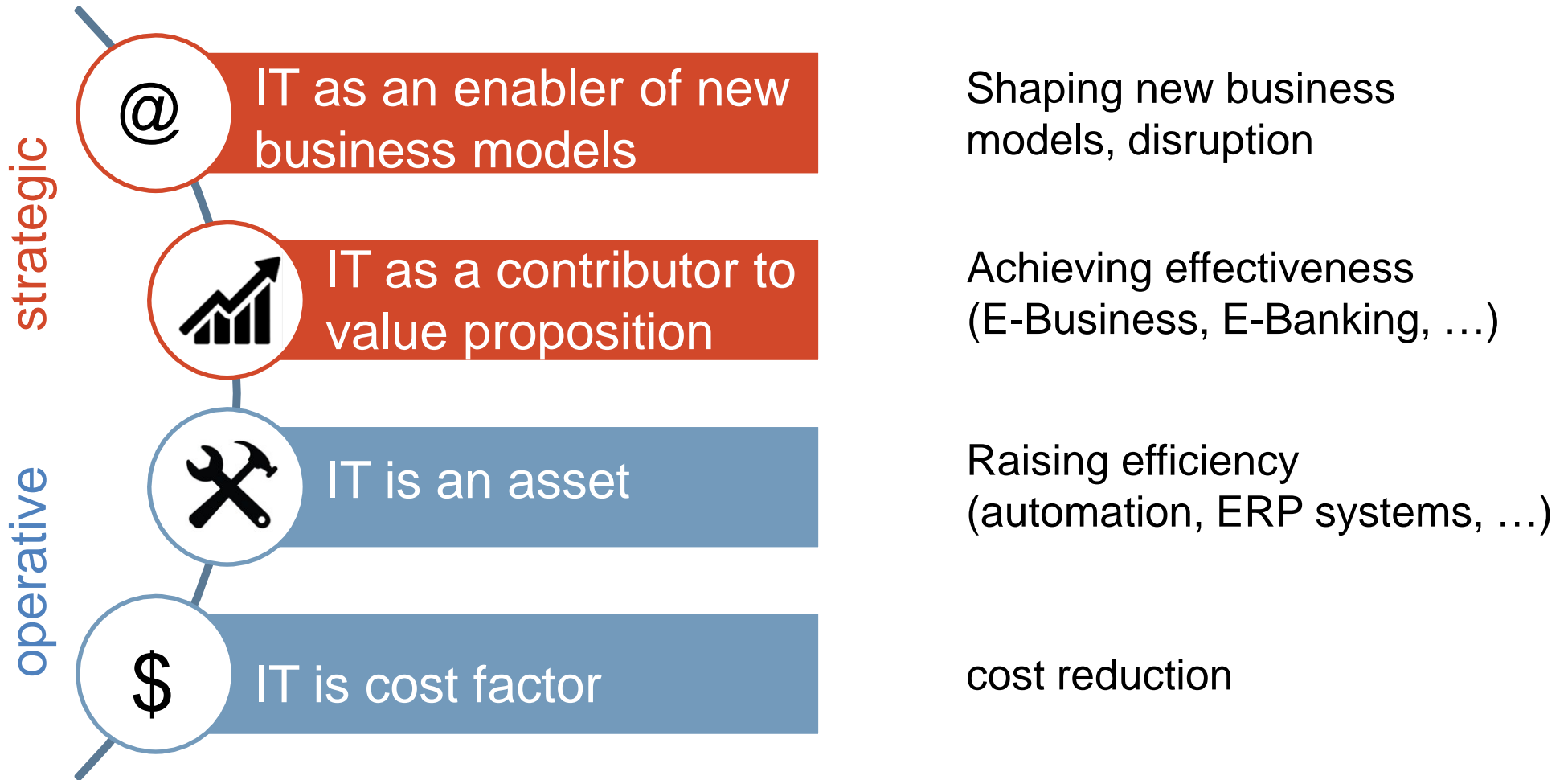
The Ultimate Goal: Business-IT Convergence

“Forget IT-business alignment. [There is] a small number of companies where business and IT are virtually indistinguishable... IT and the business are not so interested in aligning but rather are fully engaged in converging on an enterprise vision or goal that hovers above every department and project plan and is crystal clear to each and every employee.”

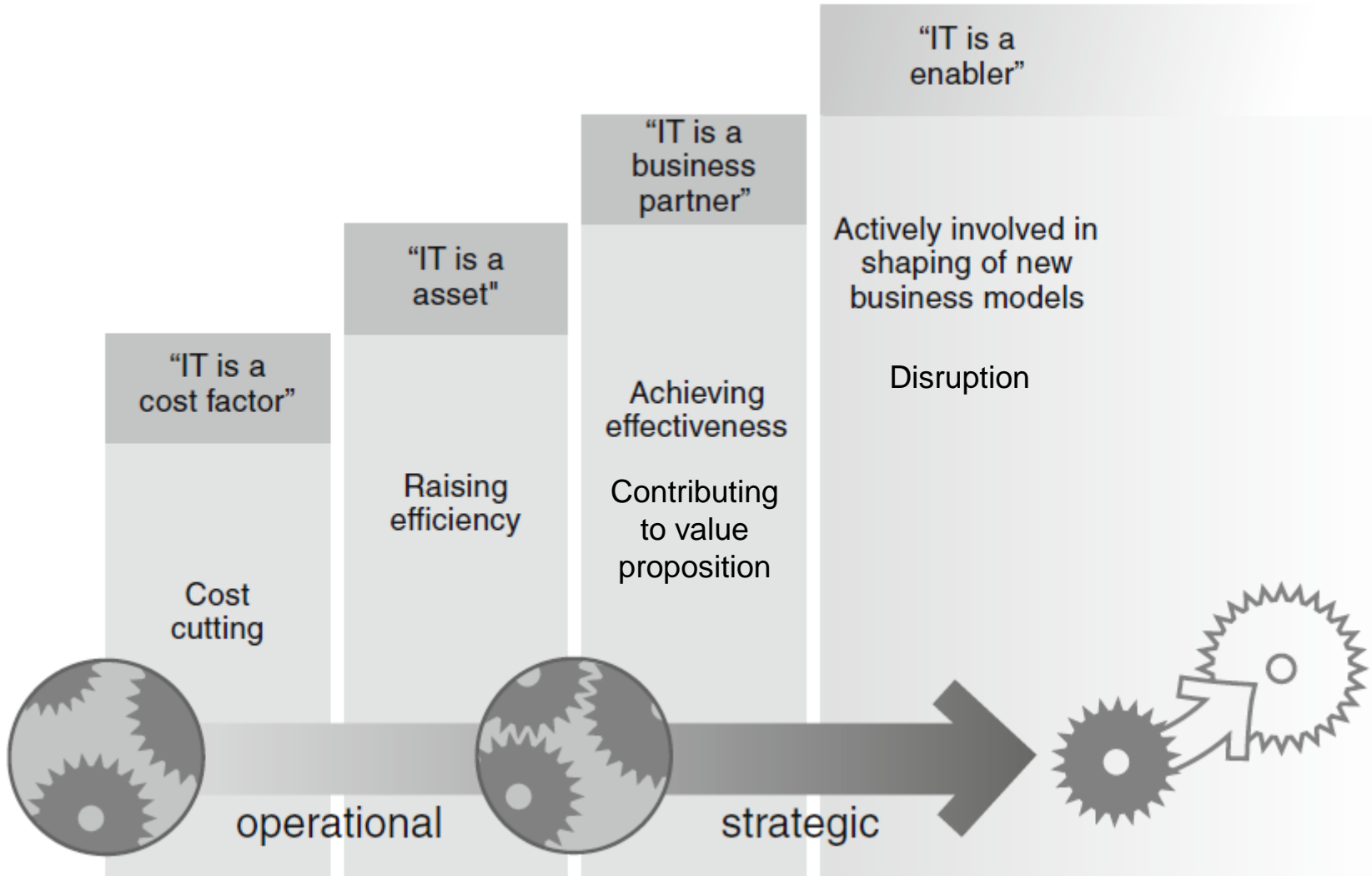
Julia King (2010)

Julia King (2010) Beyond Alignment. Computerworld. <https://www.computerworld.com/article/2550559/it-management/beyond-alignment.html>

Role of IT Enterprises



The Role of IT



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

Integration of Business and IT

- The higher the role of IT, the more are business planning and IT planning intermeshed

IT is ...

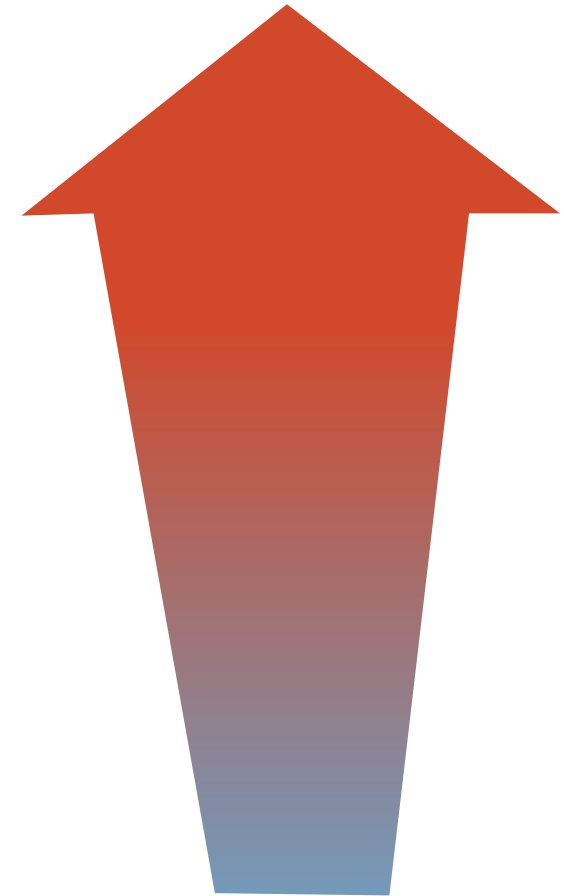
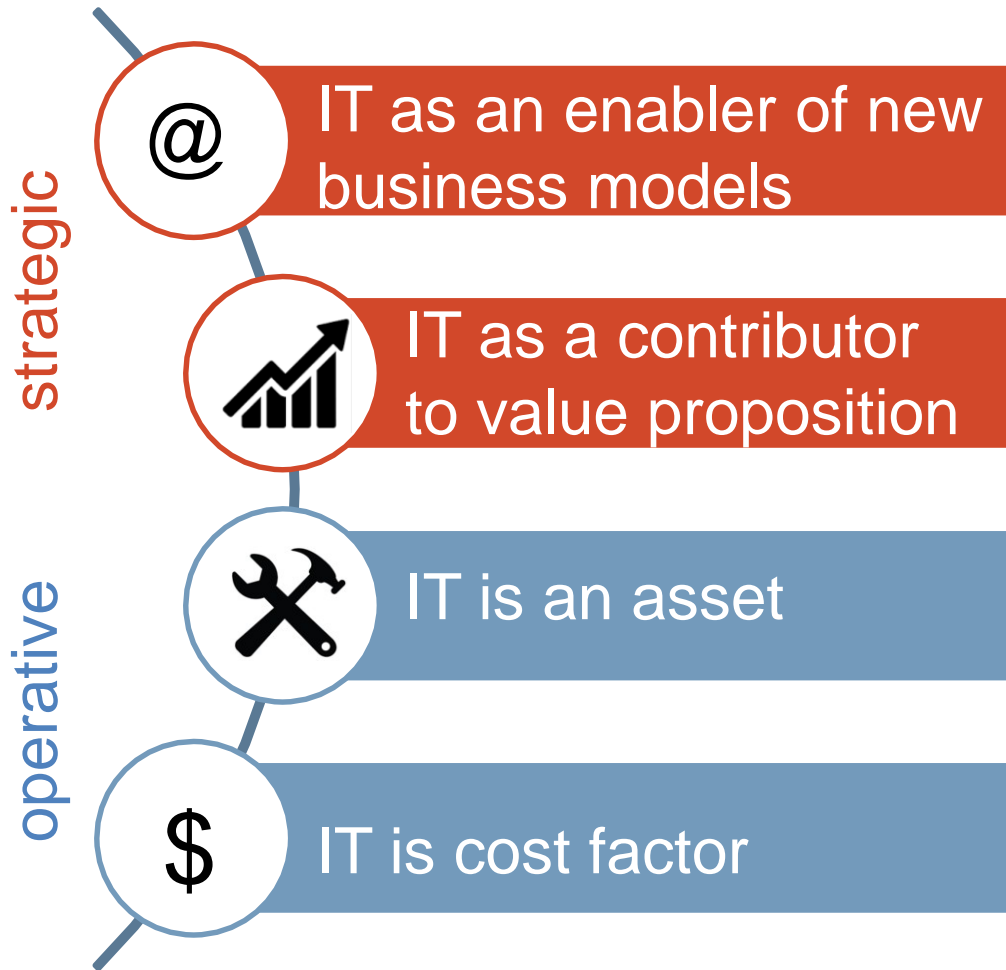
Cost factor	Asset	Business partner	Enabler
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IT planning focuses mainly on...

Reactive planning	Operational IT planning based on business planning	Business planning and IT planning intermeshed	Business planning and IT planning intermeshed
Decision on outsourcing or in-sourcing	Transparency of IT landscape Technical standardisation	Strategic planning of IT landscape	Anticipatory planning, e.g. future scenarios

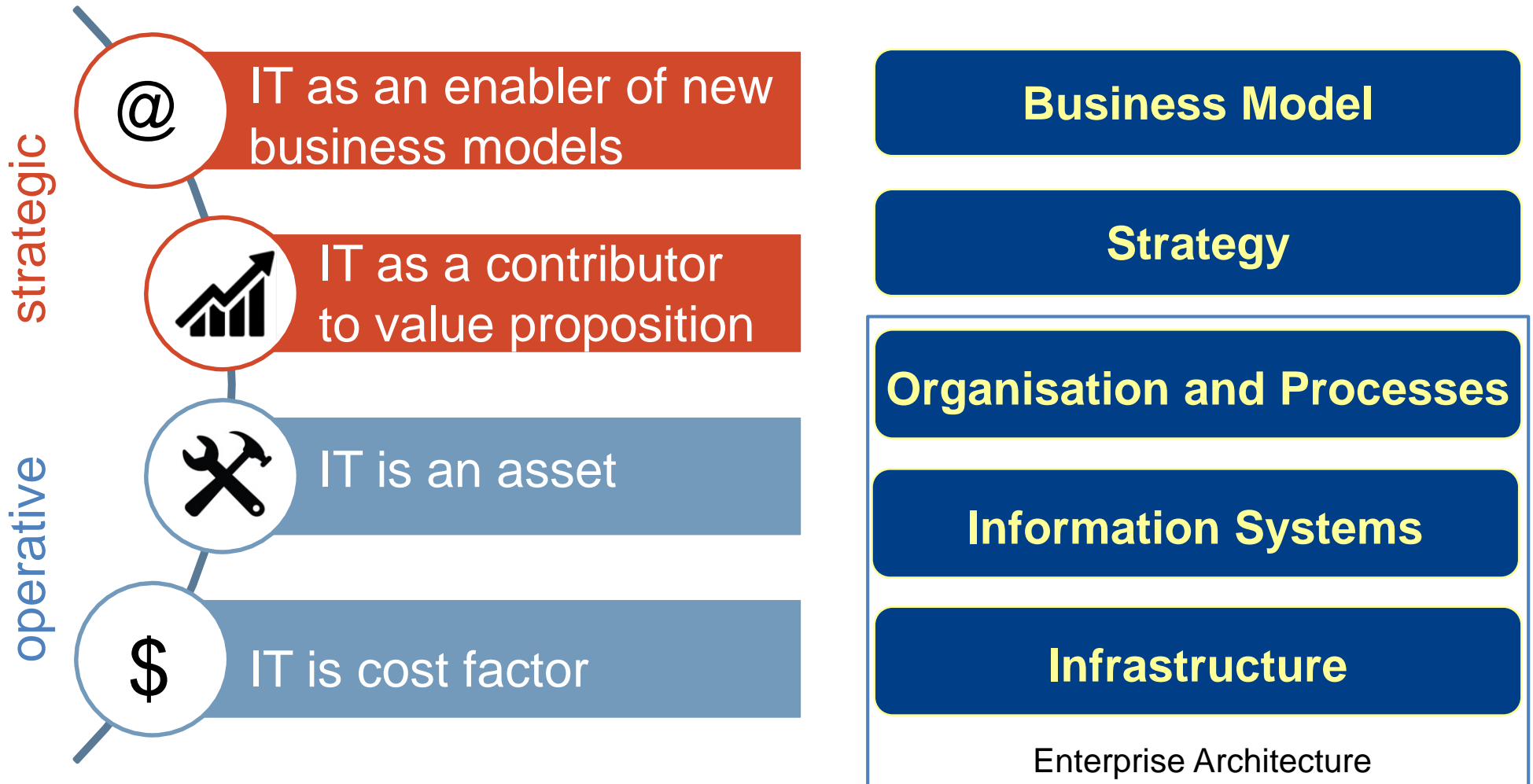
(Hanschke 2010, p. 14)

Strategic Importance of IT



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

Role of IT and affected Parts of the Enterprise



The Role of Modeling

Dealing with Complexity and Change



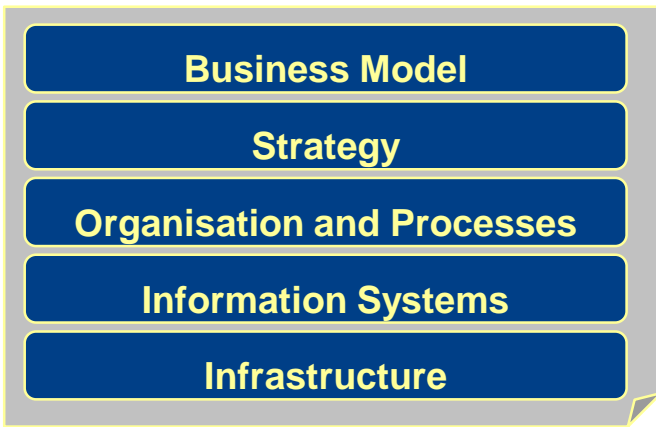
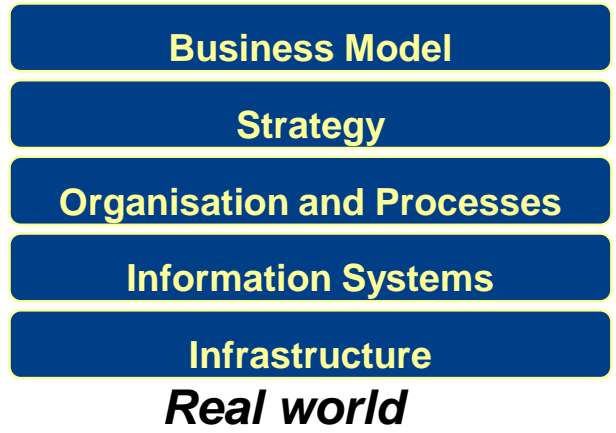
- If the object you want to create or change is simple, and it is not likely to change, then you can do it directly.



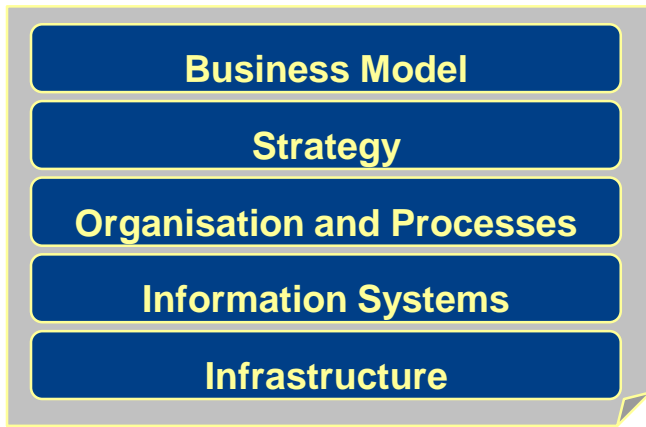
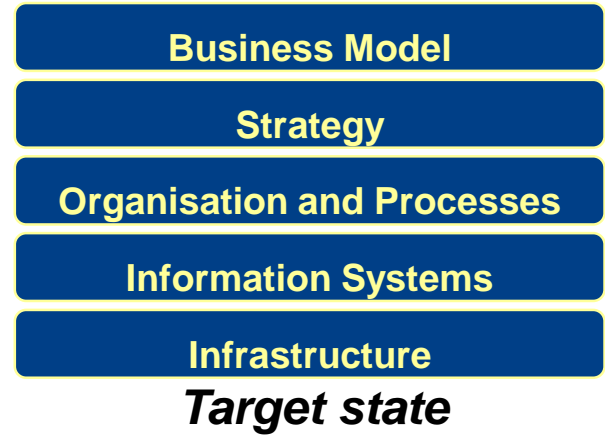
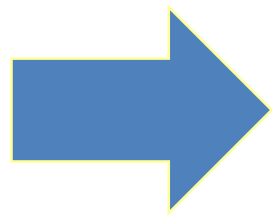
- On the other hand, if the object is **complex**, you can't see it in its entirety at one time and it is likely to **change** considerably over time, you need a description or **model**.

(John Zachmann, 2012)

Business Transformation



As-is model



To-be model