

# Business Capability Management

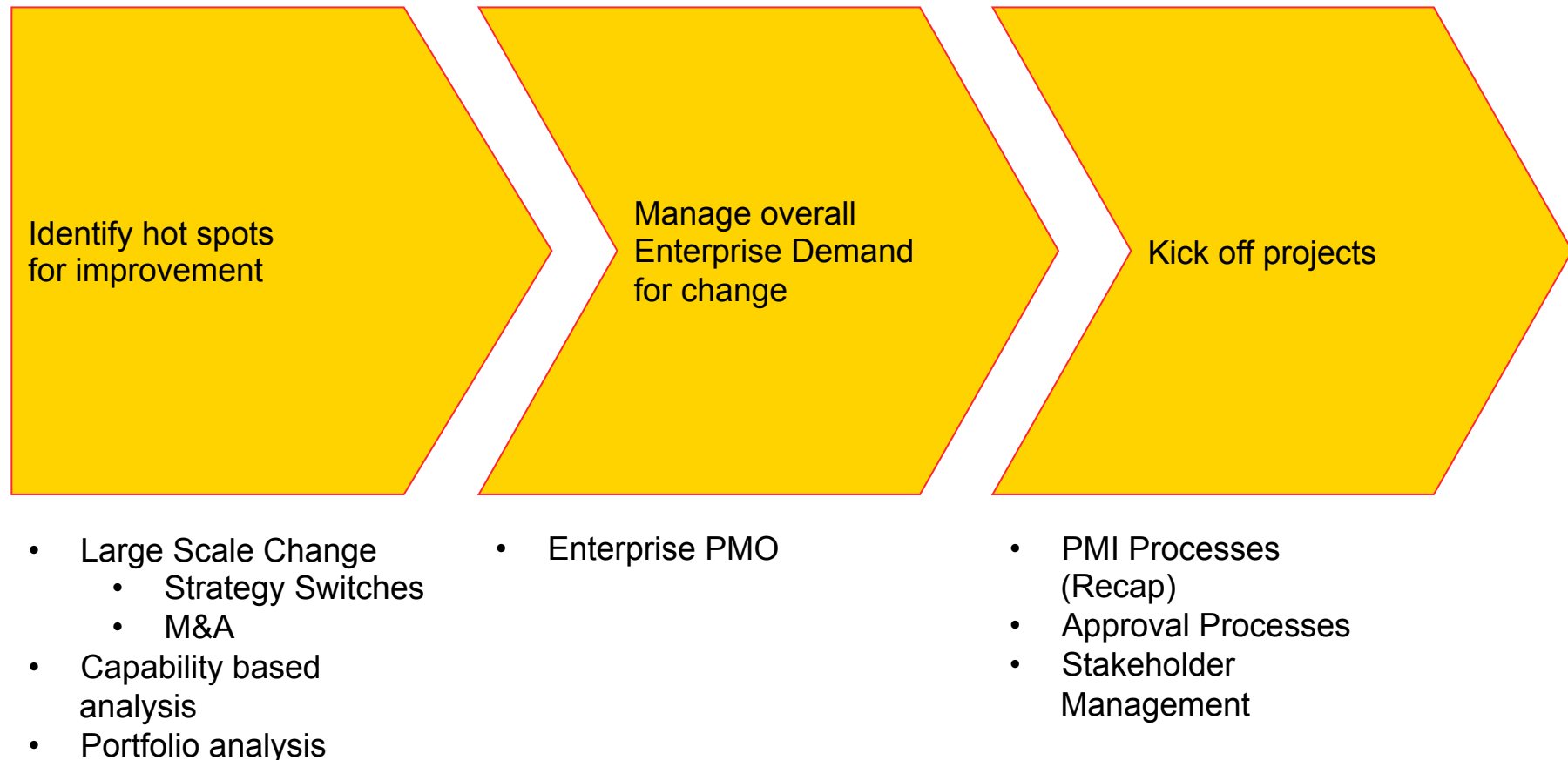
## From Business Needs to Executing Change

### Vorlesung IT-Unternehmensarchitektur

VL 05; Freitag, 16. November 2012;  
Fachgebiet Software-Architekturen, Prof. Dr. Robert Hirschfeld  
Dipl.-Inform. (univ.) Wolfgang Keller,  
[wolfgang.keller@objectarchitects.de](mailto:wolfgang.keller@objectarchitects.de)

# From Business to EA

## Story of this 90 mines module

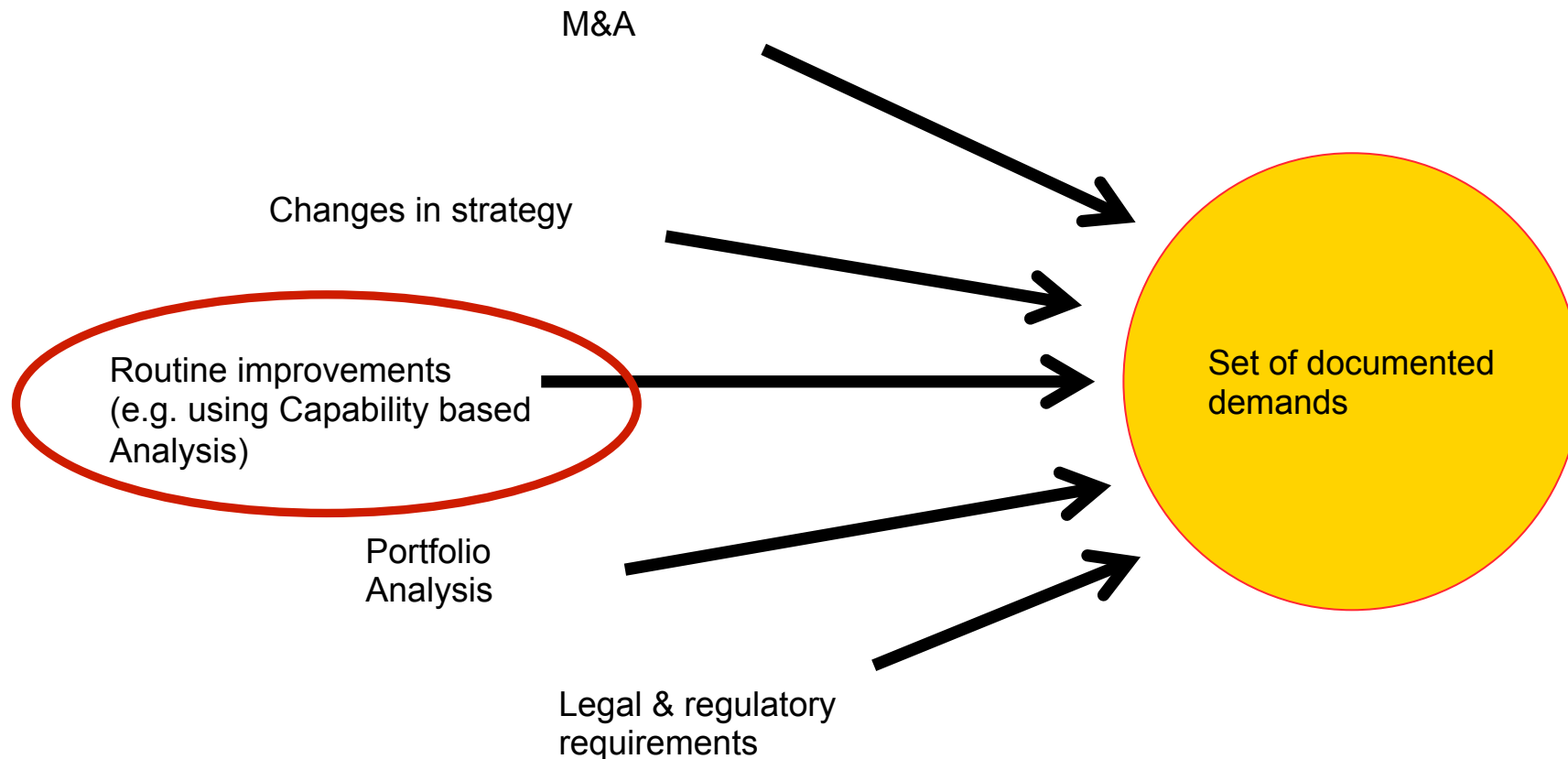


# From Business to EA

## Contents

- Building the Bridge from Business to EA Capabilities
- Enterprise Demand Management: From Business Demands to Projects
- Kicking off Projects: How to deal with approval processes, involve stakeholders, and comply to project management processes

# Potential sources of demand for Change Programmed

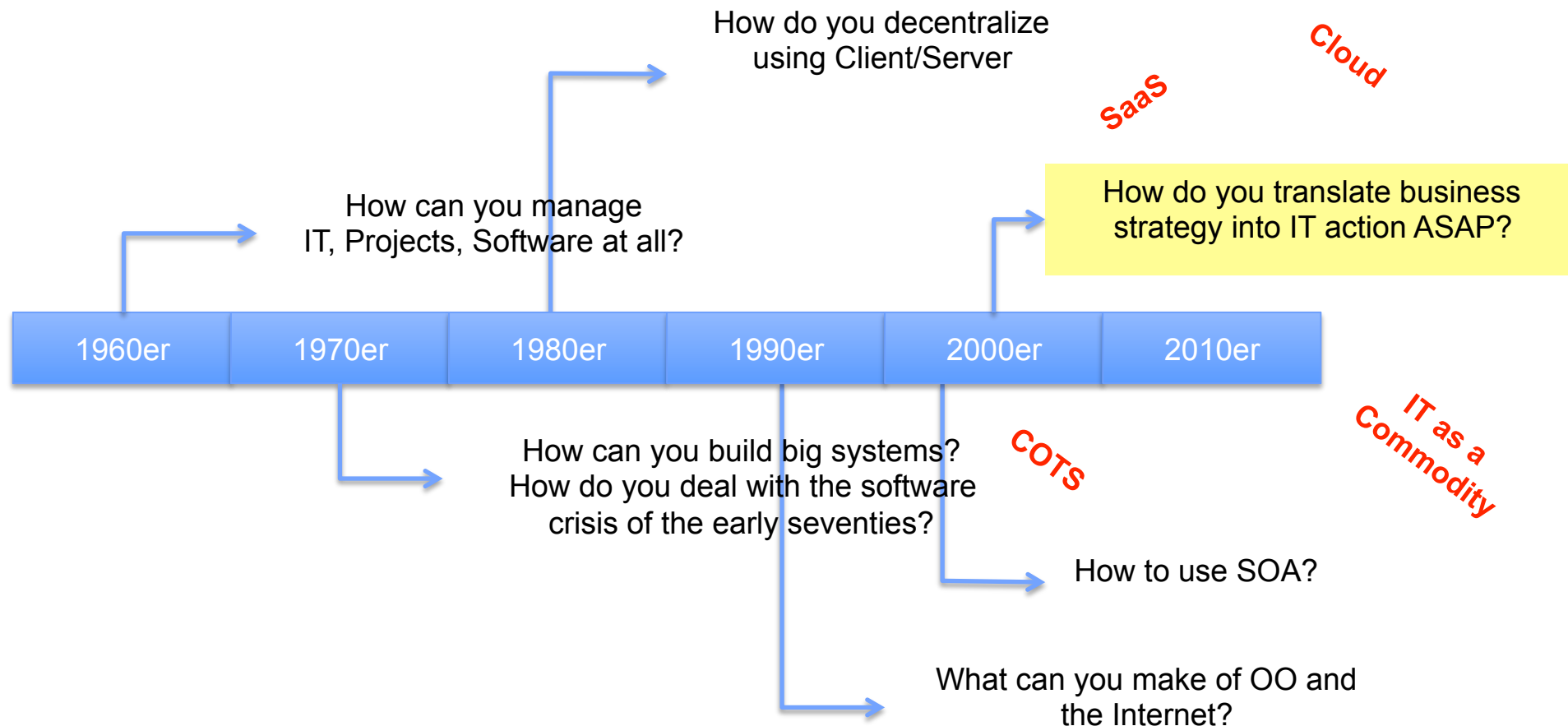


- Challenge: Business / IT Alignment
- What are Business Capabilities?
- Use Cases
  - Application Portfolio Management is limited
  - Business Capabilities are the better Vehicle for Strategic IT Planning
- Wrap-Up

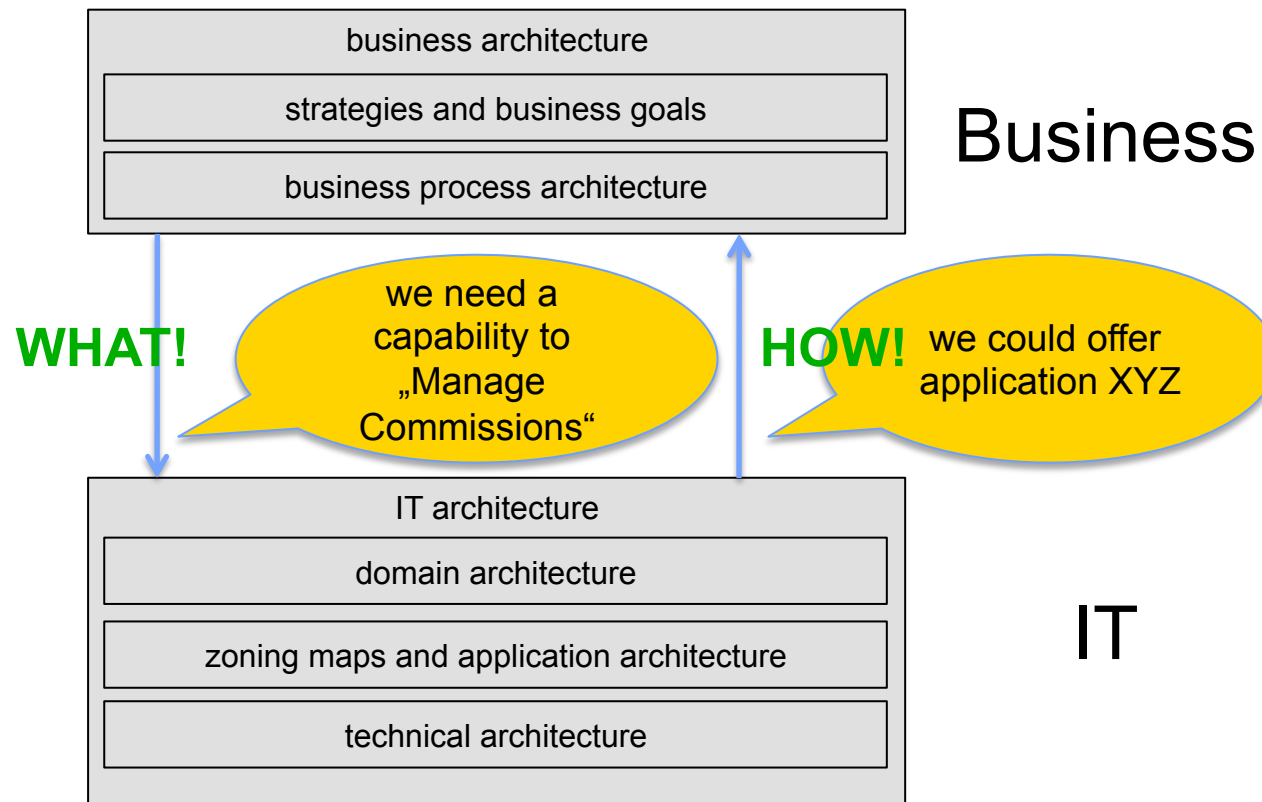
# IT/Business Alignment remains a CIO Top Priority despite the Economic Downturn

SIM CIO Panel: CIOs' Top Priorities		
2008	2009	2010
<b>(1) IT and business alignment</b>	(1) Business productivity and cost reduction	(1) Business productivity and cost reduction
(2) Build business skills in IT	<b>(2) IT and business alignment</b>	(2) Business agility and speed to market
(3) IT strategic planning	(3) Business agility and speed to market	<b>(3) IT and business alignment</b>
(4) Attracting IT professionals	(4) Business process re-engineering	(4) IT reliability and efficiency
(5) Making better use of information	(5) IT cost reduction	(5) Business process reengineering

# Questions driving IT Management change faster than Organizations adopt



# Architectural Models (again) have to be adopted to new Questions





# Agenda: Capabilities

- Challenge: Business / IT Alignment
- What are Business Capabilities?
- Use Cases
  - Application Portfolio Management is limited
  - Business Capabilities are the better Vehicle for Strategic IT Planning
- Wrap-Up

# Definitions for Business Capabilities (1)

## Dictionaries ...

### Merriam Webster's Dictionary

Main Entre: **ca·pa·bil·i·ty**

- 1 : the quality or state of being capable; *also* : ability
- 2 : a feature or faculty capable of development : potentiality
- 3 : the facility or potential for an indicated use or deployment <the capability of a metal to be fused> <nuclear capability>

### Wikipedia

**Capability** is the ability to perform actions. As it applies to human capital, capability is the sum of expertise and capacity. ()

# Definitions for Business Capabilities (2)

## Forrester Research 2009

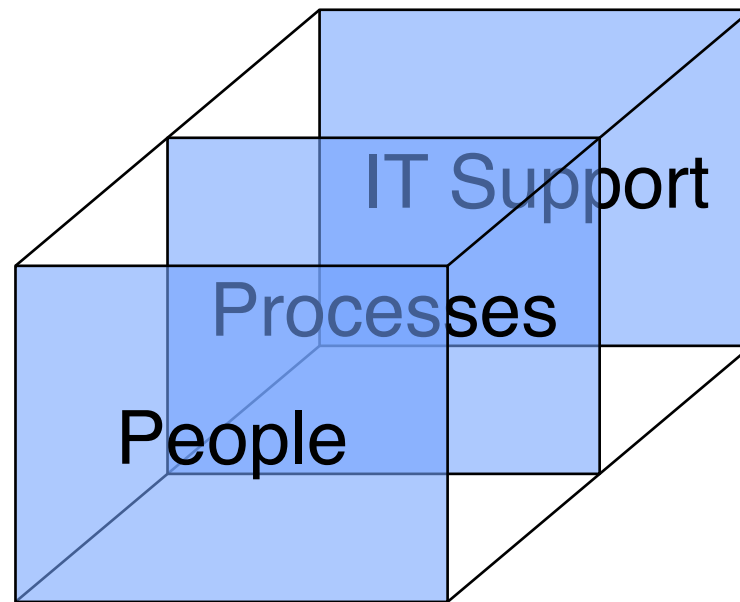
A **business capability** defines the organization's capacity to successfully perform a unique business activity.

Capabilities:

- Are the building blocks of the business,
- represent stable business functions,
- are unique and independent from each other,
- are abstracted from the organizational model,
- capture the business interests.

**Source: Forrester Research** [CamKal09]

# In order to implement a Business Capability you need People, Processes, and also IT



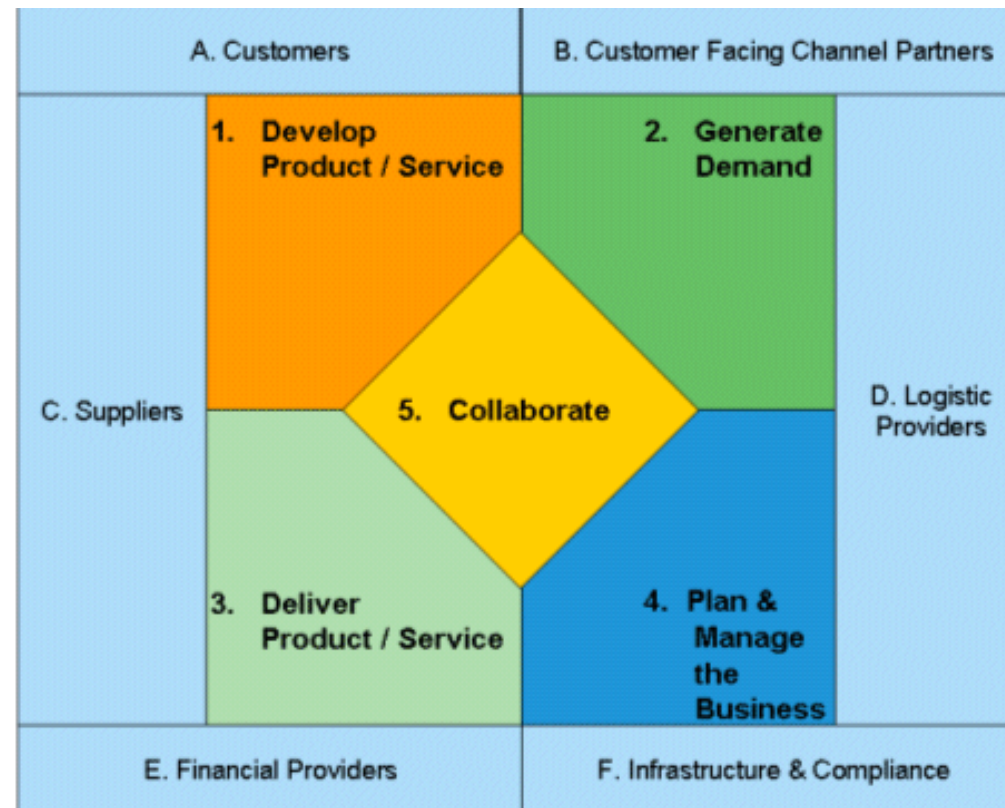
## The Attributes you can use to Manage a Portfolio of Business Capabilities are similar to those you would use to manage an Application Portfolio

The following kinds of attributes, common for Business Capabilities, are also often used in Application Portfolio Management (APM)

- **strategic importance of a Business Capability?**
- **quality of implementation of a Business Capability?**
- who are the customers using a Business Capability?
- which quantity of business at which costs can be handled by the Business Capability?
- how do you measure „success“ of a business capability – what are the KPIs?
- who is the owner of a business capability?

You can use a Balanced Score Card to monitor the state of your capability portfolio, using e.g. some 30-50 attributes per capability.

# You can „buy“ generic Capability Maps and also Capability Maps adopted to Specific Industries



Source: Microsoft

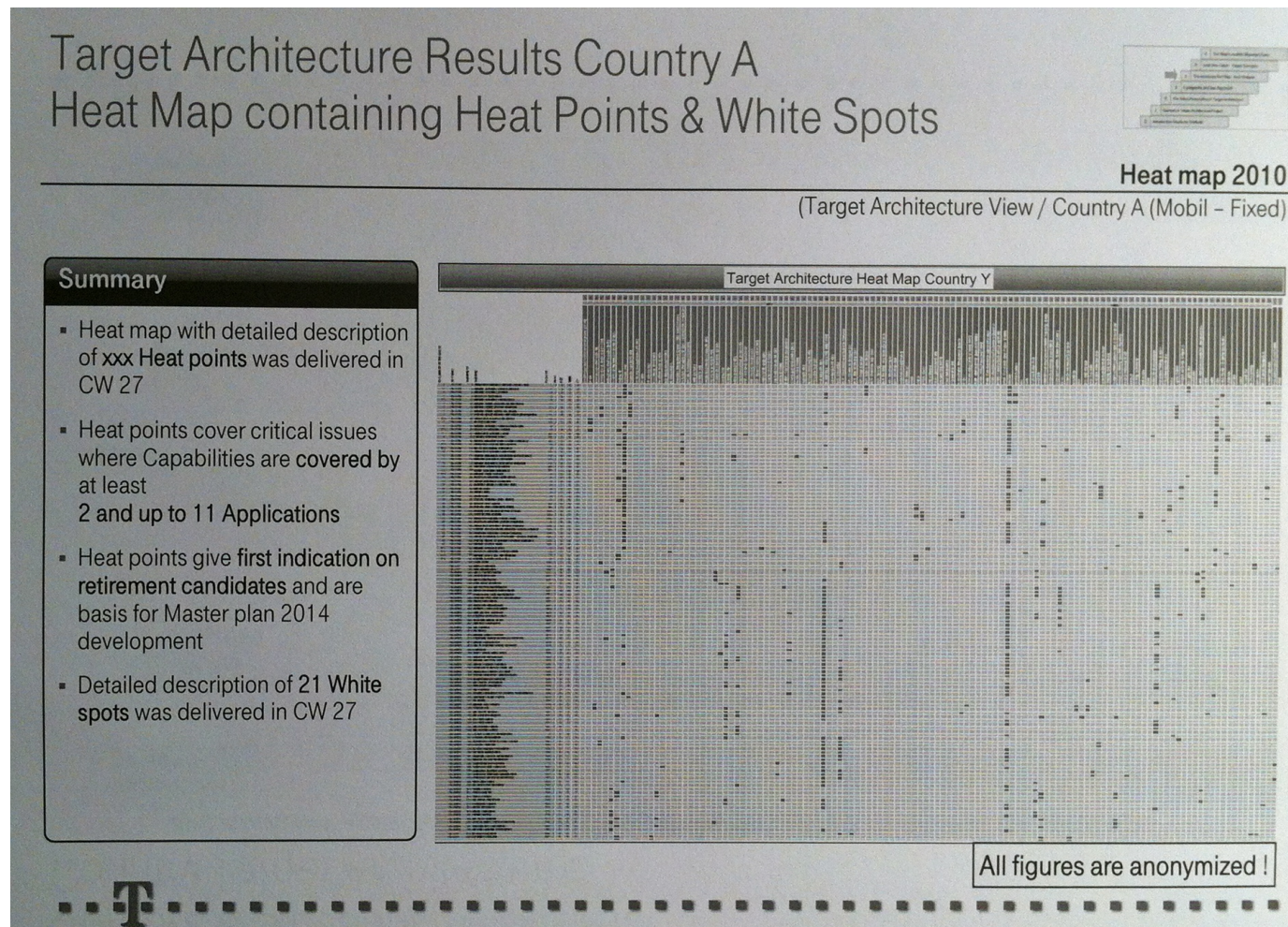
# The intended Planning Focus will influence the Focus of a Capability Map



This capability map is used by a business unit mainly focused on sales of financial products. Hence “Enterprise Activities” are treated with far less detail



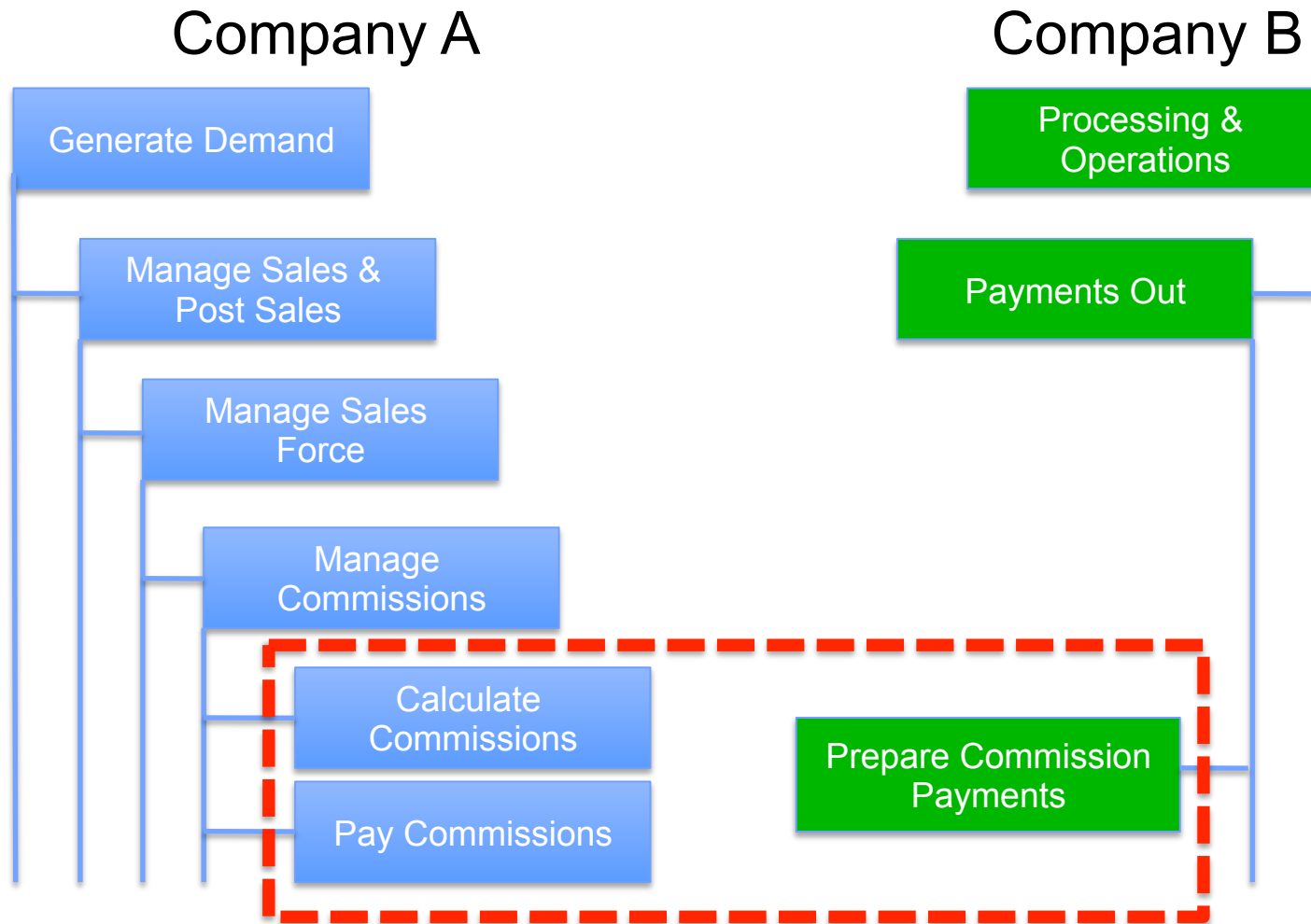
# Sorry – Telcos are a bit „secretive“ about their capability maps



Source: Deutsche Telekom AG; Target Architecture Initiative, Reiner Scheinehenne, EAM Forum 2012



The same Capability may be found at different spots in a Capability Hierarchy. Still mapping two models is possible in most cases – but a tedious task

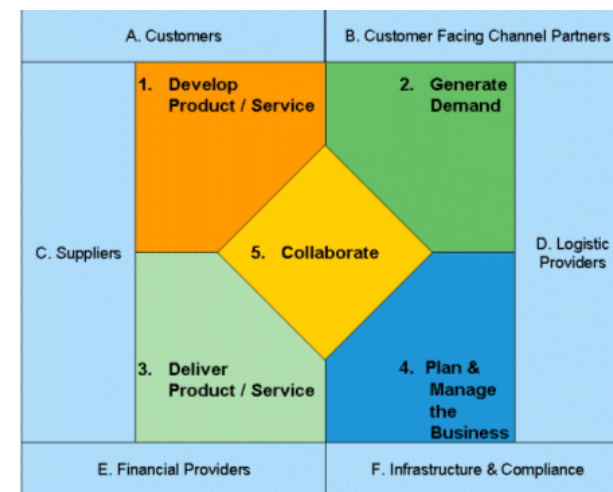


# Reusing an Application Landscape Map as a Capability Map will produce suboptimal results



This map has been created by editing an application landscape map. Normally lines of business would be invisible at the top layer of a capability map. Hence this example would lead users in the wrong direction of still thinking more in terms of application than in terms of capabilities

# Given two Capability Maps: Which one is the right one for your Enterprise?



The one that better focuses on the kind of decisions you want to take. But there is no **one** universally true Capability Map

# Definitions for Capabilities are far from really precise and uniform

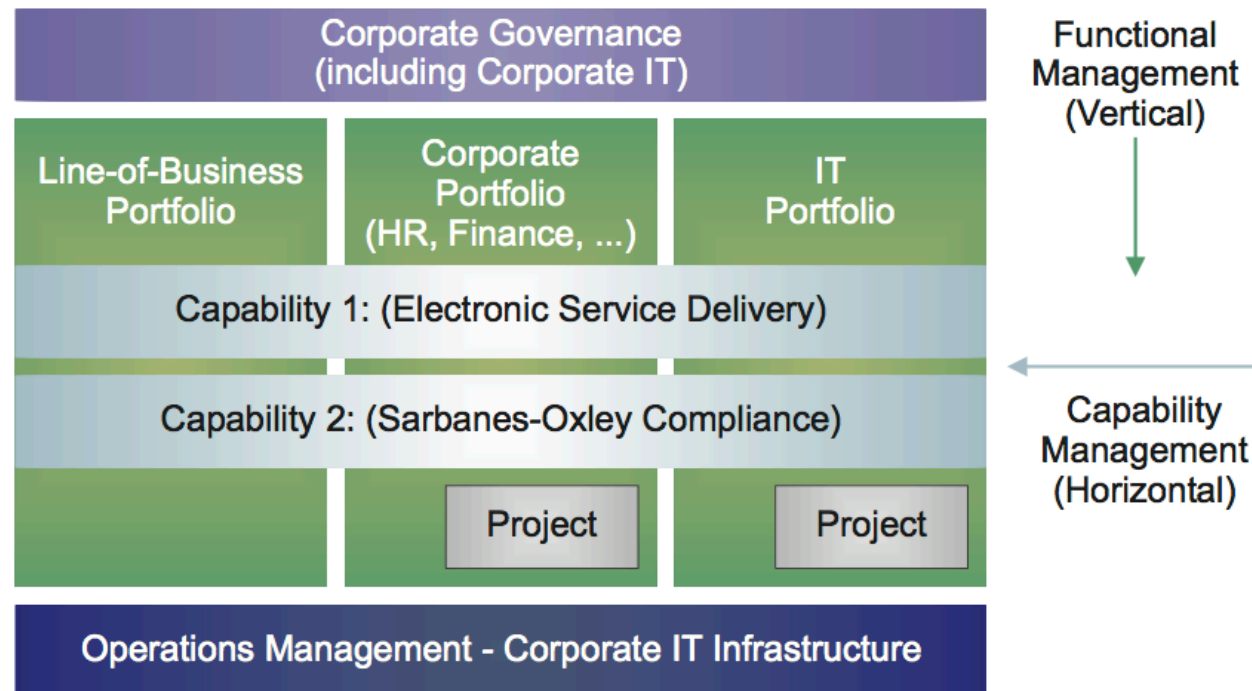
- as for software architecture or enterprise architecture there is far more than a single definition for business capabilities
- the academic community is the one that is the most annoyed by this fact
- if you want to use business capabilities for strategic planning in your enterprise, this lack of final precision does not really matter.
- As long as everybody within the planning scope of an enterprise uses the same definitions for business capabilities, the fact, that multiple definitions exist outside the enterprise, does not impair the use of capabilities
- as a minimum condition for practical use everybody in scope of a planning exercise should use an identical catalog of capabilities
- mapping between different catalogs is an extremely tedious task

# Who „invented“ Capability Based Planning and who is using it?

- Method developed around 2002 by Microsoft Consulting
  - initial name „Microsoft Motion“ for „Business in Motion“
  - today known as MSBA: Microsoft Business Architecture
- Business Capability Management is also used by other consultancies and also EAM tool vendors:
  - McKinsey
  - alfabet, planningIT
  - mentioned in TOGAF 9, chapter 32, Capability Based Planning: The definition used by TOGAF has a different emphasis: Cross Cutting Concerns (see next slide)

# TOGAF uses the term „Capabilities“ with an emphasis on Horizontal Aspects (Cross Cutting Concerns)

Backup



**Figure 32-1** Capability-Based Planning Concept

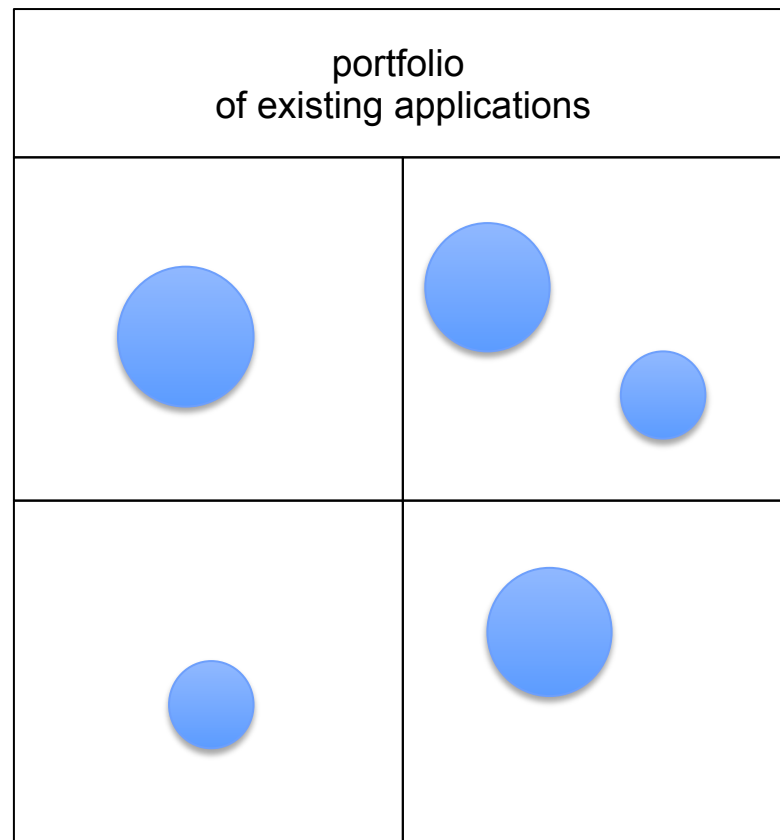
Source: TOGAF 9: TOGAF contains a definition of capabilities which is rather similar to definitions (2) and (3) above. Chapter 32 of TOGAF discusses on 6 pages with an emphasis on cross cutting concerns

# Agenda: Capabilities

- Challenge: Business / IT Alignment
- What are Business Capabilities?
- Use Cases
  - Application Portfolio Management is limited
  - Business Capabilities are the better Vehicle for Strategic IT Planning
- Wrap-Up

# Application Portfolio Management (APM)

has a focus on Apps that already exist.

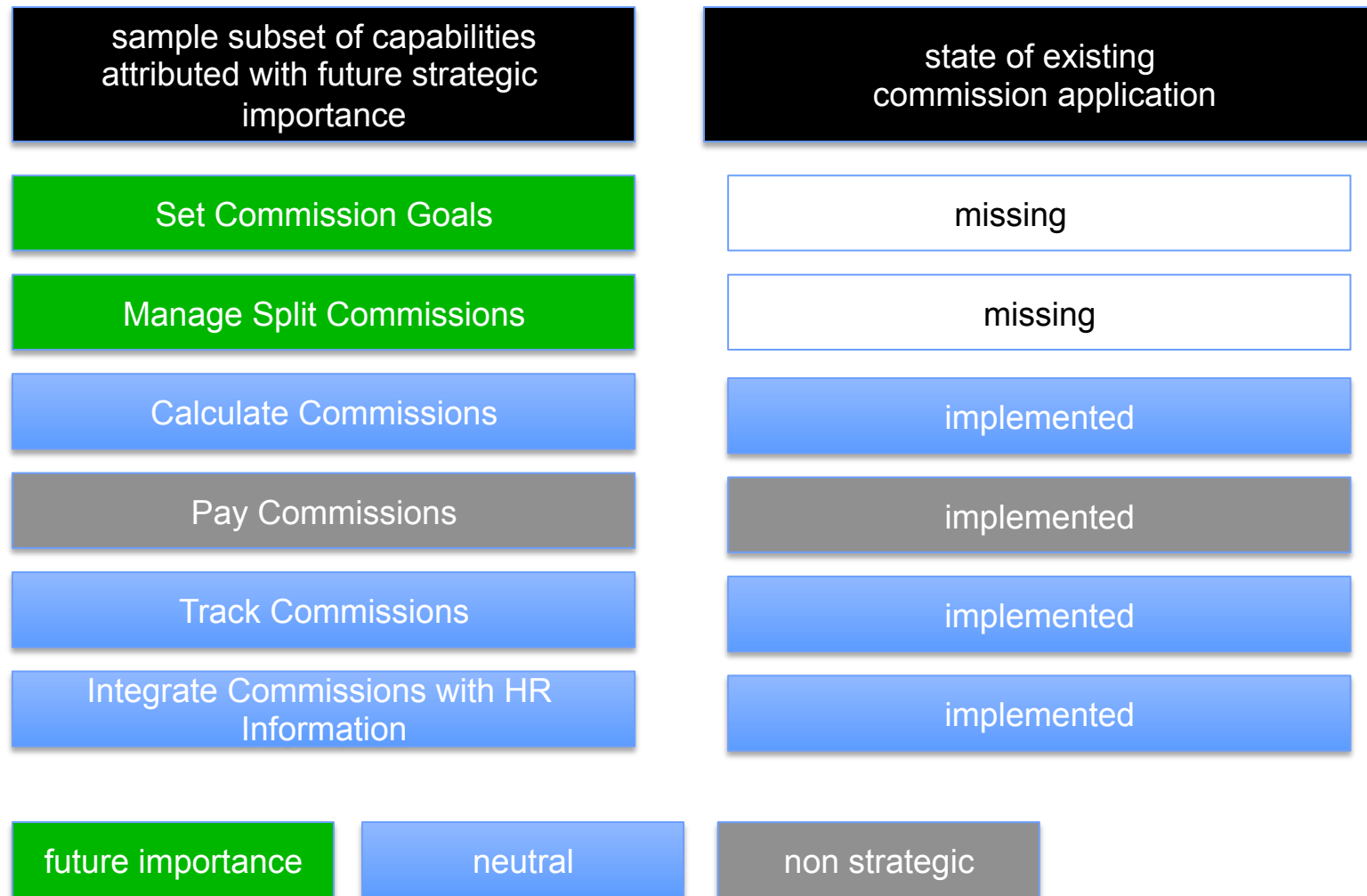


- The key item of interest in APM is an Application.
- Hence APM is not primarily focused on the future of an enterprise and strategic development of future capabilities
- APM does not concentrate on making obsolete apps or missing capabilities visible

**If something is not yet implemented in an Application, likelihood is high that it will not be subject of Application Portfolio Management**



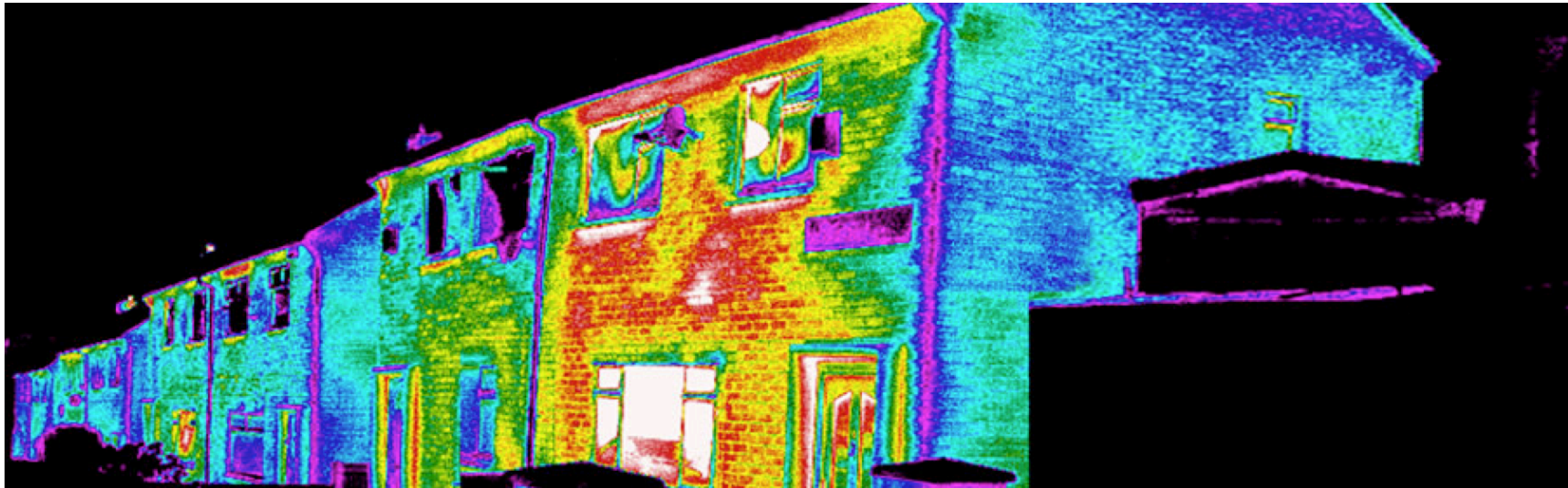
APM is primarily focused on what is currently implemented – it is not naturally focused on what needs to be implemented in the future



# A Choice of Use-Cases for Capability Based Planning

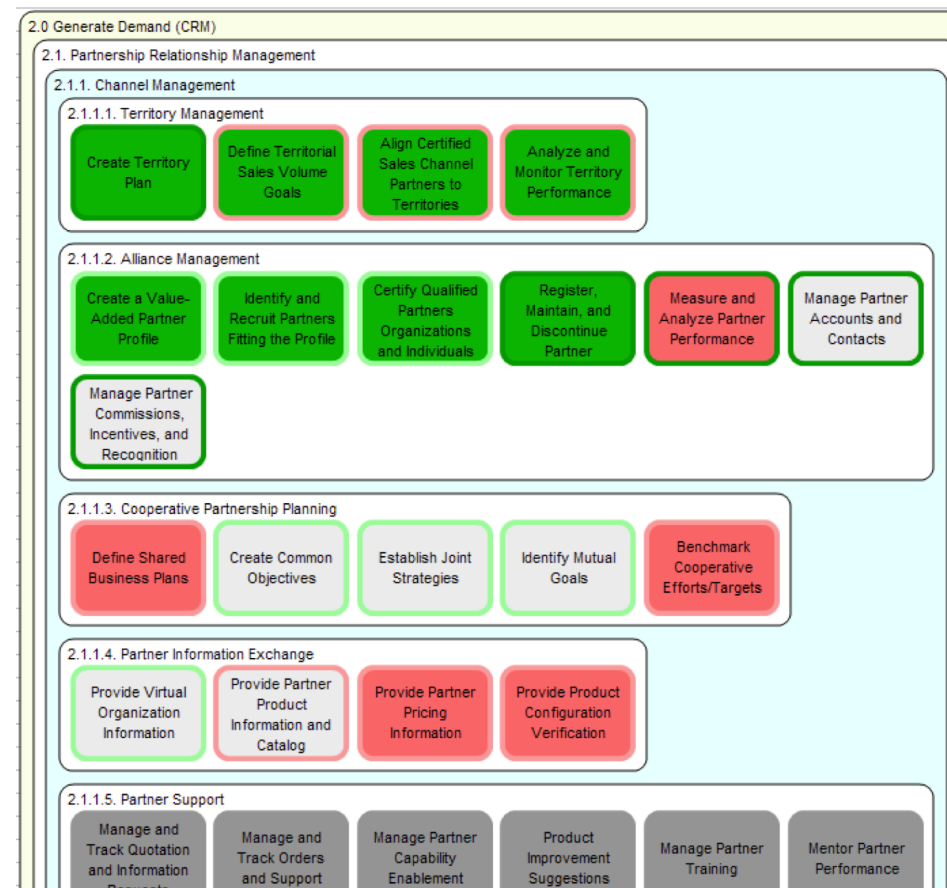
- Heat Mapping supports Investment Planning
- Footprints support comparing Applications
- Application Portfolios can be optimized using Capability Based Reasoning

# Heat Maps support Investment Planning



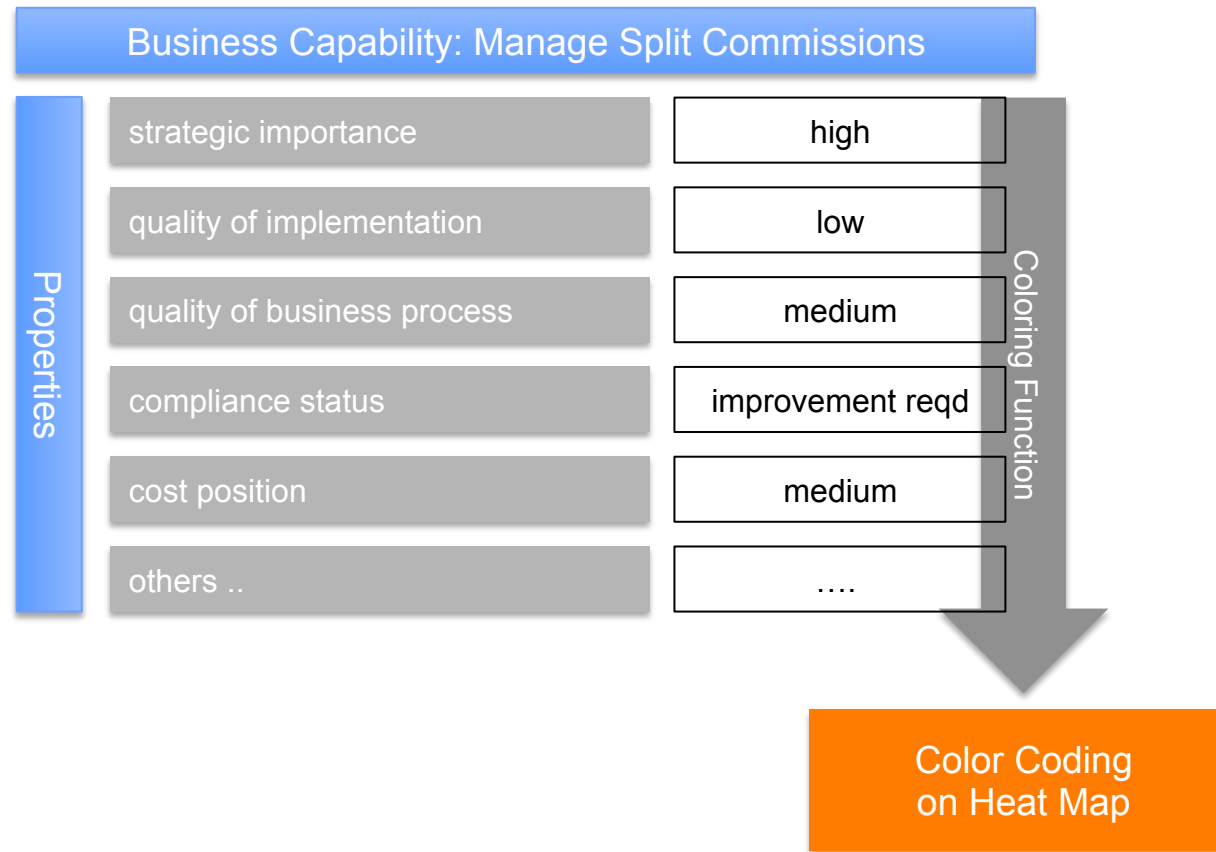
Analogy: As an owner of a house you might want to know where to invest in thermal protection. You might use a so called thermography to find out where your insulation is already sufficient and where it pays to invest in improvements

# Heat Maps are like Thermography for your Enterprise



Source Microsoft [HeatMap06]: For the moment it is enough to get an optical impression of a heat map. Color coding is arbitrary, depending on which aspects of your business shall be made visible

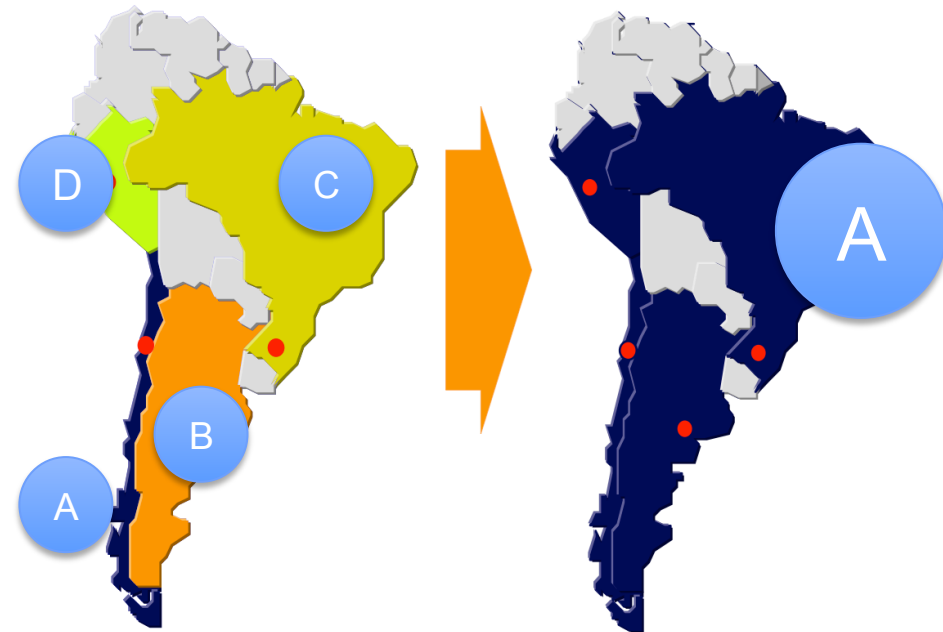
# Mechanism behind Heat Mapping



A good heat mapping tool will allow you to define your own attributes, you consider important for your planning task. You will be able to define your own coloring function. In case you “buy” a standardized assessment from a consulting firm, your consultant will start with a standard set off attributes and coloring functions, like e.g. [HeatMap06]

## Footprints: Given you want to consolidate software landscapes in a business area. How do you compare the business quality of application platforms

- Imagine you want to implement a single application platform for your South Americas Operation instead of four.
- How do you compare your existing application landscapes with one another and also with market solutions?
- Solution: Base your comparisons on a capability catalog. Prioritize that capability catalog with input on strategic directions from your enterprise's business community.



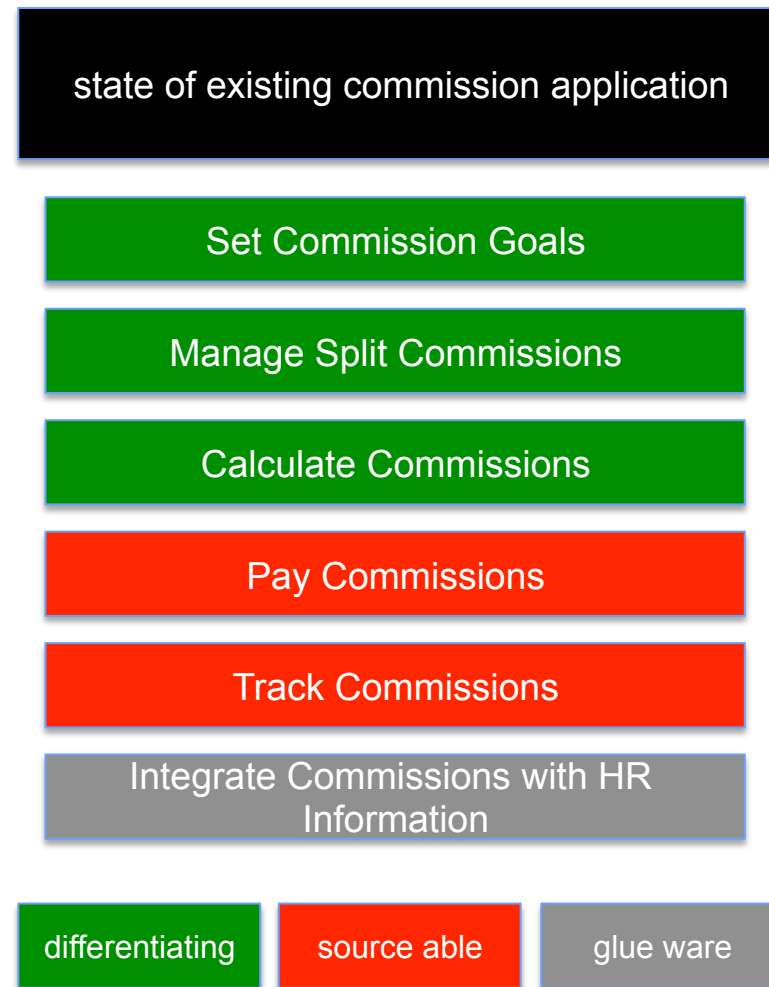
# Using Capabilities for Software Evaluations yields so called Footprints

sample subset of capabilities attributed with future strategic importance	A	B	C	D
Set Commission Goals	implemented	not implemented	implemented	not implemented
Manage Split Commissions	implemented	not implemented	not implemented	not implemented
Calculate Commissions	implemented	implemented	implemented	implemented
Pay Commissions	implemented	implemented	implemented	implemented
Track Commissions	implemented	not implemented	not implemented	not implemented
Integrate Commissions with HR Information	not implemented	implemented	implemented	not implemented

future importance	neutral	non-strategic	implemented	not implemented
-------------------	---------	---------------	-------------	-----------------

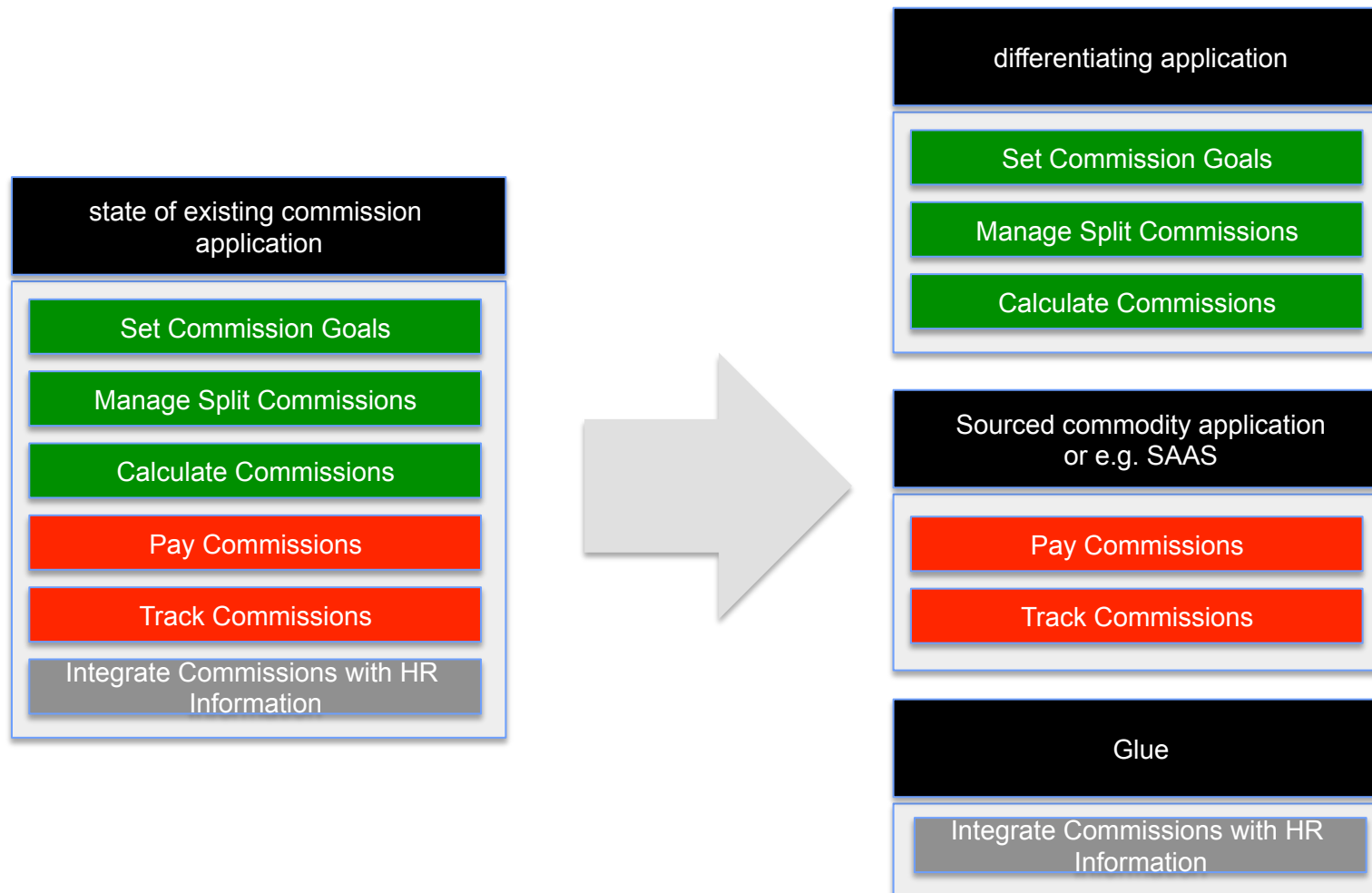
# Capabilities may also help you increase the share of software you can source

- it can be observed that applications serve strategic and non-strategic capabilities, differentiating and non-differentiating ones
- such a historically grown state can turn out to be an obstacle for appropriate sourcing action





# Reasoning based on Capabilities allows you to evolve an application or service landscape so that you have more freedom for sourcing decisions



# Agenda: Capabilities

- Challenge: Business / IT Alignment
- What are Business Capabilities?
- Use Cases
  - Application Portfolio Management is limited
  - Business Capabilities are the better Vehicle for Strategic IT Planning
- Wrap-Up Capabilities

- Using Capabilities facilitates strategic IT planning tasks
- Business Capabilities will spread as an instrument for strategic IT planning.
- A capability layer will be added to today's enterprise architecture models
- For a theoretical background see: Alignment Architectures [AierWinter09]

# Further Reading: Capabilities

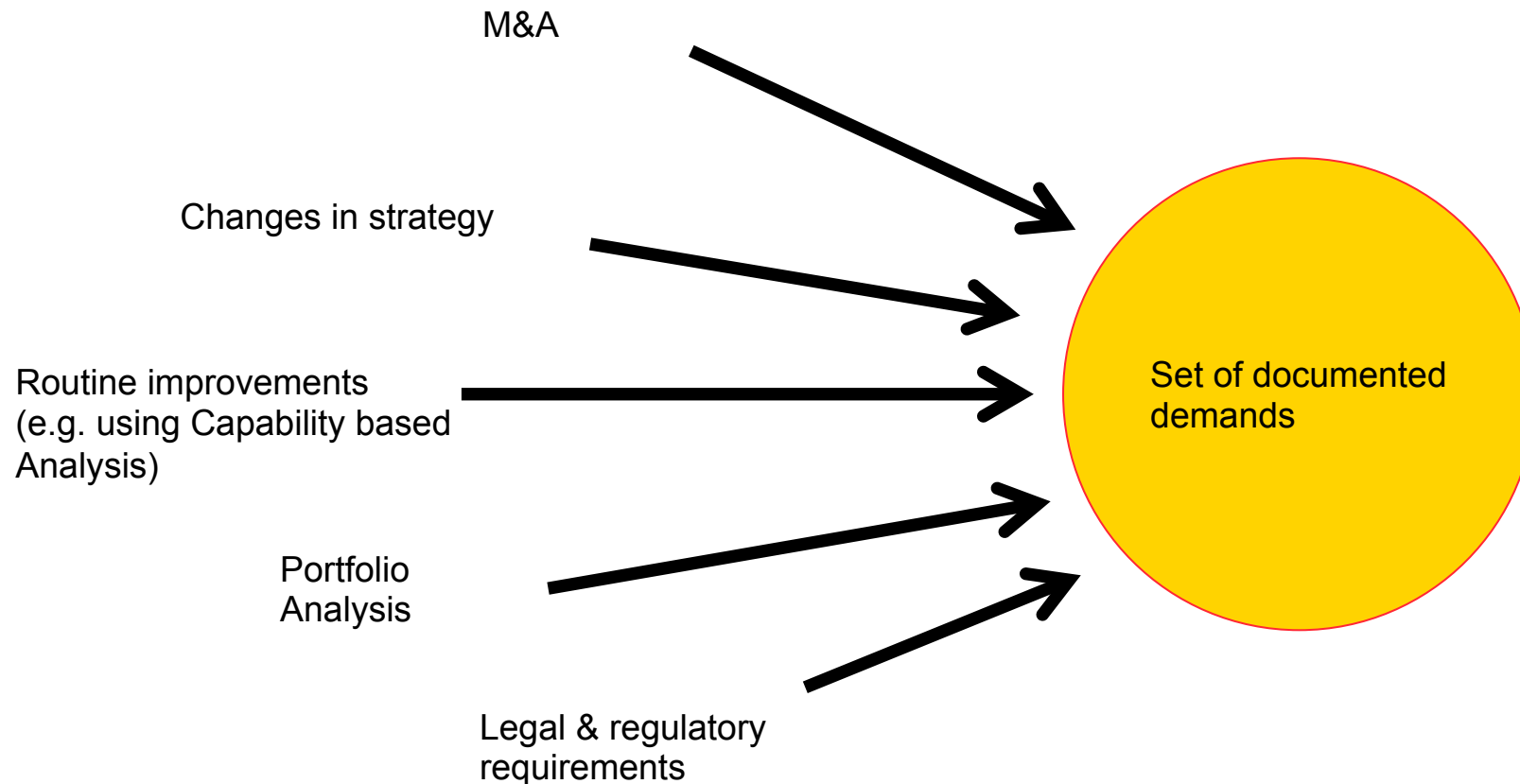
- [AierWinter09] Aier, S.; Winter, R.: Virtuelle Entkopplung von fachlichen und IT-Strukturen für das IT/Business Alignment – Grundlagen, Architekturgestaltung und Umsetzung am Beispiel der Domänengestaltung; *Wirtschaftsinformatik*, Vol. 51, No. 2. (1 April 2009), pp. 175-191.
- [Brede+06] Bredemeyer, D.; Krishnan, R.; Lafrenz, A.; Malan, R.: Enterprise Architecture as Business Capabilities Architecture; Whitepaper; Bredemeyer Consulting, available via [http://bredemeyer.com/pdf\\_files/Presentations/EnterpriseArchitectureAsCapabilitiesArch.pdf](http://bredemeyer.com/pdf_files/Presentations/EnterpriseArchitectureAsCapabilitiesArch.pdf) (Link geprüft 2009-11-12).
- [CamKal09] Cameron, B.; Kalex, U.: Webinar (Web Seminar) on Business Capability Management; Forrester Research & alfabet AG, June 2009. Available via [http://www.alfabet.de/news/veranstaltungen/webinar\\_driving\\_productive\\_it\\_investment](http://www.alfabet.de/news/veranstaltungen/webinar_driving_productive_it_investment) (Link geprüft 2009-11-13).
- [Homan08] Homan, L.: Enterprise Architecture; Connecting Business and IT, Talk at GI-Jahrestagung, Munich, September 9th, 2008
- [HeatMap06] Microsoft Services: Microsoft Motion Heat Mapping Tool: [blogs.microsoft.co.il/files/folders/2034/download.aspx](http://blogs.microsoft.co.il/files/folders/2034/download.aspx) (Link geprüft 2009-11-14)
- [MerTob06] Merrifield, R.; Tobey, J.: Motion Lite: A Rapid Application of the Business Architecture Techniques Used by Microsoft Motion; available via <http://msdn2.microsoft.com/en-us/library/bb736727.aspx> (Link geprüft 2009-11-14).
- [Ritz08] Ritzenhöfer, G.: SOA-basierte IT-Strategien für Banken, Talk at GI-Jahrestagung, Munich, September 9th, 2008.

# From Business to EA

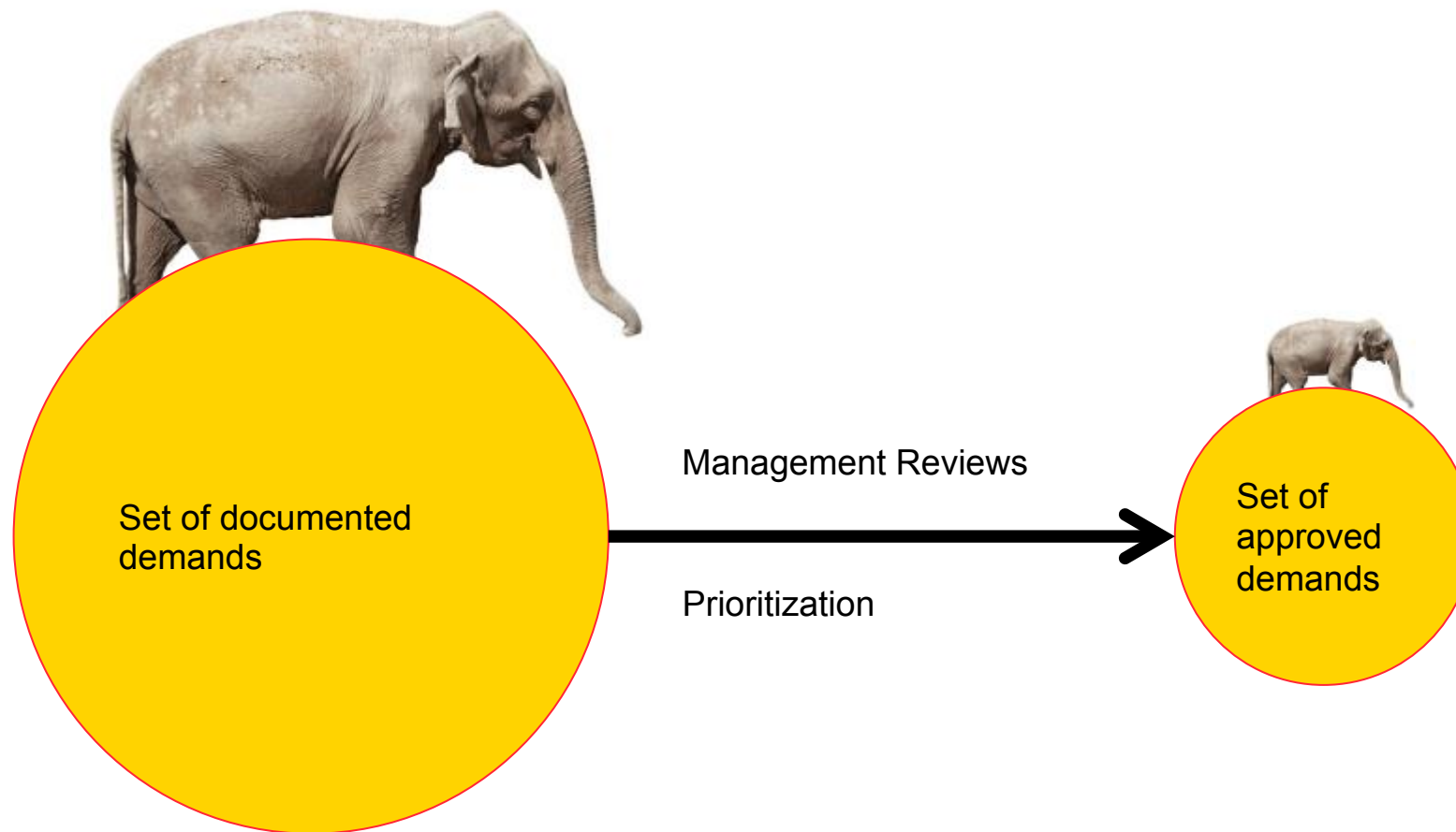
## Contents

- Building the Bridge from Business to EA Capabilities
- Enterprise Demand Management: From Business Demands to Projects
- Kicking off Projects: How to deal with approval processes, involve stakeholders, and comply to project management processes

# Potential sources of demand for Change Programs

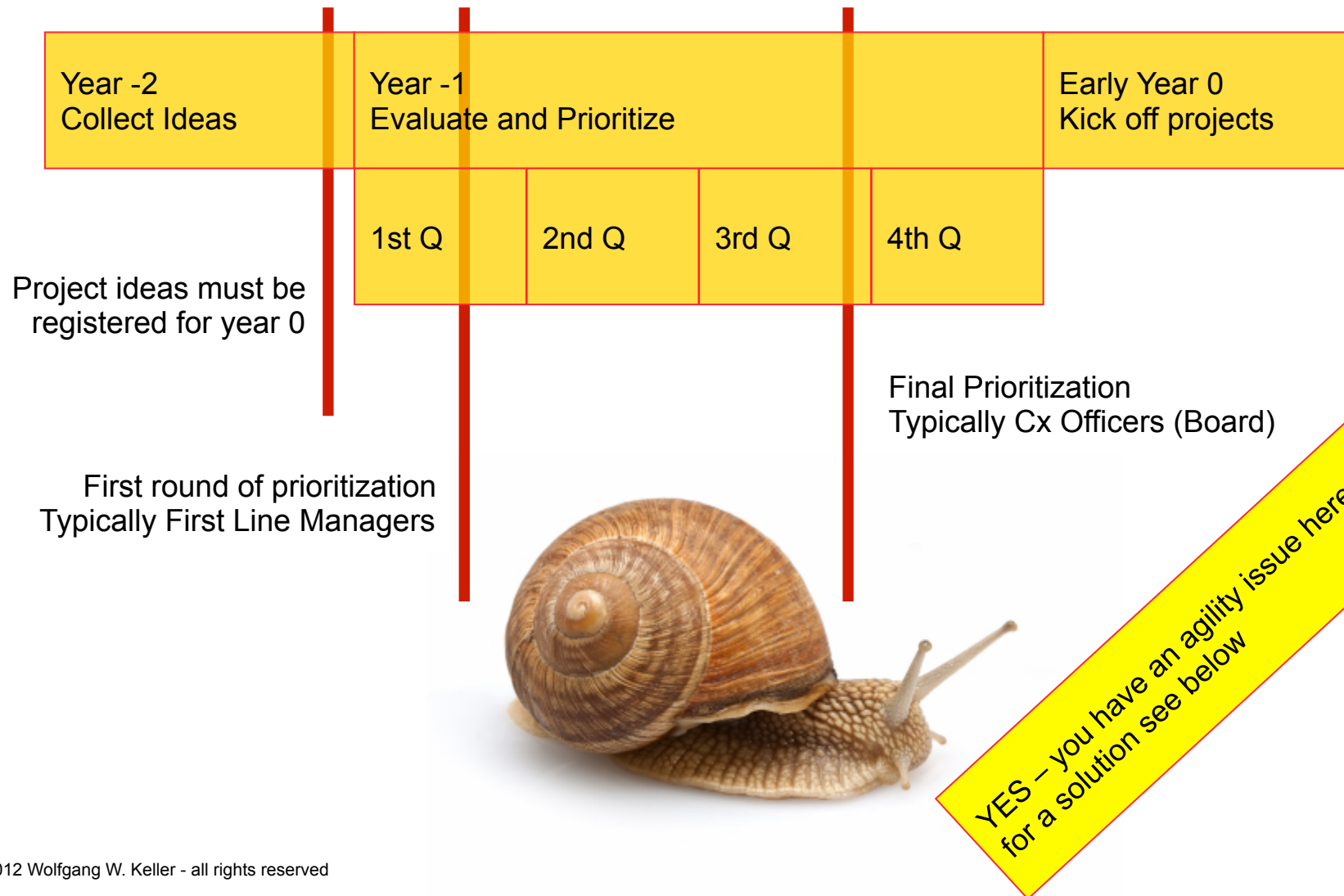


# Potential sources of demand for Change Programmed



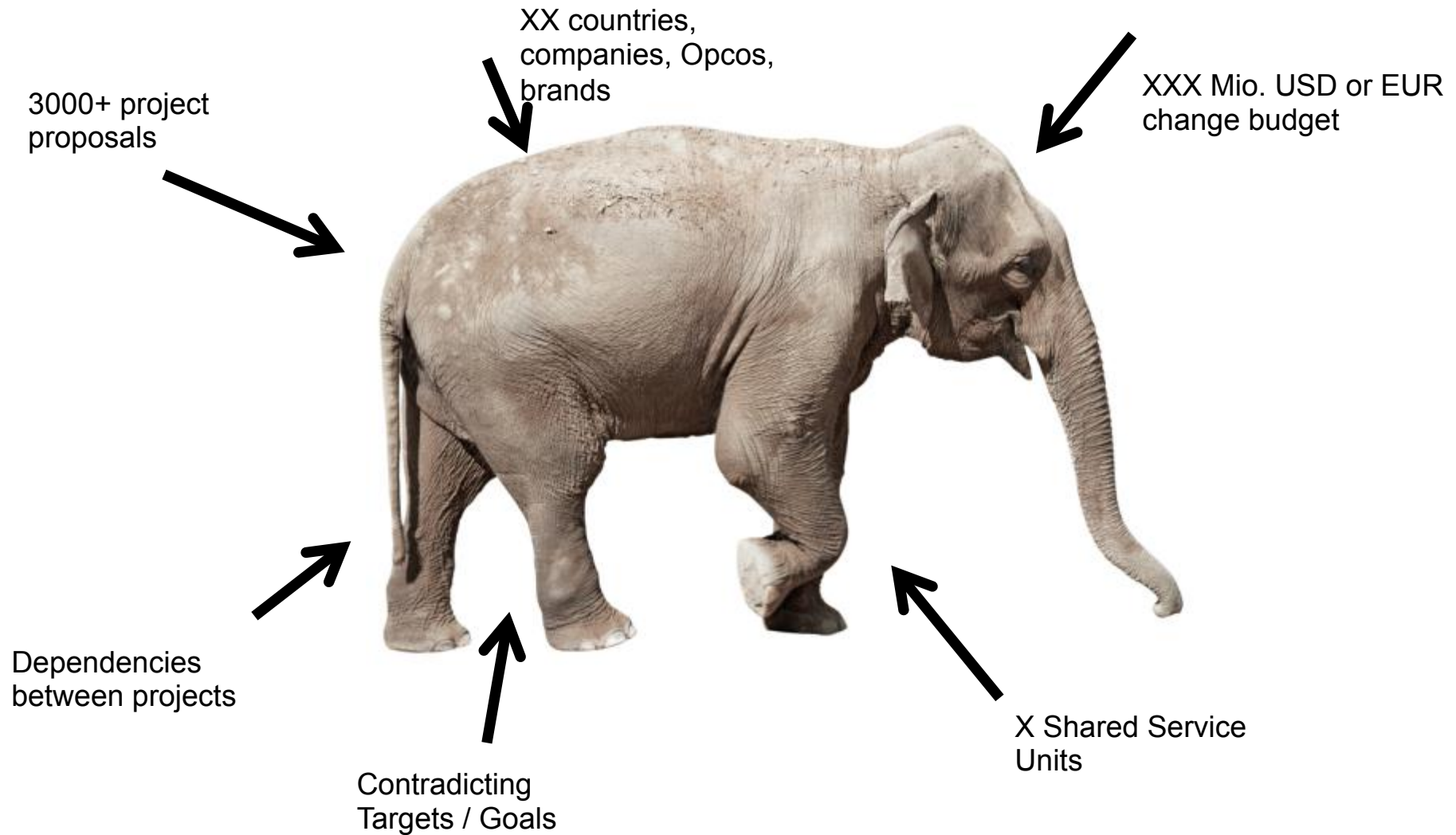
Typically 2-3+ times more demands  
than budget available

# Typical Enterprise Planning Process From Idea to Project



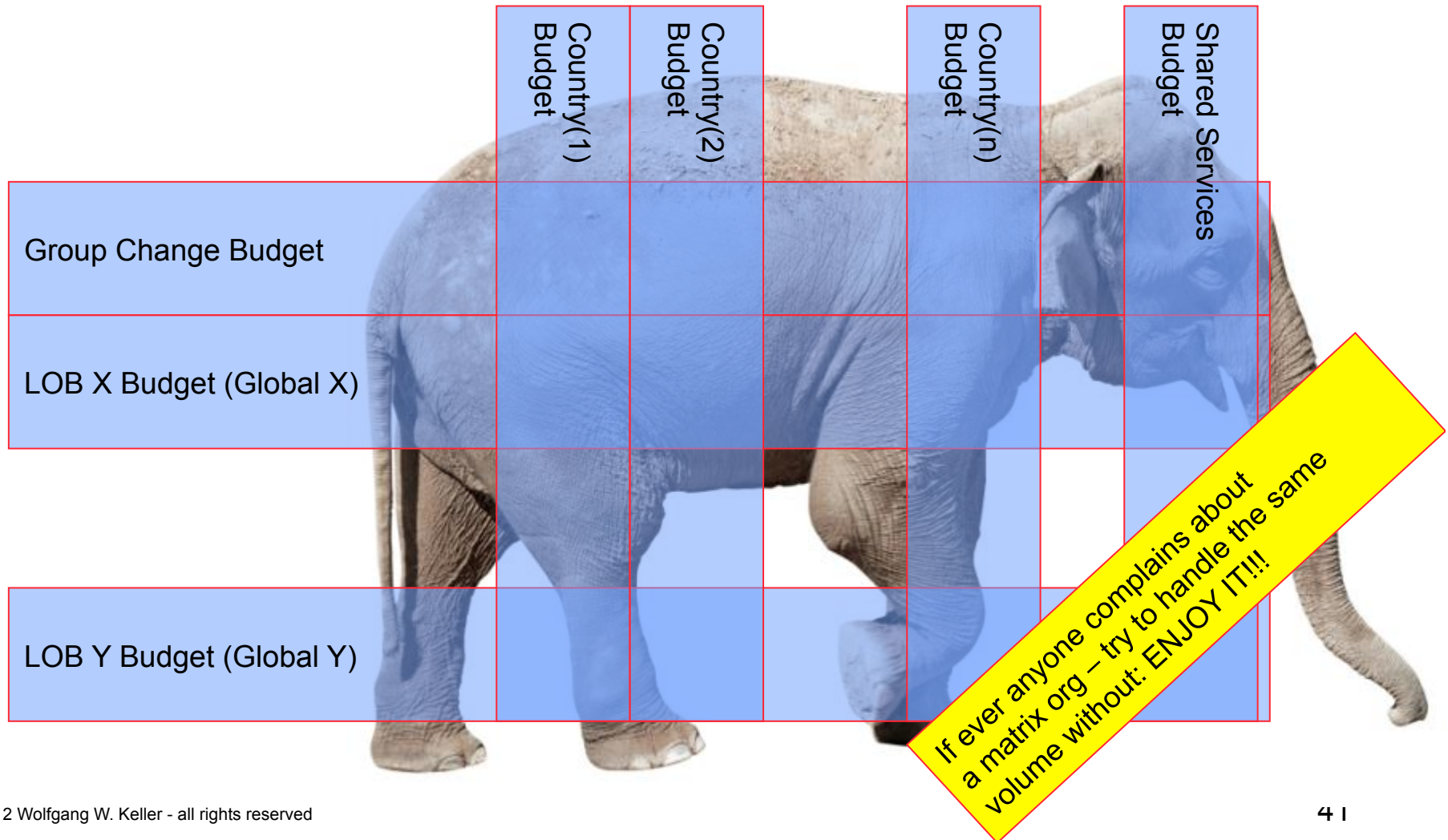


# Slicing the Elephant: How to find the Optimum Project Portfolio?

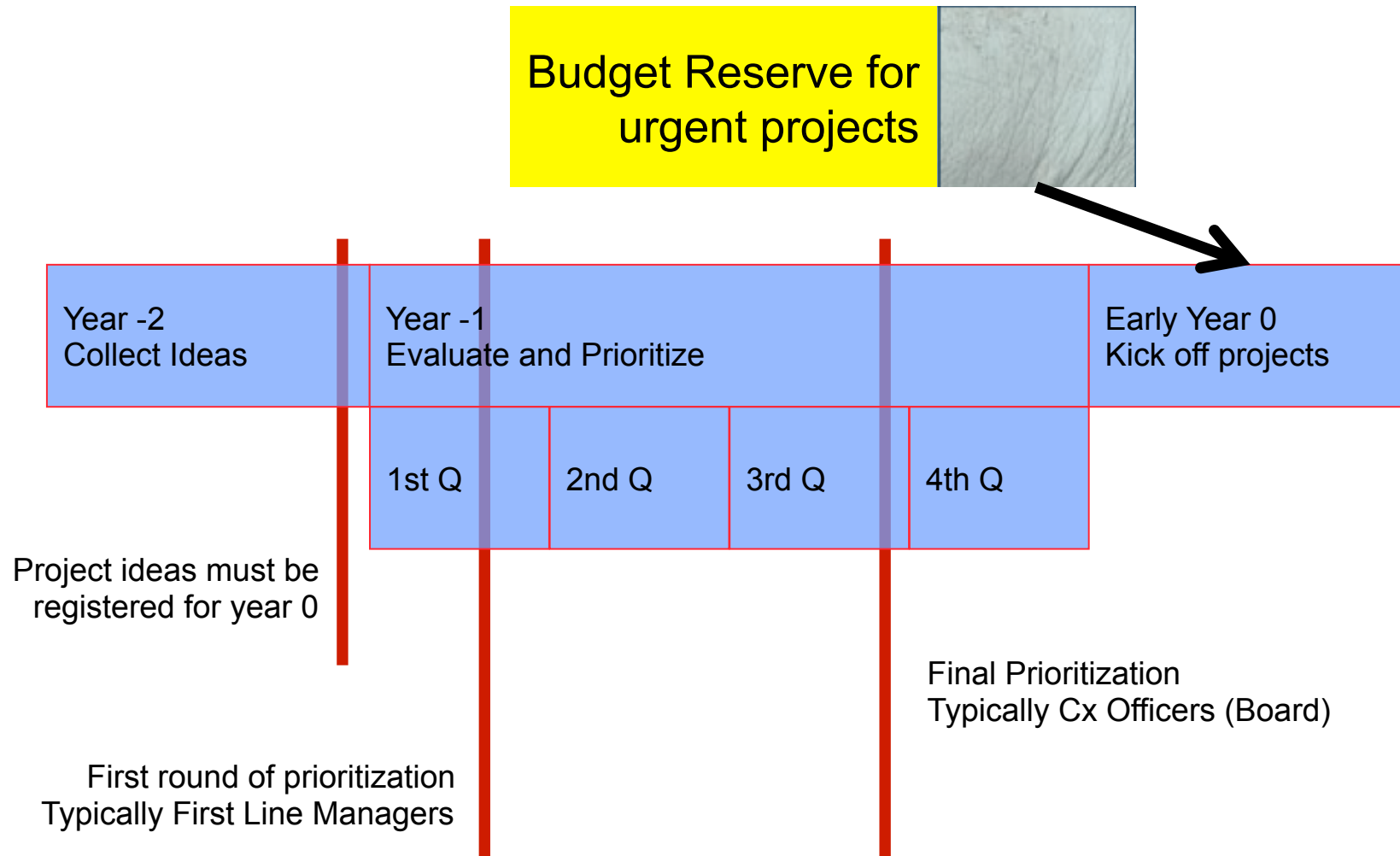


# Possible Solution: Divide & Conquer

Not optimal but “good enough”



# The “sliced elephant model” also solves the agility issue of the below process



# From Business to EA

## Contents

- Building the Bridge from Business to EA Capabilities
- Enterprise Demand Management: From Business Demands to Projects
- Kicking off Projects: How to deal with approval processes, involve stakeholders, and comply to project management processes

# The typical „Large Enterprise“ change process



# PMI Process Clusters revisited

Collect approvals using project planning documents

Preapproval		Final Approval			
Knowledge Areas	Project Management Process Groups				
	Initiating Process Group	Planning Process Group	Executing Process Group	Monitoring and Controlling Process Group	Closing Process Group
Project Integration Management	• Develop Project Charter	• Develop Project Management Plan	• Direct and Manage Project Execution	• Monitor and Control Project Work • Perform Integrated Change Control	• Close Project or Phase
Project Scope Management		• Collect Requirements • Define Scope • Create WBS		• Verify Scope • Control Scope	
Project Time Management		• Define Activities • Sequence Activities • Estimate Activity Resource • Estimate Activity Duration • Develop Schedule		• Control Schedule	
Project Cost Management		• Estimate Cost • Determine Budget		• Control Costs	
Project Quality Management		• Plan Quality	• Perform Quality Assurance	• Perform Quality Control	
Project Human Resource Management		• Develop Human Resource Plan	• Acquire Project Team • Develop Project Team • Manage Project Team		
Project Communications Management	• Identify Stakeholders	• Plan Communications	• Distribute Information • Manage Stakeholder Expectations	• Report Performance	
Project Risk Management		• Plan Risk Management • Identify Risk • Perform Qualitative Risk Analysis • Perform Quantitative Risk Analysis		• Monitoring and Control Risks	
Project Procurement Management		• Plan Procurement	• Conduct Procurement	• Administer Procurements	• Close Procurements

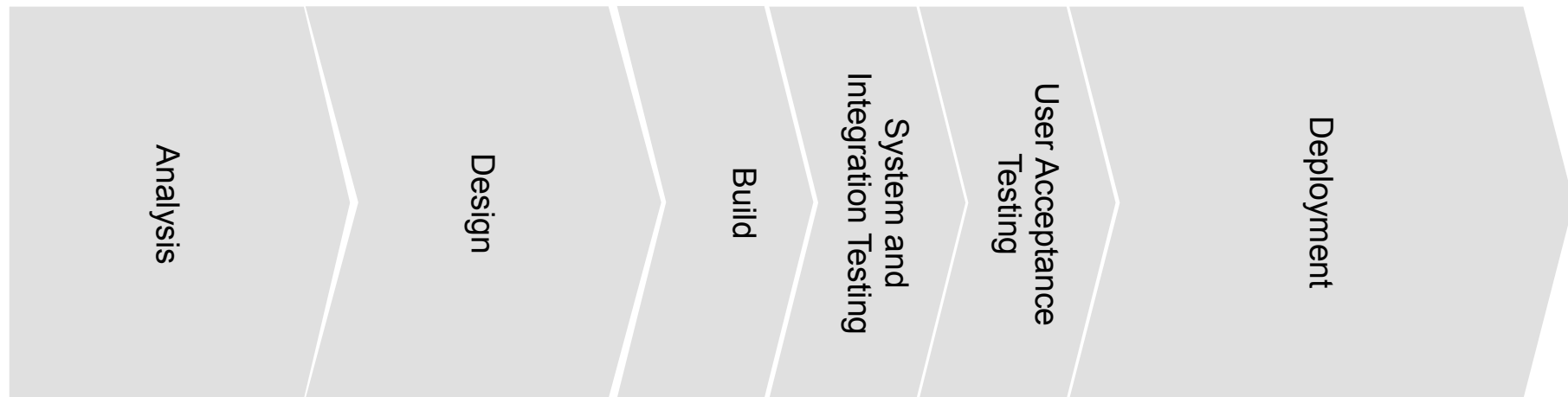
Source: <http://toastresearch.com/2010/09/02/project-management-for-people-that-dont-want-to-manage-projects/>

# A little list of potential approvals you might need – you can easily hit 25 approvals

- Enterprise Strategy
  - CEO Strategy Office
  - EITA
- Project Sponsor
- Business Units (LOBs) directly involved, e.g.
  - Products
  - Sales
- Finance
  - Will verify Business Case
- Compliance
  - Legal
  - Data Security
- Risk Management
  - Financial
  - IT-Risk
- ....

# The Approvers will come back to you

## Example: Enterprise Architecture Approval



Architecture is approved by Enterprise Architects

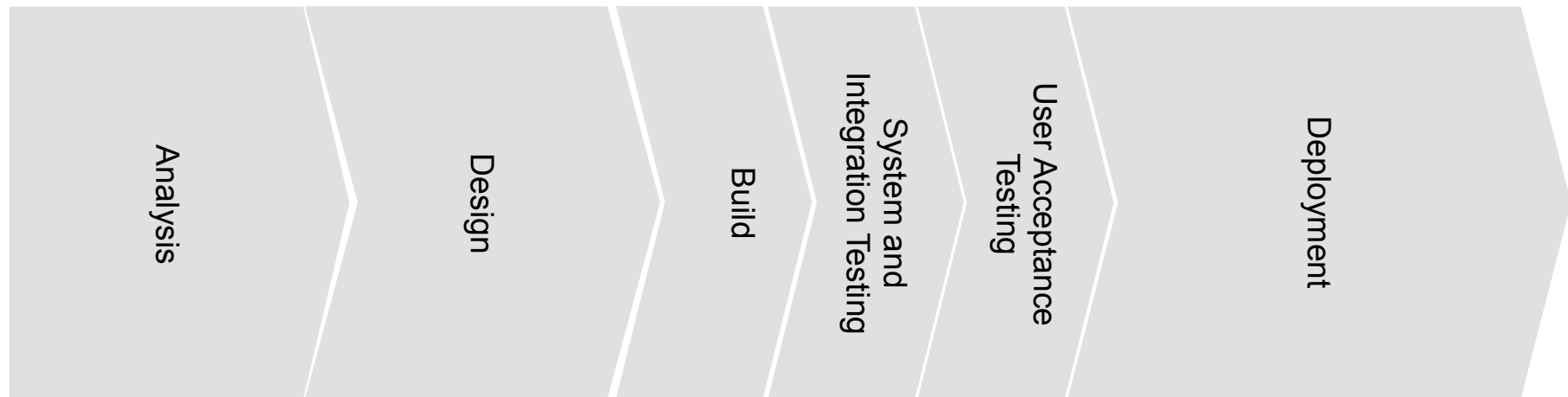


Enterprise Architects will recheck whether what has been built is what has been agreed



# The Approvers will come back to you

## Example: Finance Officer's Approval

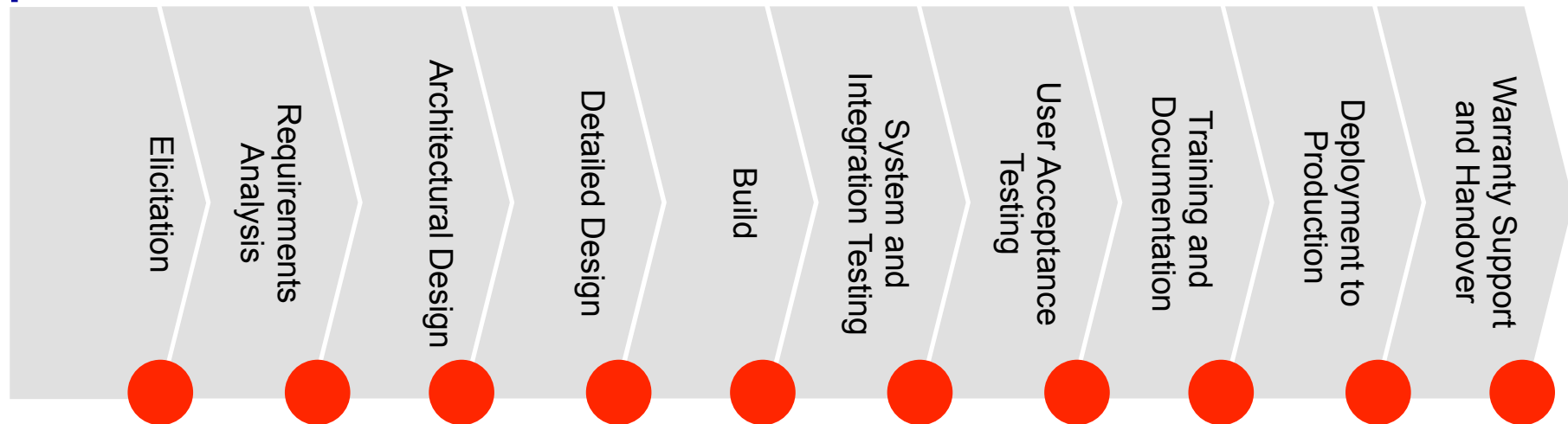


Solution, Budgets and Benefits  
approved by CFO's Office

CFO Office will “come back” and check  
whether project benefits have  
materialized



The “Enterprise Project Office” will typically check you at the end of each phase ..



### Typical Content of a Milestone Report / Review

- Results as defined by the project model delivered (in approved quality)?
- Ready to start next phase?
- Project is in time and budget?
- Reassessment of Risks and Security Constraints

# From Business to EA Summary

