Business Capability Management
From Business Needs to Executing Change
Vorlesung IT-Unternehmensarchitektur

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Fachgebiet Software-Architekturen, Prof. Dr. Robert Hirschfeld
Dipl.-Inform. (univ.) Wolfgang Keller,
wolfgang.keller@objectarchitects.de
From Business to EA
Story of this 90 mines module

Identify hot spots for improvement

- Large Scale Change
  - Strategy Switches
  - M&A
- Capability based analysis
- Portfolio analysis

Manage overall Enterprise Demand for change

- Enterprise PMO
- PMI Processes (Recap)
- Approval Processes
- Stakeholder Management

Kick off projects
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

M&A

Changes in strategy

Routine improvements (e.g. using Capability based Analysis)

Portfolio Analysis

Legal & regulatory requirements

Set of documented demands
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
IT/Business Alignment remains a CIO Top Priority despite the Economic Downturn

<table>
<thead>
<tr>
<th>SIM CIO Panel: CIOs‘ Top Priorities</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>(1) IT and business alignment</td>
<td>(1) Business productivity and cost reduction</td>
<td>(1) Business productivity and cost reduction</td>
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<tr>
<td>(2) Build business skills in IT</td>
<td>(2) IT and business alignment</td>
<td>(2) Business agility and speed to market</td>
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<td>(3) IT strategic planning</td>
<td>(3) Business agility and speed to market</td>
<td>(3) IT and business alignment</td>
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<td>(4) Attracting IT professionals</td>
<td>(4) Business process re-engineering</td>
<td>(4) IT reliability and efficiency</td>
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<td>(5) Making better use of information</td>
<td>(5) IT cost reduction</td>
<td>(5) Business process reengineering</td>
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</table>
Questions driving IT Management change faster than Organizations adopt

- How do you translate business strategy into IT action ASAP?
- How can you manage IT, Projects, Software at all?
- How can you build big systems?
- How do you deal with the software crisis of the early seventies?
- How do you decentralize using Client/Server?
- How to use SOA?
- What can you make of OO and the Internet?
Architectural Models (again) have to be adopted to new Questions

Business

- business architecture
- strategies and business goals
- business process architecture

we need a capability to „Manage Commissions“

IT

- IT architecture
- domain architecture
- zoning maps and application architecture
- technical architecture

we could offer application XYZ
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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

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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)

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
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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 of 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:

- Set Commission Goals
- Manage Split Commissions
- Calculate Commissions
- Pay Commissions
- Track Commissions
- Integrate Commissions with HR Information

Future importance:

- Implemented
- Not implemented

Neutral:

- Implemented
- Not implemented

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

<table>
<thead>
<tr>
<th>state of existing commission application</th>
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<tbody>
<tr>
<td>Set Commission Goals</td>
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<tr>
<td>Manage Split Commissions</td>
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<tr>
<td>Track Commissions</td>
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<tr>
<td>Integrate Commissions with HR Information</td>
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</tbody>
</table>

differentiating | source able | glue ware
Reasoning based on Capabilities allows you to evolve an application or service landscape so that you have more freedom for sourcing decisions.
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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


From Business to EA

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Potential sources of demand for Change Programs

- M&A
- Changes in strategy
- Routine improvements (e.g. using Capability based Analysis)
- Portfolio Analysis
- Legal & regulatory requirements

Set of documented demands
Potential sources of demand for Change Programmed

Set of documented demands

Management Reviews

Prioritization

Set of approved demands

Typically 2-3+ times more demands than budget available

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Typical Enterprise Planning Process
From Idea to Project

Year -2
Collect Ideas

Year -1
Evaluate and Prioritize

Early Year 0
Kick off projects

1st Q
2nd Q
3rd Q
4th Q

Project ideas must be
registered for year 0

First round of prioritization
Typically First Line Managers

Final Prioritization
Typically Cx Officers (Board)

YES – you have an agility issue here
for a solution see below
Slicing the Elephant: How to find the Optimum Project Portfolio?

- 3000+ project proposals
- Dependencies between projects
- Contradicting Targets / Goals
- XX countries, companies, Opcos, brands
- XXX Mio. USD or EUR change budget
- X Shared Service Units
Possible Solution: Divide & Conquer
Not optimal but “good enough”

<table>
<thead>
<tr>
<th></th>
<th>Country(1)</th>
<th>Country(2)</th>
<th>Country(n)</th>
<th>Shared Services</th>
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<tbody>
<tr>
<td>Group Change Budget</td>
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<td>LOB X Budget (Global X)</td>
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<tr>
<td>LOB Y Budget (Global Y)</td>
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If ever anyone complains about a matrix org – try to handle the same volume without. ENJOY IT!!!
The “sliced elephant model” also solves the agility issue of the below process.

- **Year -2** Collect Ideas
- **Year -1** Evaluate and Prioritize
- **Early Year 0** Kick off projects

**Budget Reserve for urgent projects**

- **1st Q**
- **2nd Q**
- **3rd Q**
- **4th Q**

Project ideas must be registered for year 0

First round of prioritization
Typically First Line Managers

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The typical „Large Enterprise“ change process

- Analysis
- Design
- Build
- System and Integration Testing
- User Acceptance Testing
- Deployment

- Elicitation
- Requirements Analysis
- Architectural Design
- Detailed Design
- Build
- System and Integration Testing
- User Acceptance Testing
- Training and Documentation
- Deployment to Production
- Warranty Support and Handover

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### PMI Process Clusters revisited

#### Collect approvals using project planning documents

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<tbody>
<tr>
<td>Project Integration Management</td>
<td>• Develop Project Charter</td>
<td>• Develop Project Management Plan</td>
<td>• Direct and Manage Project Execution</td>
<td>• Monitor and Control Project Work</td>
<td>• Close Project or Phase</td>
</tr>
<tr>
<td>Project Scope Management</td>
<td>Collect Requirements Define Scope Create WBS</td>
<td>• Verify Scope</td>
<td>• Control Scope</td>
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<tr>
<td>Project Time Management</td>
<td>Define Activities Sequence Activities Estimate Activity Resource Estimate Activity Duration Develop Schedule</td>
<td></td>
<td>• Control Schedule</td>
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<tr>
<td>Project Cost Management</td>
<td>Estimate Cost Determine Budget</td>
<td></td>
<td>• Control Costs</td>
<td></td>
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<tr>
<td>Project Quality Management</td>
<td>Plan Quality</td>
<td>• Perform Quality Assurance</td>
<td>• Perform Quality Control</td>
<td></td>
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<tr>
<td>Project Human Resource Management</td>
<td>Develop Human Resource Plan</td>
<td>• Acquire Project Team</td>
<td>• Develop Project Team</td>
<td>• Manage Project Team</td>
<td></td>
</tr>
<tr>
<td>Project Communications Management</td>
<td>• Identify Stakeholders</td>
<td>• Plan Communications</td>
<td>• Distribute Information</td>
<td>• Manage Stakeholder Expectations</td>
<td>• Report Performance</td>
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<tr>
<td>Project Risk Management</td>
<td>• Plan Risk Management</td>
<td>• Identify Risk</td>
<td>• Perform Quantitative Risk Analysis</td>
<td>• Control Risks</td>
<td></td>
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<tr>
<td>Project Procurement Management</td>
<td>• Plan Procurement</td>
<td>• Conduct Procurement</td>
<td>• Administer Procurements</td>
<td>• Close Procurements</td>
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</tbody>
</table>

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

Identify hot spots for improvement

- Large Scale Change
  - Strategy Switches
  - M&A
- Capability based analysis
- Portfolio analysis

Manage overall Enterprise Demand for change

- Enterprise PMO

Kick off projects

- PMI Processes (Recap)
- Approval Processes
- Stakeholder Management