EAM wirksam machen
Warum EAM kein Nischenprodukt sein kann und was es außer guten Modellen und Methoden braucht
Agenda

1. Praktisch: Quo Vadis EAM?
2. Theoretisch: Die Rolle von Kontext und Kultur
3. Theoretisch: Die Rolle von Kontext und Organisation
4. Praktisch: Was machen wir daraus?
Quo Vadis EAM
Guiding Ideas

**Hypothesis**
Enterprise Architecture Management (EAM) is a function that aims at guiding transformation of organizations – with modest success.

**Question**
How can existing EAM capabilities be matured and leveraged to new fields of application?

**Task**
In order to build next generation EAM we have to
- understand what the essential capabilities of EAM are,
- understand who has or should have a primary interest in these capabilities,
- understand how to develop these capabilities and bring them to use.

**Working Title**
We call this function Corporate Intelligence (CI).
It aims at supporting Enterprise Transformation (ET).
We found three groups of drivers for Corporate Intelligence:

**Drivers for Corporate Intelligence**

- **External Pressures (external, reactive)**
  - Pressure by regulations (e.g. separation of power networks and power trading, financial supervision)
  - Political and social pressure, pressure by customers (e.g. acceptance of nuclear energy)
  - Technological pressure (e.g. operations of legacy systems, „omnipresence“ of the iPad)

- **Strategic Decisions (external/internal, proactive)**
  - Globalization
  - Mergers & Acquisitions
  - Cooperation/networking in value creation
  - Adaptations of product portfolios
  - Reorganizations
  - Decommissioning of core systems

- **Optimization/Transformation Functions (internal, proactive/reactive)**
  - Limits von development of maturity resulting in fundamental transformations
  - Limits of growth in existing structures and modes of operation
  - Constant pressure for efficiency and necessity of global optimization/consolidation
We found three groups of disciplines for Corporate Intelligence

**Disciplines for Corporate Intelligence**

### Classical Disciplines existing in EA Context
- Project portfolio management (strategic and operative)
- Project management
- Enterprise Architecture Management
- Change Leadership
- Business Analysis
- Business process improvement/management
- Vendor/sourcing management

### Existing Disciplines rarely used in EA Context
- Strategic Control (analysis, development, implementation of strategy)
- Financial Control (Investment, mapping of value flows)
- Strategic HR management/development, resource management
- Skill/competence management
- Innovation management

### Cross-cutting Disciplines needed for coordinated Transformation
- Leadership/Management
- Communication
Drivers and Disciplines of Transformation

Positioning of Transformation Topics

- **Focus of “classical” EA within an IT department.**
- **EA has almost no impact here because it is too slow and transformation is business driven ignoring EA.**
- **Organizations that positioned EA outside IT are “powerful” here.**

**A**
- **Mode**
  - proactive
  - reactive

- **Focus**
  - internal
  - external

- **Driver**
  - strategic decisions
  - existing disciplines rarely used in EA context

- **Disciplines**
  - optimization-/transformation functions
  - classical disciplines existing in EA context

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Lean EAM

Missing instruments or existing instruments too slow

Mode

proactive

reactive

Focus

internal

external

driver

optimization-/transformation functions
disciplines
classical disciplines existing in EA context

A

driver

strategic decisions
disciplines
eexisting disciplines rarely used in EA context

B

Most (EA-) instruments do not help here. We need a lean versions of EAM processes: fast tracks.

driver

external pressures

C
Strategic EAM
EAM as decision support, integrating disciplines

We need a management support function integrating so far isolated enterprise wide disciplines such as:
- strategic control
- financial control
- strategic HR
- innovation management

Mode
proactive

driver
optimization-/transformation functions
disciplines
classical disciplines
existing in EA context

reactive

driver
strategic decisions
disciplines
existing disciplines rarely used in EA context

Focus
internal
external

driver
external pressures
Evolution paths for EAM
Maturity and Differentiation

(1) Active EA planning, (2) EA roadmaps, (3) business cases for EAM and EAM relevant projects.

Adapt to needs and language of stakeholders outside IT.

Driver: optimization-/transformation functions
Disciplines: existing disciplines rarely used in EA context

A

driver: strategic decisions
Disciplines: existing disciplines rarely used in EA context

B

Adapt to needs and language of stakeholders outside IT.

Driver: external pressures

C

Focus

internal

external

Mode

proactive

reactive
What is the challenge for organizations in cluster A? Do we have a lack of methods and models?

EAM approaches do not only have to be **methodically sound**, but, in order to be adopted successfully, they also need to **respect an organization’s context**.
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Example 1: Organizational Culture and EA Principles

**EA Principle (EAP)**

**An EA Principle**
- guides the evolution of a current EA to a future EA
- aiming at the consistent development of EA
- **by restricting** stakeholders’ design freedom.
Measuring Organizational Culture
Competing Values Modell

- **Group culture**
  - Emphasis on **human relations**
  - Main purpose: **maintenance of organization**
  - Core values: **belonging, trust, participation**
  - Leaders tend to be **participative, considerate, supportive**
  - Teamwork is important

- **Developmental culture**
  - Emphasis on **flexibility and change**
  - Main focus is on the external environment
  - **Growth**, resource acquisition, **creativity**, and adaptation to the external environment are important
  - **Leaders** tend to be **entrepreneurial** and idealistic, **willing to take risks**, and future-oriented

- **Hierarchical culture**
  - Emphasis on **internal efficiency, uniformity**, coordination, evaluation
  - Focus on the logic of the internal organization
  - Stability
  - Main purpose: **execution of regulations**
  - **Leaders** tend to be **conservative**, cautious, paying close attention to technical matters

- **Rational culture**
  - Emphasis on **productivity**, performance, goal fulfillment
  - Purpose of organization: **pursuit and attainment of well-defined objectives**
  - **Leaders** tend to be **directive, goal oriented**, instrumental, functional, and are **constantly providing structure** and encouraging productivity

Hypotheses

EA Principles and Organizational Culture

- EAP Grounding
- EAP Management
- EAP Application
- EAP Guidance
- Organizational Culture
- EA Consistency
- EA Utility
Results of our Empirical Study

**EA Principles and Organizational Culture**

In different organizational cultures managers should

- focus on different activities
- allocate budget, resources and their own efforts differently

... for making EA Principles a success.

### Intra-Organizational Relationships

- **GRO x HIC**
- **GRO x RAC**
- **GRO x GRC**
- **GRO x DEC**
- **MAN x HIC**
- **MAN x RAC**
- **MAN x GRC**
- **MAN x DEC**

### Relationship Coefficients

- $R^2 = 0.712$
- $R^2 = 0.581$
- $R^2 = 0.617$
- $0.786^{****}$
- $0.440^{****}$

### Variables

- **APP**: EAP Application
- **CON**: EA Consistency
- **DEC**: Developmental Culture
- **GRC**: Group Culture
- **GRO**: EAP Grounding
- **GUI**: EAP Guidance
- **HIC**: Hierarchical Culture
- **MAN**: EAP Management
- **RAC**: Rational Culture
- **UTI**: EA Utility

### Statistical Significance

- ****: $\alpha < 0.001$
- ***: $\alpha < 0.01$
- **: $\alpha < 0.05$
- *: $\alpha < 0.1$

... this is just one example
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Example 2: An institutional perspective on EAM

EAM imposes pressures to an Organization

Pressure exerting Entities

EAM
Strat. Mgmt
Controlling
...

Depends upon design of

Focal organization

Question
Which are the relevant design factors?

Acquiesce
Compromise
Avoid
Defy
Manipulate

Desirable, Supportive, Constructive, Open-minded attitude towards enterprise transformation
Undesirable, Contradictory, Destructive, Narrow-minded attitude towards enterprise transformation
## Generic Analysis Framework

### Predictive Factors and Responses

<table>
<thead>
<tr>
<th>Predictive Factor</th>
<th>Strategic Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Acquiesce</td>
</tr>
<tr>
<td><strong>Cause</strong></td>
<td>Why are organizational units pressured to conform to rules or expectations?</td>
</tr>
<tr>
<td>Legitimacy</td>
<td>High</td>
</tr>
<tr>
<td>Efficiency</td>
<td>High</td>
</tr>
<tr>
<td><strong>Constituents</strong></td>
<td>Who is exerting pressures?</td>
</tr>
<tr>
<td>Multiplicity</td>
<td>Low</td>
</tr>
<tr>
<td>Dependence</td>
<td>High</td>
</tr>
<tr>
<td><strong>Content</strong></td>
<td>To what norms and requirements are organizational units pressured to conform?</td>
</tr>
<tr>
<td>Consistency</td>
<td>High</td>
</tr>
<tr>
<td>Constraint</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Control</strong></td>
<td>How or by what means are the pressures being exerted?</td>
</tr>
<tr>
<td>Coercion</td>
<td>High</td>
</tr>
<tr>
<td>Diffusion</td>
<td>High</td>
</tr>
<tr>
<td><strong>Context</strong></td>
<td>What is the organizational context within which pressures are being exerted?</td>
</tr>
<tr>
<td>Uncertainty</td>
<td>High</td>
</tr>
<tr>
<td>Interconnectedness</td>
<td>High</td>
</tr>
</tbody>
</table>

[cf. Oliver 2001]
## EAM-Specific Analysis Framework

### Predictive Factors for EAM Acceptance (1)

<table>
<thead>
<tr>
<th>EAM factor</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cause</strong></td>
<td>The cause, i.e. why stakeholders should participate in EAM at all</td>
</tr>
<tr>
<td><strong>Legitimacy</strong></td>
<td><strong>Will stakeholders gain social fitness</strong> when supporting EAM? &lt;br&gt; Support of EAM should be &lt;br&gt; - Encouraged/appreciated/acknowledged by top management; &lt;br&gt; - Associated and communicated with positive attributes (e.g. innovative, complexity-reducing) &lt;br&gt; - Fostered through processes and governance (e.g. project clearance, project assessments)</td>
</tr>
<tr>
<td><strong>Efficiency/Utility</strong></td>
<td><strong>Will stakeholders become more efficient</strong> when following EA guidelines? &lt;br&gt; Propagate, realize, and demonstrate efficiency gains with respect to &lt;br&gt; - Direct efficiency gains (e.g. faster decision making, faster information gathering) &lt;br&gt; - Indirect efficiency gains (e.g. sustainable project results, implementation quality, long-term support) &lt;br&gt; - Use of available infrastructure/knowledge (e.g. information, platforms, hardware, methods, best practices)</td>
</tr>
<tr>
<td><strong>Constituents</strong></td>
<td>The challenge of dealing with diverse stakeholders.</td>
</tr>
<tr>
<td><strong>Multiplicity</strong></td>
<td><strong>Who (else) exerts pressures</strong> on the organization besides the local EAM function? &lt;br&gt; While other pressure exerting entities such as strategic management and controlling cannot be influenced directly, EAM should &lt;br&gt; - Try to align with these other management functions. &lt;br&gt; - Align and coordinate different EAM units (group vs. division, business vs. IT)</td>
</tr>
<tr>
<td><strong>Grounding of EAM</strong></td>
<td><strong>How should or can EAM be anchored</strong> within the organization. This takes place on multiple dimensions: &lt;br&gt; - Anchoring and support from the side of affected stakeholders &lt;br&gt; - Strategic importance ascribed to EAM &lt;br&gt; - Position in the hierarchy &lt;br&gt; - Level, amount and dedication of top manager(s) behind EAM</td>
</tr>
</tbody>
</table>
## EAM-Specific Analysis Framework
### Predictive Factors for EAM Acceptance (2)

<table>
<thead>
<tr>
<th>EAM factor</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Content</strong></td>
<td>This factor deals with how the actual EA content (e.g. principles) appeals to stakeholders.</td>
</tr>
</tbody>
</table>
| **Consistency** | To which extent are EA guidelines in line with stakeholders’ goals? Design implications:  
- Align with stakeholder goals, i.e. induce the setting of goal systems in a way that EAM goals are supported.  
- Identify proper measures for contributing to EAM goals. |
| **Creation** | How are constraints created such that they may become more commonly accepted. Design implications:  
- Define and communicate processes for regular reviews of EA content (e.g. principles), propagate participation opportunities. Institutionalize EA creation and participation mechanisms.  
- Establish appropriate channels based on stakeholder preferences, such as web portal, cross-functional meetings, etc. |
| **Facilitators** | Facilitators for introducing EAM. |
| **Diffusion** | Unless the enterprise is governed strongly hierarchically and top management pushes EAM personally, the adoption of EAM principles will be based on (voluntary) diffusion. Design implications:  
- “Do good and talk about it”, i.e. provide good showcases and success stories to motivate participation and diffusion. Use appropriate communication channels and marketing mechanisms and educate stakeholders in EAM. A communication plan and process should be defined accordingly. |
| **Trust** | Do stakeholders trust the means of the EAM approach and the enterprise architects’ capabilities? Design implications:  
- Proof means and capabilities where possible  
- Leverage personal relationships  
- Undertake trust-building activities (e.g. exchange of staff between business units and IT)  
- Be reliable but not dogmatic in EAM application |
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Was machen wir daraus?

Warum EAM kein Nischenprodukt sein kann und was es ausser guten Modellen und Methoden braucht?

**Mature an actively planning and designing EAM**
- EA planning
- EA roadmaps
- EA principles
- Customer/strategy/business perspective
- Value documentation/communication

**Corporate Intelligence as strategic decision support**
- Integration of disciplines
- De/centralization of disciplines
- Legitimization in business and IT
- Heterogeneity of stakeholders
- Organizational anchoring

**Early-warning system and lean EAM**
- Environmental scanning
- Fast tracking of projects

Es reicht nicht leitungsfähige Werkzeug zu haben, es muss auch attraktiv sein, diese zu benutzen – und das heisst leider in (fast) jedem Unternehmen etwas anderes.
Wie können Sie mitmachen?

- Sie haben heute schon mitgemacht und unseren Fragebogen ausgefüllt – danke!

- Sie können uns Ihren Fall „erklären“ – in Fallstudieninterviews oder auch als AWF-Referent oder in AWF-Workshops – danke!

- Sie können aktiv mit uns und den Partnern im CC CI arbeiten.

- Oder einfach mit uns in Kontakt bleiben, z.B. via XING

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Slide 23
Vielen Dank!

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