Investigating on the role of EA Management in Mergers and Acquisitions

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The author team

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- Prof. Dr. Florian Matthes is holder of the chair Software Engineering for Business Information Systems (sebis) at the TU München, Germany
- Research areas in Enterprise Architecture Management & Social Software (e.g. EAM KPI Catalog, Enterprise 2.0 Survey, Hybrid Wikis)

Christopher Schulz

- PhD student at sebis, primary research areas: Enterprise Architecture Management, Mergers & Acquisitions, data migrations
- Professional working experience in German automotive industry and Swiss private banking

Andreas Freitag

- External PhD student at sebis, primary research area: EA management in the context of M&A
- Senior consultant at Detecon International GmbH, Global Competence Team Enterprise Architecture Management
Total number of global mergers and acquisitions remains on a very high level

- Appearance of mergers and acquisitions (M&A) remains remarkably high
- Enterprises attempt to
  - realize increased **market power** through external growth,
  - reduce costs through **economies of scale**, and
  - conquer **new markets** through economies of scope

Source: Capital 02/11

Graph showing transaction value in billion dollars and number of transactions from 2000 to 2010.
M&A affects all dimensions of an enterprise

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Merger Planning</th>
<th>Transaction</th>
<th>Post Merger Integration (PMI)</th>
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<tbody>
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<td>Financial</td>
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<td>Communication</td>
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EA management for planning, analyzing, and controlling the as-is and target enterprise states

1. Creation of a **holistic perspective** on the enterprise, comprising business and IT elements

2. Foster communication by defining a **common language** for multidisciplinary stakeholders

3. Gathering information from differing sources and provisioning of consistent **decision base**

→ M&A literature considers these aspects as challenges [GS09, Pi08, Pe99]

→ EA management literature is promoted as holistic M&A approach [BS10, Ro06]

EA management methods and models for M&A not subject to research yet!
Research questions

1. “Is there a general reference to M&A in EA management literature?”

2. “For which phases of an M&A process is EA management relevant?”

3. “Which are typical EA management tasks carried out during M&A?”

4. “Which EA management artifacts are used to perform these tasks?”

5. “Have these artifacts been designed and/or evaluated by empirical means?”

Examining the topic from a literature and industrial point of view.
Research approach

Five-step literature analysis

13 recent EA management books (2005-2011)

EA management survey with 15 concise questions

Three European EA management conferences (2011)

Comparison literature and survey results

Role of EA management in M&A situations

(Webster & Watson, 2002)

(Frazer and Lawley, 2000)
<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Type</th>
<th>M&amp;A</th>
<th>Phase(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>van den Berg, M. and van Steenbergen, M.</td>
<td>2010</td>
<td>Academic</td>
<td>p. 4, 25, 27, 37, 50, 134, 137</td>
<td>All phases</td>
</tr>
<tr>
<td>Bernard, S. A.</td>
<td>2005</td>
<td>Academic</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Engels et al.</td>
<td>2008</td>
<td>Practitioner</td>
<td>p. 84, 85, 86, 169, 232, 277</td>
<td>PMI</td>
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<td>Hanschke, I.</td>
<td>2009</td>
<td>Practitioner</td>
<td>p. 328</td>
<td>-</td>
</tr>
<tr>
<td>Johnson, P. and Ekstedt, M.</td>
<td>2007</td>
<td>Academic</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Keller, W.</td>
<td>2006</td>
<td>Practitioner</td>
<td>p. 98</td>
<td>PMI</td>
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<td>Lankhorst, M.</td>
<td>2005</td>
<td>Academic</td>
<td>p. 108-110</td>
<td>PMI</td>
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<tr>
<td>Niemann, K.</td>
<td>2006</td>
<td>Partitionier</td>
<td>-</td>
<td>-</td>
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<td>Proper et al.</td>
<td>2008</td>
<td>Academic</td>
<td>p. 6</td>
<td>-</td>
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<tr>
<td>Ross et al.</td>
<td>2006</td>
<td>Academic</td>
<td>p. 176-181</td>
<td>PMI</td>
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<td>Schekkerman, J.</td>
<td>2008</td>
<td>Academic</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Schwarzer et al.</td>
<td>2009</td>
<td>Partitionier</td>
<td>p. 85, 86</td>
<td>Merger Planning, PMI</td>
</tr>
<tr>
<td>Wagter et. al.</td>
<td>2005</td>
<td>Academic</td>
<td>-</td>
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</table>
Literature analysis – Main findings

- Link EA management – M&A: 8 of 13 sources
- M&A phase: mostly PMI phase
- EA management tasks: IT consolidation, integration work, support of communication, and modeling
- EA management artifacts: not provided
- Empirical means: fictitious examples, case studies
EA management survey – Overview

<table>
<thead>
<tr>
<th>Conference name</th>
<th>Location / Date</th>
<th>Issued</th>
<th>Returned</th>
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<tbody>
<tr>
<td>EAM Forum 2011</td>
<td>Frankfurt, Germany / Feb. 2011</td>
<td>50</td>
<td>14 (28%)</td>
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<tr>
<td>The Open Group Practitioners Conference</td>
<td>London, UK / May 2011</td>
<td>50</td>
<td>16 (32%)</td>
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<tr>
<td>EAMKON 2011</td>
<td>Stuttgart, Germany / May 2011</td>
<td>35</td>
<td>14 (40%)</td>
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1. Survey participants’ industry

2. Survey participants’ role
Survey results 1 – EA management’s degree of involvement in M&A activities

1. M&A currently as a task of EA management
   - Yes: 48%
   - No: 23%
   - No answer: 30%

2. Involvement of Enterprise Architects in previous M&A activities
   - Yes: 61%
   - No: 16%
   - No answer: 23%

3. Actual EA management support per M&A phase
   - Planning: 89%
     - Yes: 11%
     - No: 7%
   - Transaction: 93%
     - Yes: 7%
     - No: 27%
   - Post Merger Integration: 73%
     - Yes: 36%
     - No: 62%

4. Application of EA management would have made the M&A more successful
Survey results 2 – Support of M&A through EA management – tasks today and in future

**Today**
- Integration planning
- Definition of target architecture
- Currently not
  - Is currently defined
  - Migration of application landscape
  - None

**In future**
- Review Is-landscape
- Design of integration scenarios
  - Due diligence
  - Decision support
- Stipulation of standards
- Business-IT mapping
- Foster transparency
- Consolidation scoping

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EA management tasks in M&A: literature & industry

**Literature**
- EA modeling
- Creation of a common understanding

**Common**
- Consolidation of organization and business process, applications, and infrastructure
- Dependency and redundancy analysis
- Identification of focus areas (scoping) and measures required, and as-is and target-architecture planning
- Standardization of best-practices
- Knowledge transfer

**Experts**
- Governance
- Project management
- Due diligence
- Application and data migration
- Preparation of business capability roadmap
- Support of management decision making
Summary and outlook

Summary

- Limited body of knowledge regarding EA management in M&A
- Analyzed 13 sources & conducted survey at 3 EA management conferences
- Compared literature findings and industry results
  - Literature discusses the role of EA management in M&A only in brief
  - EA practitioners consider M&A as one of their future application domain

Further Work

- Literature analysis
  - Include other publication types (e.g., journals, conference papers)
  - Consider sources from related research domains (e.g., M&A perspective)
- EA management survey
  - Increase the sample size
  - Extend to groups other than enterprise architects
  - Add complementary questions detailing on specific aspects in more detail
- Design and evaluate concrete EA management artifacts for M&A
Thank you for your attention!

Any Questions?

Contact
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Further information
http://wwwmatthes.in.tum.de/wikis/sebis/mergers-and-acquisitions
References


