Business Architecture Trends & Methods

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Session abstract

Business Architecture is a key component of the Enterprise Analysis Knowledge Area. Business analysts & Enterprise business architects need to equip themselves with the tools, techniques, and methods of building and analyzing business capability maps, business domain models, and business process models to excel in the field of business architecture. This session explores the latest trends, value propositions, and methodologies in business architecture, both from the practitioner and business manager points of view.
Session agenda

1. Trends in business architecture
   a) Why (& what is) business architecture?
   b) Business analysis & business architecture convergence

2. Sample business architecture methods & tools

3. Q&A
Business architecture definition & value proposition are in a state of flux

- “The Structure of Scientific Revolutions” by Kuhn
  - “Once a paradigm shift has taken place, the textbooks are rewritten.”

- Early influencers
  - OMG definition & streams of work
  - Third-party consulting firms’ view
    - Forrester, Cutter, Gartner, others
  - Formal non-profit associations & coalitions
  - Subject-matter experts
    - Academe, consultants, industry practitioners, government experts, others
  - Early beginnings of a “body of knowledge”, social-networking style
  - Software tool vendors
Why (& what is) business architecture?

- **OMG BASIG**
  - A blueprint of the enterprise that provides a common understanding of the organization and is used to align strategic objectives and tactical demands.

**From Wikipedia (2013)**

Business Architecture is a disciplined approach to realize business models and to serve as a business foundation of the enterprise to **enhance accountability and improve decision-making**.

Business Architecture's value proposition, unlike other disciplines is to **increase functional effectiveness** by mapping and modeling the business to the organization's business vision and strategic goals.

- Mapping **identifies gaps** between the current and target business capabilities (underlying services, processes, people, and tools).
- Modeling **discovers business requirements** in the area of interest including stakeholders, business entities and their relationships, and business integration points.
Early references link business architecture to strategic planning & process excellence


Abstract: Developing the capability to successfully sell information to the private sector requires an approach altogether different from developing a successful government agency. This session will explore the methodology that must be employed to assure that a profitable line of business can be built. Starting from the initial steps of defining a market and establishing products & users through the more advanced steps of potential delivery models and developing a business plan, all phases of the development cycle will be examined. ...

In order to begin this transition, the public sector needs to adopt strategic planning and methodologies for strategic planning. This essay pinpoints the bedrock requirements for performing strategic planning and provides guidelines for a public sector strategic planning methodology. The value to be derived can be maximizing a single item like third-party...
Early references link business architecture... (continued)


- Description: This fascinating account of Xerox's now-legendary quality crusade--from its uncertain beginnings to its Malcolm Baldridge National Quality Award-winning campaign to the company's current and future plans for advancing quality--provides both inspiration and strategic advice within a scintillating success history.
Business architecture practice poised to exit “early adoption” stage

Innovators

Early Adopters

Early Majority

Late Majority

Laggards

"The Chasm"

Disruptive Technology Adoption Lifecycle


Early adopters

• Pollak, 1992
• Palermo & Watson, 1993
• McDavid, 1999

Forrester, 2002-present
• Homann, 2006
• Object Management Group, 2008-present
• Business Architecture Society et. al., 2008-present
• Business Architecture Institute, 2008-present

Mainstream adoption

• Academe
• Media
• Corporations

Late adopters

• Government
• Micro & small businesses

Area under the curve represents number of customers
Pure-play organizations emerge to create business architecture “vortex”

Influencers led followed by communities of practice and standards-setting bodies; vendors followed

Standards-setting bodies
- ISO
- OMG
- MDA
- BASIG
- The Open Group
- TOGAF
- BPMN
- BEI
- BPM/ SOA
- BEI

Influencers
- Academe
- Various authors
- Media
- Gartner
- Cutter
- IIR
- Forrester

Third-party vendors
- Metastorm
- IBM
- Sparx
- Troux
- Mega
- Pega
- BrainstormCentral
- BAI
- BPMI
- Progress

Communities of practice
- PMI
- AOGEA
- BAA
- BizArchCommunity
- IIBA
- BPM Architecture Guild
- Business Architecture Society
- BEI
- TOGAF
- BPM/SOA
- ISO
- OMG
- MDA
- BASIG

Conflicting ideas provide opportunity to define the future of business architecture profession
What is business analysis? (IIBA, 2010)

- Set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organization, and to recommend solutions that enable the organization to achieve its goals
- ...defining the capabilities an organization requires to provide products and services
- ...play a central role in aligning the needs of business units with the capabilities delivered by information technology

Majority of projects fail because of incomplete or changing requirements

- Standish Group (2010)
  - 24% cancelled before complete
  - 54% cost more than original estimates
  - Only 32% of projects completed on time and on budget
    - Only about 20% of the features and functions specified ever get used

- Bull Survey (1998)
  - Bad communication between relevant parties, 57%

- Top five reasons projects fail (OASIG, 1995)
  1. Lack of User Inputs, 12.8%
  2. Incomplete Requirements & Specifications, 12.3%
  3. Changing Requirements & Specifications, 11.8%
  4. Lack of Executive Support, 7.5%
  5. Technology Incompetence, 7.0%
Strategic thinking & planning are key inputs to enterprise analysis

- Balanced scorecard (Kaplan & Norton, 1996)
  - System for tracking implementation of strategy
  - A focus on financial measures creates short-term and conflicting goals
  - Look at organizational performance based on 4 perspectives
    - Financial
    - Customer
    - Internal Process
    - Learning and Growth

- Relationship to portfolio management, risk management, enterprise architecture, organization change management

Source, IIBA, BABOK V2.0
BABOK V3 puts business architecture front and center

Key takeaway: Situation analysis ensures co-alignment for every change.

Business process modeling drives business architecture adoption in key industries

“What are your firm’s plans to adopt the following types of platform and infrastructure software?”
(Business process management software [BPM])

- **Adopted/Interested***
- **No interest/don’t know**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Adopted/Interested</th>
<th>No interest/don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services and insurance</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Business services and construction</td>
<td>78%</td>
<td>22%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Public sector and healthcare</td>
<td>65%</td>
<td>35%</td>
</tr>
<tr>
<td>Retail and wholesale</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>Utilities and telecommunications</td>
<td>53%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Base: 485 enterprise IT decision-makers

Source: Enterprise And SMB Software Survey, North America And Europe, Q4 2009

*BPM demand is comprised of respondents who are expanding/upgrading implementation; have implemented but are not expanding; are planning to implement in the next 12 months; are planning to implement in a year or more; or are interested with no plans.

Source: Forrester Research, Inc.
Enterprise architecture frameworks attempt to embody business architecture

### Zachman Framework

<table>
<thead>
<tr>
<th>Role</th>
<th>What (Data)</th>
<th>How (Function)</th>
<th>Where (Locations)</th>
<th>Who (People)</th>
<th>When (Time)</th>
<th>Why (Motivation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope (contextual)</td>
<td>List of things important to the business</td>
<td>List of processes that the business performs</td>
<td>List of locations in which the business operates</td>
<td>List of organizations important to the business</td>
<td>List of events/cycles important to the business</td>
<td>List of business goals/strategies</td>
</tr>
<tr>
<td>Planner</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterprise Model (conceptual)</td>
<td>e.g. Semantic Model</td>
<td>e.g. Business Process Model</td>
<td>e.g. Business Logistics System</td>
<td>e.g. Workflow Model</td>
<td>e.g. Master Schedule</td>
<td>e.g. Business Plan</td>
</tr>
<tr>
<td>Business Owner</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>System Model (logical)</td>
<td>e.g. Logical Data Model</td>
<td>e.g. Application Architecture</td>
<td>e.g. Distributed System Architecture</td>
<td>e.g. Human Interface Architecture</td>
<td>e.g. Process Structure</td>
<td>e.g. Business Rule M</td>
</tr>
<tr>
<td>Designer</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Technology Model (physical)</td>
<td>e.g. Physical Data Model</td>
<td>e.g. System Design</td>
<td>e.g. Technology Architecture</td>
<td>e.g. Presentation Architecture</td>
<td>e.g. Control Structure</td>
<td>e.g. Rule I</td>
</tr>
<tr>
<td>Implementer</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Detailed Representation (out-of-context)</td>
<td>e.g. Data Definition</td>
<td>e.g. Program</td>
<td>e.g. Network Architecture</td>
<td>e.g. Security Architecture</td>
<td>e.g. Timing Definition</td>
<td>e.g. Rule R Definit</td>
</tr>
<tr>
<td>Subcontractor</td>
<td></td>
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<tr>
<td>Functioning System</td>
<td>e.g. Data</td>
<td>e.g. Function</td>
<td>e.g. Network</td>
<td>e.g. Organization</td>
<td>e.g. Schedule</td>
<td>e.g. Straw</td>
</tr>
</tbody>
</table>
Shift of focus towards business outcomes drives role convergence “sweet spot”

*Merriam-Webster (2010): The network of professionally skilled managers (as scientists, engineers, and administrators) that tends to control the economy both within and beyond individual corporate groups; first appeared in “The New Industrial State” (Galbraith, 1967)
Case 1: Going to the “cloud” involves changing the organization structure

Problem:
“You cannot and will not break out of technological silos without first breaking organizational silos.”

Solution:
1. Place Network and Storage teams under common management
2. Cross-train your MVPs
3. Promote ingenuity
4. Analyze budget process

"It still boggles my mind ... [that] the subprime mortgage market could grow from practically nothing to close $1.5 trillion in the space of a few years ... without anybody doing something about it..."
-Paul Volcker, Former Fed Chairman as quoted in American Banker, 10/27/2010

"We should have been asking how servicers were able to achieve such efficiencies without sacrificing quality."
-Sheila Bair, FDIC Chair as quoted in American Banker, 10/27/2010

<table>
<thead>
<tr>
<th>Bank</th>
<th>Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank of America</td>
<td>$2.3T</td>
</tr>
<tr>
<td>J P Morgan Chase</td>
<td>$2.0T</td>
</tr>
<tr>
<td>Citigroup</td>
<td>$1.9T</td>
</tr>
</tbody>
</table>

Data from SNL Financial/Associated Press, 8/31/2010

"If rules are being broken, we don't need to wait for an expert in Washington to wake up. If we set it up right from the beginning, the agency can collect and analyze data faster and get on top of problems as they occur, not years later."
-Elizabeth Warren, new CFPB Chief as quoted in The Fiscal Times, 10/29/2010
What is a business capability map?

- Capability (Homann, 2006)
  - A particular ability or capacity that a business may possess or exchange to achieve a specific purpose or outcome.
  - Describes what the business does (outcomes and service levels) that creates value for customers; for example, pay employee or ship product.
  - Abstracts and encapsulates the people, process/procedures, technology, and information into the essential building blocks needed to facilitate performance improvement and redesign analysis

- Business capability map
  - Clear structural outline of the business capabilities and their connections (for example, structured network)
Example 1: SOA view of business capability establishes service levels

Capabilities are "black boxes," with inputs and outputs defined with explicit service level expectation

Example 2: Business capability architecture is “the tie that binds all”

Principles
1. Non-overlapping
2. Complete
3. Rich
4. Business oriented
5. Industry-agnostic

Drivers
1. Maintain competitive edge
2. New products / markets
3. Consolidation / acquisition
4. Business transformation

Concepts
1. Business situation
2. Business purpose
3. Business outcome
4. Business behavior
5. Business resource
6. Business role

Goals
1. Enhance accountabilities
2. Better decision-making
3. Improve operations

BCA effectively maps the inter-relationships among business components

**BCA Goal:**
Enhance accountabilities.
BCA sample use cases address pain points related to change

- **LOB Executive**
  - Define a set of business capabilities to realize a strategic intent

- **Business Architect**
  - Identify target business capabilities to accomplish a product strategy

- **Product Manager**
  - Determine which business capabilities will be impacted by a change in product configuration

- **Program / Project Manager**
  - Justify a project’s business case in relation to an organization’s strategic goal

- **Business Analyst**
  - Discover project requirements that meet business needs

- **Process Analyst**
  - Identify gaps in processes, people, and tools to enable a business capability

- **Resource Manager**
  - Measure performance by role in relation to the accomplishment of process success metrics or service level agreements

- **Enterprise / Systems Architect**
  - Identify gaps and tools integration opportunities for shared services
Example 3: Civil service capability review

D1 Innovate and improve delivery
- Do you have the structures, people capacity and enabling systems required to support appropriate innovation and manage it effectively?
- Do leaders empower and incentivise the organisation and its partners to innovate and learn from each other, and the front line, to improve delivery?
- Is innovation explicitly linked to core business, underpinned by a coherent innovation strategy and an effective approach towards risk management?
- Do you evaluate the success and added value of innovation, using the results to make resource prioritisation decisions and inform future innovation?

In summary

1. Business architecture definition & value proposition are in a state of flux
2. Pure-play organizations emerge to create business architecture “vortex”
3. Business architecture practice poised to exit “early adoption” stage
4. Shift of focus towards business outcomes drives role convergence “sweet spot”
Appendix
Metastorm ProVision®’s comprehensive EA support for **Business Architecture**, Information Architecture and Strategic Planning, allows organizations to holistically model, understand, analyze and plan their business...

IBM BPM Blueprint
Process improvement is everybody’s business

IBM BPM Blueprint is a cloud-based process discovery and documentation platform accessible from any browser. It is designed to be easy-to-use and collaborative so that a wide range of stakeholders can work together synchronously or asynchronously to map, refine and improve processes.

- Simple Process Discovery
- Collaboration and Centralization
- Sharing and Linking

- Problem Analysis
- Data Import and Export
- Participant and Author Access

- Easy-Administration
- Security and Privacy

Simple Process Discovery
Capturing a process is as simple as typing out a bulleted list of activities. As you type Blueprint generates a set of activity boxes which can then be re-arranged, stacked and grouped through simple drag and drop. Double click on each box and add activity details or attach files on the pop-up form. When you’re satisfied with your map, select “Process Diagram” from the tool bar and a flow diagram in BPMN 2.0 notation is automatically generated for you.
What does it take to be a business architect?

"What are the skills and requirements for business architects?"

- Very logical mind
- Industry experience
- Deep business knowledge
- Process modeling
- Solution architecture
- Respond to future market changes
- Thought leaders
- Super architects
- Abstract thinking
- Understands development life cycle
- Communicate to different stakeholders
- Tech savvy
- Strategic thinkers
- Customer-facing senior business analyst
- Jack-of-all-trades
- Relationship-oriented
- Good sense and appreciation for business
- Ability to work with ambiguity
- Subject-matter expert
- Seek challenges
- Get requirements out of people
- Change management attitude
- Facilitate discussions
- Command of business language
- Understands patterns and reusable services
- Think like an architect
- Balance of tech and business
- Businessperson
- Understands high-level conceptual ideas
- Strategic and analytic skills
- Emotional maturity
- Ability to visually represent ideas
- Responses from more than 25 interviews with organizations that have business architecture

Source: Forrester Research, Inc.
Visit my blog at BrainstormCentral.org on BA Methods

BrainStormCentral.org

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FORWARD-THINKING BUSINESS AND IT PROFESSIONALS LIKE YOU

Business Architecture Methods
Blog by Andrew Guitarte

It’s a tricky issue to settle -- what exactly is business architecture and why do people do it (or spend money on it)? But maybe a less controversial topic to discuss is *how* business architects do their work on a daily basis. There’s no right or wrong way of *doing*, as long as it adds value, right? Perhaps. Let’s find out in these series of blog posts. Your comments are always welcome.

**Let’s define what we mean by methods**
By Andrew Guitarte in Business Architecture Methods on Friday, July 09, 2010 5:42 PM 1
Tags: define methods methodology business architecture pmbok babok | 1 Comment Post a Comment

**Simply put, we model and map**
By Andrew Guitarte in Business Architecture Methods on PM 1
Tags: map methods model omg | 3 Comments Post

**Choose your method wisely**
By Andrew Guitarte in Business Architecture Methods on 12:51 PM 1
Tags: business analysis business capability me

**Tools, tools, tools**
By Andrew Guitarte in Business Architecture Methods on PM 1
Tags: business architecture metl

**What’s missing in EA frameworks**
By Andrew Guitarte in Business Architecture Methods on 1
Tags: business capability cisr ea frameworks gao it capa

**Take the Dodd-Frank Act example**
By Andrew Guitarte in Business Architecture Methods on T 3:32 PM 1
Tags: business architecture dodd frank act methods | Pos
References


