Best and Worst Enterprise and Application Architecture

Betsy Burton, VP Distinguished Analyst

Andy Kyte, VP & Gartner Fellow

April 12, 2012
Gartner at a Glance

- Analysts: 775
- Client Organizations: 11,500
- Client Interactions: 290,000
- Vertical Coverage in Nine Industries: 5,500
- World's Largest Community of CIOs: 11,500
- Media Inquiries: 70%
- Clients in 85 Countries: 75%
- 75% of Global 500: 55
- 10,000 Media Inquiries
- 55 Conferences
- 470 Consultants
- 5,500 Benchmarks
- 1,500 Consulting Engagements
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April 12, 2012
Application and Enterprise Architecture

Brothers From Two Different Mothers
## Disconnect Between The Perception of EA Maturity

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<tr>
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<th>Gartner ITScore Results</th>
<th>Chief Architect</th>
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<th>Executive</th>
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Enterprise Architecture

- Enterprise architecture is
  ... a discipline that of translating business vision and strategy into effective enterprise change.
- The value of EA is
  ... the ability for business and IT leaders to make more effective investment decisions and take more impactful actions.
- The output of EA is
  ... the creation and communications of key requirements, principles and models that describe the enterprise's future state and enable its evolution.
- The scope of the enterprise architecture includes...
  ... the people, processes, information and technology of the enterprise, ... and their relationships to one another and to the external environment.

Enterprise architecture means architecting the enterprise for change.
How would you describe the current focus of your EA efforts?

- Aligning business and IT vision and strategies, deliver strategic business value and enable a major business transformation (62%, 74%, 73%, 33% for NA, EMEA, AsiaPac, LA respectively)
- Guiding technology use, support and decisions and simplify technology landscape (74%, 73%, 66% for EMEA, AsiaPac, LA respectively)
- Other (1% or less)

N = 360
Q04. How would you describe the level of engagement your organization’s business leaders have within EA?

N = 360

- **Collaborative**: Business, IT and EA practitioners are activity engaged together in the development of EA (23%)
- **Beginning to engage**: Business leaders are starting to work on EA and collaborating on specific projects and programs (34%)
- **Limited engagement**: Business is generally supportive of EA but has limited involvement or collaboration on EA (28%)
- **No engagement**: Despite our best efforts to focus on business integration and on working with business leaders, they see us as only IT (8%)
- **No engagement**: We are only focusing EA on driving and leading technology decisions (6%)
You Must Define Your Enterprise Context to Integrate EA and Business Strategy

EA practitioners must define and drive their EA efforts based on their enterprise context. The Enterprise Context is the process of:

- Identifying internal and external environmental trends
- Articulating the business strategy
- Identifying requirements
- Creating principles
- Developing anchor models of the business
Turning EA on its Head: Business Outcome-Driven EA

Two-Phase Approach

Deliverables

Operational
- Communications
- Governance
- Resources

Enabling
- Current State Models
- Future Requirements

Diagnostic
- Analysis Tools & Methods
- Future State Models

Actionable
- Business Change Roadmaps
- Project Inception Documents
- Reference Documents

Measurable
- Projects Initiated
- Project Exceptions
- Business Outcomes
The 10 Best Practices of Successful EA Programs

1. Charter Your EA Program focused on enterprise context
2. Develop (and Execute) a Communications Plan
3. Be Pragmatic (scope and iterate your efforts)
4. Treat Each Iteration Like a Project
5. Start With the Business Strategy and Obtain Business Sponsorship
6. Do the Future State Before the Current State
7. Don't Forget Governance
8. Set Up a Measurement Program (link to overall performance management)
9. Track EA Program Maturity and perceptions
10. Pay as Much Attention to Peoples Competencies as to Skills
13 Worst EA Practices

1. No Link to Business Strategic Planning and Budget Process
2. Confusing "IT Architecture" With "Enterprise Architecture"
3. Lack of Governance
4. Over-standardization
5. Focusing on the Art or Language of EA Rather Than Outcomes
6. Strict Following of EA Frameworks
7. "Ivory Tower" Approach
8. Lack of Communication and Feedback
9. Limiting the EA Team to IT Resources
10. Lack of Performance Measures
11. Picking a Tool Before Understanding Your Business Needs
12. Focusing on the Current State First and Primarily
13. "We're Done"
Recommended Research

• EA Practitioners Must Focus on Outcome-Oriented Deliverables
• Predicts 2012: Opportunities for EA to Lead Business Transformation in Turbulent Times
• Beyond the Tipping Point: EA Is Strategic
• Enterprise Architecture in Organizations Beyond the Tipping Point
• EA Must Include Defining Your Enterprise Context
• Enterprise Architects: Know Thy Business Strategy
Application Architecture Defined

- Application architecture is
  ....a core set of leverageable design artifacts and best practices that will effectively guide subsequent application construction, deployment efforts, ongoing performance and continued evolution.

- Application architecture is
  .....what translates business needs into functioning software requirements.

- Application architecture is
  ......influenced heavily by application-solution-specific guidelines and constraints.
Best Practice 1: Focus on the Ecosystem

- Application Artefacts populate the Application Ecosystem
- Define the Ecosystem Requirements First, Then Select the Artefacts
- Application Architecture Must Encompass the Detail of Sourcing Strategies
- The Success of Application Architecture Can Only Be Judged in the Long Term
Best Practice 2: Focus on the NFRs

- Functionality
- Reliability
- Usability
- Efficiency
- Maintainability
- Portability

Reference: IEC 25010 (Was ISO 9126)
Best Practice 2: Focus on the NFRs

Reference: IEC 25010 (Was ISO 9126)
Best Practice 3: Take Responsibility for Multiple Outcomes

Cost To Create
Annual Cost
Lifespan
Functional Cover
Agility
Usability
Portability
Reliability

Target
Actual
Best Practice 4: Attention To Detail

- e.g. SDLC – especially when implementing CoTS Artefacts
- e.g. Sourcing Arrangements
- e.g. QA – especially “Design for Test” and “Design for Diagnostics”
- e.g. Life-Cycle Management – “Design for Change”, “Design for Support”
- e.g. Planning for benefits realization
Best Practice 5: Drive Governance Process

Governance of the stakeholders, by the stakeholders, for the stakeholders

- Demand-Side Stakeholders
- Supply-Side Stakeholders
- Enterprise Architecture

Named Owner
Recommended Research

- In Application Projects, 'Success' Needs Many Definitions
- What Application Leaders Need to Know About Application Design
- Application Architecture Overview, Part 1: General Context and Scope
- Application Architecture Overview, Part 2: Enterprise-Level Scope and Roles
- Application Architecture Overview, Part 3: Project-Level Scope and Roles
- Defining the Discipline of Application Architecture
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Gartner Enterprise Architecture Foundation Seminar
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May 21 – 22, National Harbor, MD
June 5-6, Sydney, Australia
September 10 – 11, Orlando, FL
October 2 – 3, near London, U.K.
November 29 – 30, Las Vegas, NV
December 4 – 5, Amsterdam, Netherlands

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