Agile Enterprise Architecture: Oxymoron or Savior?

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Agenda

- Wouldn't you like to...
- Enterprise architecture
- Agile enterprise architecture
- Enterprise architecture and Disciplined Agile Delivery (DAD)
- Parting thoughts





Wouldn't you like to...

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Wouldn't your development team like to...

- Get guidance regarding key architecture decisions
 - e.g. So that you can safely start coding?
- Easily leverage existing systems, data sources, ...
 - e.g. So you can focus on providing new value?
- Have people who can mentor you
 - e.g. So that you can learn new skills?
- Have sensible development guidelines to follow
 - e.g. So that you can develop higher quality solutions?
- Have a tooling infrastructure that supports those guidelines
 - e.g. So that you can efficiently develop those solutions?



Wouldn't your organization like to...

- Maximize their return on investment (ROI) in IT:
 - e.g. Spend the money wisely?
- Have systems which provide consistent and valuable behavior and data?
 - e.g. Get solutions which meet their actual needs?
- Have flexible systems which can easily evolve to meet new market opportunities?
 - e.g. Achieve true business agility?



Enterprise Architecture





PEOPLE / COMMUNITIES OF INTEREST / DOMAINS

DATA / INFORMATION







Defining Enterprise Architecture (EA)

Process-based definition*:

The process of translating business vision and strategy into effective enterprise change by creating, communicating and improving the key requirements, principles and models that describe the enterprise's future state and enable its evolution.

Artifact-based definition**:

The organizing logic for business processes and IT infrastructure reflecting the integration and standardization requirements of the company's operating model. The operating model is the desired state of business process integration and business process standardization for delivering goods and services to customers.

*Gartner

**MIT Center for Information Systems Research (CISR)



The Potential Scope of Enterprise Architecture

Your enterprise architecture program may address:

- Enterprise business architecture. Understanding the business domain and developing a business vision
- Enterprise IT architecture. Identifying the existing and desired IT technical environment (may be sub-divided into information architecture, security architecture, communications architecture, solution architecture, ...)
- **Facilities planning**. Identifying and planning for physical buildings and supporting infrastructure
- **Portfolio management**. Identifying and governing potential and existing projects and product teams
- **IT Governance**. Overseeing, guiding, and enhancing all aspects of an organizations information technology ecosystem



Common Enterprise Architecture Configurations



Common Enterprise Architecture Configurations



Common Enterprise Architecture Configurations



What do Enterprise Architects Produce?



Source: Dr Dobb's January 2010 State of the IT Union Survey



Do you have an EA program?



EA Success Factors

People Issues:

#1 Active involvement of business leaders

#2 Active involvement of IT leaders

#3 Enterprise architects are active participants on project teams

#4 Enterprise architects are trusted advisors of the business

#5 Flexible enterprise architects

Business Issues:

#6 Having a business case for EA efforts #10 Cost reduction

Process Issues:

#7 Continuous improvement/evolution of EA artifacts

#8 Architecture reviews

#9 Appropriate governance

#11 Master data management (MDM)



Source: Dr Dobb's January 2010 State of the IT Union Survey

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EA Failure Factors

Business Issues:

#1 Insufficient time provided
#3 Too difficult to measure benefits
#6 No perceived benefit of EA program
#7 No executive endorsement
#10 Insufficient funding
#12 Cancelled due to political issues
#13 EA program successful but terminated

People Issues:

#2 Project teams didn't take advantage of the EA#4 Enterprise architects perceived as "ivory tower"#8 Enterprise architects weren't sufficiently flexible#9 Enterprise architects perceived as impediment to success#11 EA perceived as not viable

Process Issues:

#5 Development teams couldn't wait for enterprise architects



Source: Dr Dobb's January 2010 State of the IT Union Survey

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Agile Enterprise Architecture







Principles and

Guidelines

Dueling Surveys

Enterprise Architects

"versus"

Agilists



Ambysoft February 2012 EA Mini Survey Agile Mini Survey

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Enterprise Architects

70% of their firms have agile projects underway

34% said their agile teams work with them well

44% thought that their agile teams addressed architecture well

47% believe their agile teams view EA positively

49% of their firms have an EA program

15% said their EA teams work with them well

18% thought that their EA teams work in an agile manner

33% believe their EA teams view agile positively



We must do better

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Agilists

Agile Enterprise Architecture: Definitions

- Process-based definition:
 - The process of collaboratively defining, sharing, and nurturing common business and technical visions and guidance within an organization to maximize long-term value.
- Artifact-based definition:
 - Sufficient models, documents, examples, and guidance describing an organization's existing and to-be states.



Create Slim Artifacts at First

- Prefer executable artifacts for IT professionals
 - Reference architectures which include working code
- Prefer simple visual diagrams for non-IT professionals
 - Don't get bogged down in details
- Your artifacts should evolve over time





Take a Multi-View Approach

Views

Code Distribution Data Storage Data Transmission Deployment Function/Logic/Services Events Hardware Network System Interface User Interface Usage

Accuracy Availability Concurrency Consumability **Customization Points** Internationalization Layering/Partitioning Maintenance Operations Quality Performance Regulations Reliability Reuse Security Serviceability Support Timeliness Usability Validation

Concerns

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Collaborate, Don't Dictate or Police





Work Closely With Stakeholders

- Few stakeholders are good at telling you want they want, and even so their requirements evolve over time anyway
 - An evolutionary (iterative and incremental) approach is critical
- The goal is to gain and then act on pertinent feedback in a timely manner
 - Short feedback cycles are critical

Potential Non-IT Stakeholders	Potential IT Stakeholders
End users	Delivery teams
End user managers	Maintenance teams
Senior business managers	Operations
The "gold owner"	Support
External regulators	Internal IT regulators
Partner organizations	Governance body



Enterprise Architecture and Disciplined Agile Delivery (DAD)

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Disciplined Agile Delivery (DAD)

Disciplined Agile Delivery (DAD) is a process decision framework

The key characteristics of DAD:

- People-first
- Goal-driven
- Hybrid agile
- Learning-oriented
- Full delivery lifecycle
- Solution focused
- Risk-value lifecycle
- Enterprise aware





Disciplined Agile Delivery (DAD) Lifecycle (Basic)





Disciplined Agile Delivery (DAD) Lifecycle (Advanced)









During Construction



Late in the Lifecycle





Governance is Built Into DAD



- Governance strategies built into DAD:
 - Risk-value lifecycle
 - Light-weight milestone reviews
 - "Standard" agile opportunities for increased visibility and to steer the team
 - Enterprise awareness
 - Robust stakeholder definition
 - Development intelligence
- These strategies make it easier for enterprise architects to collaborate with DAD teams







Why Agile Enterprise Architecture?

- Development teams can
 - Get help with key architecture decisions
 - Easily leverage existing systems, data sources, ...
 - Get mentoring in architecture skills
 - Have sensible development guidelines to follow
 - Have a tooling infrastructure that supports those guidelines
- Organizations can
 - Spend their investment in IT wisely
 - Get solutions which meet their actual needs
 - Achieve true business agility
- But only if
 - Enterprise architects work in a collaborative and light-weight manner
 - Agile teams are enterprise aware





Learn:

How ages teams work and the unique approaches they utilize

What strategies and teeling help you acale your age a practice

How a disciplined ages approach helps you deliver working solutions faster

Ten agile adoption mistakas and how to avoid there

Scott W. Ambler Matthew Holitza

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Thank You!

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