

# Agile Enterprise Architecture

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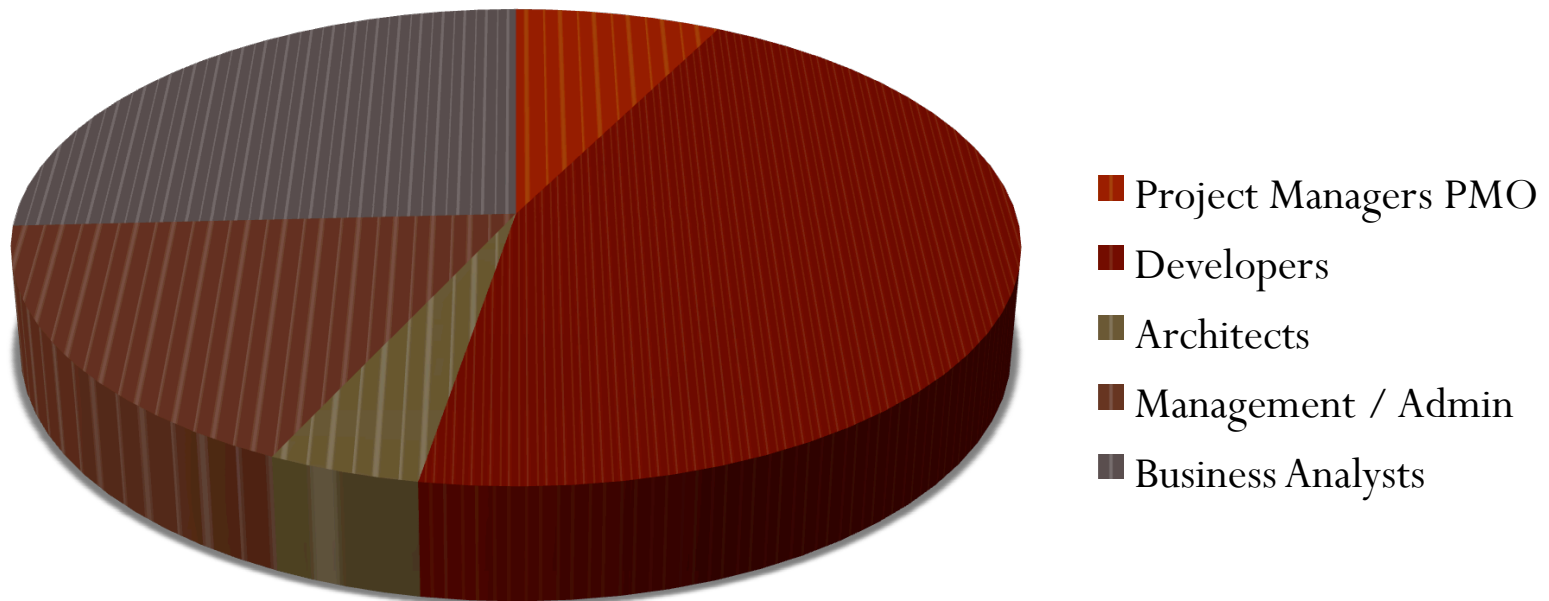
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# The Rise of Agile Architecture

- Traditional Enterprise Architecture maturing
- Demands of IT and business require agility, adaptability
- Pressures of a more complex industry require at least “some” architecture
- Some of the philosophy of Agile development leaking into architecture

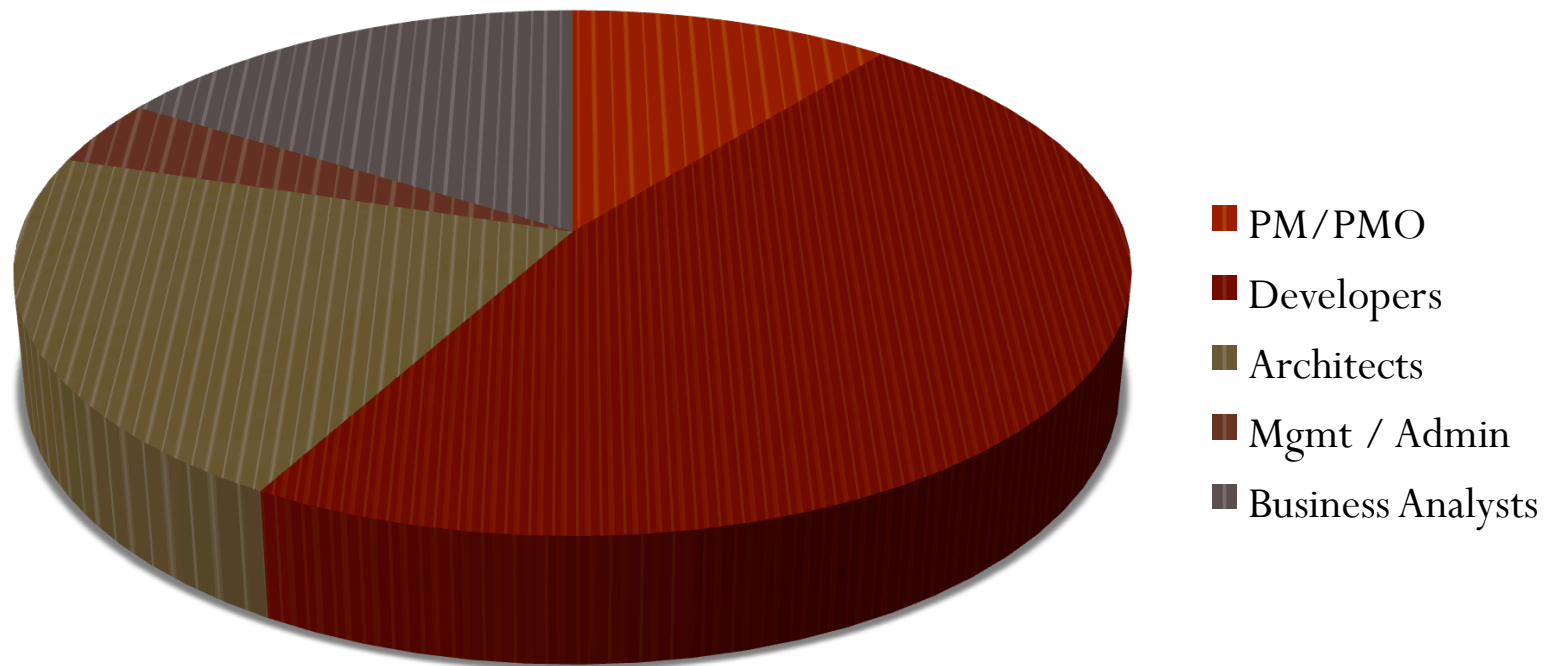
# Architecture on the Rise?

## IT Staffing - Traditional



# Architects Here

**This Room**



# Oxymoron?

- Connotations of “Enterprise”:
  - Ivory Tower
  - No tie-in with projects
  - “Big Stick” governance
- Connotations of “Agile”:
  - No concern for enterprise
  - Requirements only drive design
  - No tie-in with EA

# Ivory Tower meets XP

- Enterprise Architecture
  - Evolving to be more relevant
  - Needs to change to meet needs of dynamic iterative development
  - Needs to embrace increasing complexity
  - Needs to address demands of Agile development
  - Reaching out to development teams
- Agile development
  - Architecture needs to extend beyond project
  - End the creation of more silos
  - Speaks mainly to the interaction within a team

# Definitions of Architecture/Architect

- Different Types:
  - Application
  - Data
  - Integration
  - Security
  - Enterprise
  - Technical
  - Solutions

# Specialization vs Generalization

- Specialization brings about:
  - Ability to dive down deep
  - Ability to answer specific questions about technology
  - Potentially more silos
- Generalization brings about
  - Ability to see the big picture
  - Breaking down silos

# The End of Enterprise Architecture

- Or is it the beginning of EA?
- Gartner (unable to find source)
  - Team of specialists should be more generalists
  - All architects need to understand EA
  - All EA architects must understand Solutions Architecture
  - All architects need an understanding of all disciplines
    - Where does Application Arch leave off and Integration Arch begin
    - How can you architect the data strategy without understanding application or integration vision

# Architect as Guide

- Martin Fowler – “Who Needs an Architect”
  - <http://martinfowler.com/ieeeSoftware/whoNeedsArchitect.pdf>
- Ivory Tower Architecture is dead
- Architecture should be to facilitate, or guide the team through:
  - Sharing experienced through mentoring
  - Outlining the path ahead
  - Being a member of the team, not someone to answer to

# Scott Ambler's Contribution

- <http://www.agiledata.org/essays/enterpriseArchitecture.html>
  1. Focus on people, not technology or techniques
  2. Keep it simple
  3. Work iteratively and incrementally
  4. Roll up your sleeves
  5. Look at the whole picture
  6. Make enterprise architecture attractive to your customers

# Agile Architect

- <http://www.agilearchitect.org>
- Objectives:
  1. Deliver working solutions
  2. Maximize stakeholder value
  3. Find solutions which meet the goals of the all stakeholders
  4. Enable the next effort
  5. Manage change and complexity

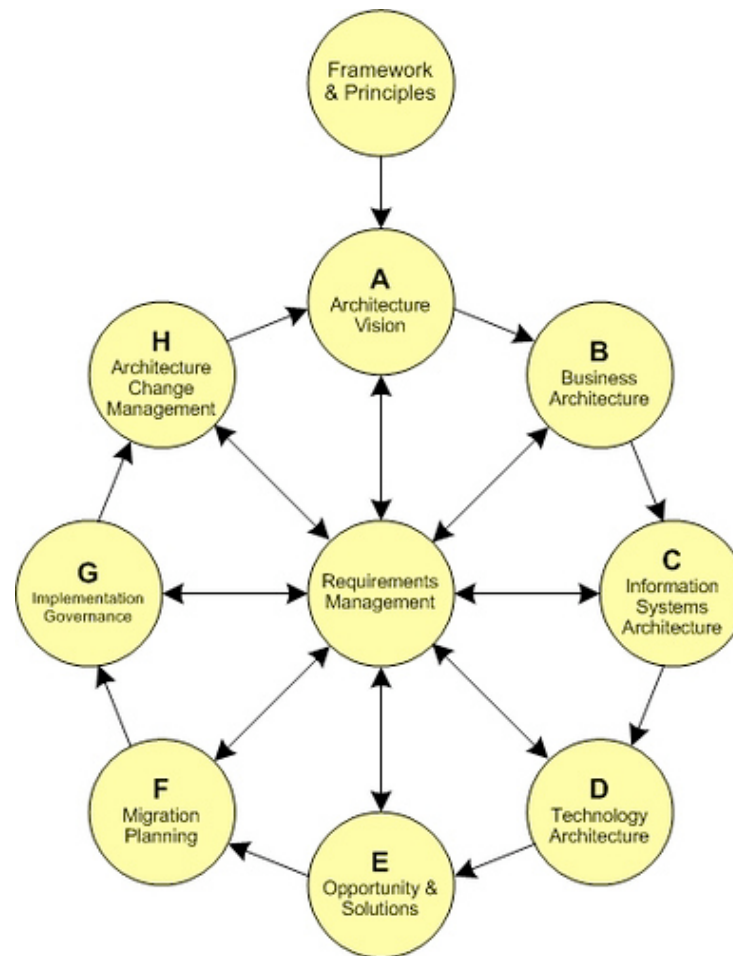
# Tension between Rigour and Flexibility

- Adhoc architecture is like XP without pair programming, no unit tests, no peer reviews
- Architecture following something like Zachman difficult to be agile – but not impossible:
  - <http://www.ddj.com/architect/184415821?cid=Ambysoft>

# TOGAF

- A Framework for EA
- Make the framework work for you, not the other way around

# TOGAF from 20,000 feet



# Architecture Vision

- If you don't know where you are going, how will you get there?
- Absolutely essential
- No room for Ivory Tower Visioning
- Principles of EA Vision:
  - Iterative
  - Collaborative
  - “Good Enough”
  - Communicated

# Iterative Visioning

- Spend short period to kick off visioning
- Each project “tests” EA vision, spurring visioning iteration

# Collaborative Architecture

- Everyone needs to participate and buy in:
  - Driven by **business** principles and drivers
  - Need to speak to **project sponsors** who fund development
  - **Developers** implement the vision, and they will be connecting the dots

# “Good Enough”

- Simple models and documentation
  - Simple UML documents
  - POW if it will work
- Don't worry about things that are not important

# Communicating the Vision

- A vision that is is not understood is worthless
- Simple diagram(s)
- Simple documentation
- Collaboration feeds communication
- Architects must sell the vision

# Governance

- There is no EA unless there is conformance to a vision
- Governance is a “stick” to be used only when necessary
- Need to balance the “stick” with the “carrot” of immediate value – need to constantly find carrots
- Typical governance is:
  - Participate in design of application
  - Review / audit of application before deployment
  - Embedded architects enforce standards at each stage

# Selling Architecture

- Focus on value to the business
- Create Roadmaps to facilitate planning
- Create federated and embedded architecture structure
- Keep it lean and agile
- Opportunistic
  - Embed any architecture exercises in projects as opportunities allow
  - stand-alone Architecture Infrastructure projects hard to sell and easy targets

# Architecture and Golf

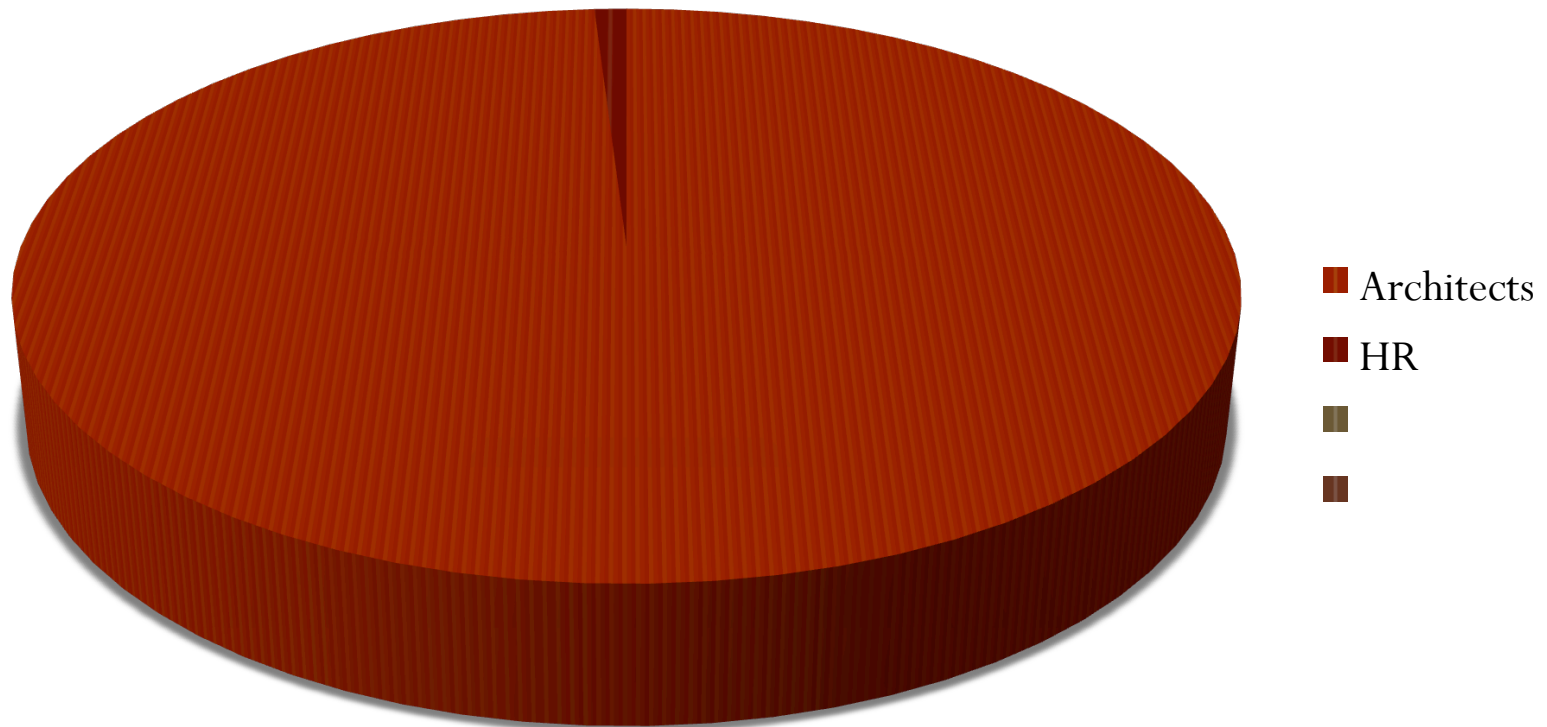
- You cannot focus on too many things at once
- With golf, I focus on keeping my head still on the tee box
- With architecture:
  - Vision
  - Roadmaps
  - People

# Agile Architecture is Everyone's Job

- Everyone needs to play a part in:
  - Adding to / challenging / evolving EA vision
  - Filling in the details on roadmaps
  - Engaging in dialogue negotiating between EA and project application architecture
  - Buying into the EA processes
  - Helping to evolve EA processes
- Processes, organizations, roles will evolve

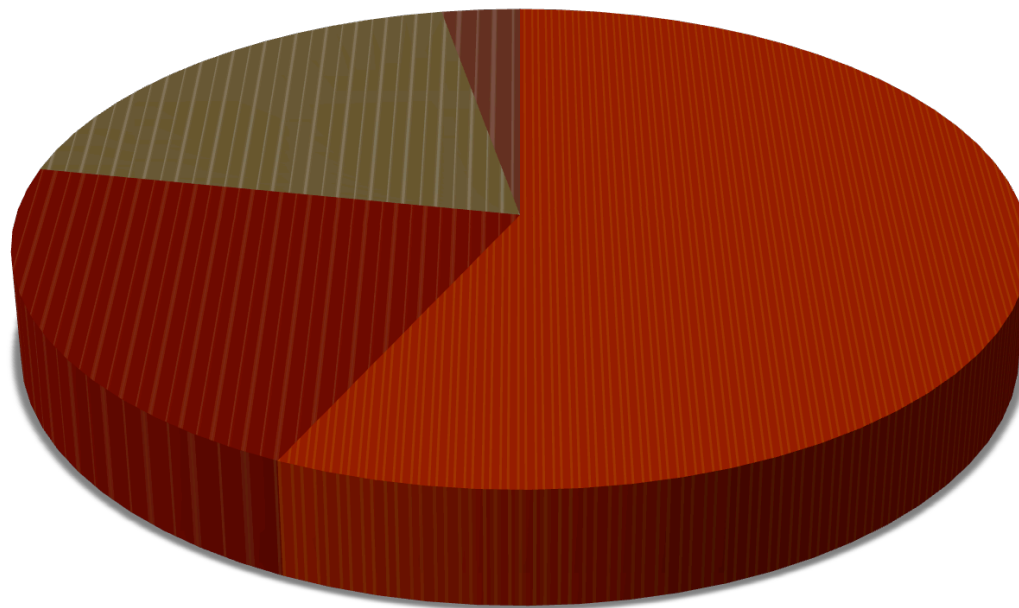
# Future of Architecture

## IT Makeup



...or maybe

## IT Makeup



- Developer / Architects
- PM / Architects
- BA / Architect
- Guide

# Summary

- Why Agile?
  - Demands of business and IT
  - Ivory Tower never worked
- Enterprise Architecture Roles
  - It's all "Enterprise"
  - Need to be generalists
- Must be of value
  - For business
  - For IT

# Questions?

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