Architecture Foundation Workshop (3 Days)

The discipline of Enterprise, Solution, and Technical architecture is fragmented in many organizations. There are varying degrees of knowledge, approaches, and capabilities in the realm of architecture. Variations exist across teams and even across practitioners within a team. Architects are left to grapple with architecture frameworks like Zachman and TOGAF, a wide variety of tools, a host of techniques and architecture work products, and no discernable way to connect these pieces together. There is no formal approach within the industry for describing or communicating the practice of modeling an organization's architecture. It is that gap in the industry that this course fills.

This course provides a balanced experience, deftly blending academic content with practical hands-on lab exercises Attendees will begin the course with an informal collection of architecture concepts, strategies, and work products, and conclude the workshop with a comprehensive approach to organizing and practicing the discipline of architecture.

Topics

- Role of the Architect
- The Meta Architecture Toolbox
- What Every Architect Must Have
- What Every Architect Must Do
- What Every Architect Must Use
- Connecting the Dots
- Populating your Toolbox
- Putting it in Action
- The Meta Architecture Maturity Model
- Next Steps

What you will learn

After completing this course, the student should be able to:

- How to think like an architect
- Explore the importance of realizing an architectural vision
- What skills, aptitudes, and capabilities are important for successful architects
- Understanding the importance of an architecture method
- Identify the use of tools and techniques to produce artifacts
- Identify the advantages of using reference models, patterns, and templates
- How to identify, organize, and utilize assets from popular architecture frameworks such as Zachman and TOGAF
- Understand the value and application of a maturity model for architecture

Audience

This course is applicable for Architects, Team Leaders, Managers of Architects, and individuals training to become architects.

Prerequisites

No formal requirements, although previous full life cycle project experience as an analyst, developer, project manager, or architect is preferable.

Course Outline

Chapter 1. The Role of the Architect

- The Architect Identity Crisis
- Exercise – "
- What's in a Name?"
- An Architect is NOT
- What is the role of the architect?
- Traditional Architects
- The Para
- llel to IT Architecture
- The Softer Side of Architecture
- Architect as a Rosetta Stone
- The Process of Creating an Architecture
- A Day in the Life of an Architect
- Recommended Practices for Architects

Chapter 2. The Meta-Architecture Toolbox

- Exercise – "The Napkin Test"
- The Mind of an Architect
- The Napkin Test
- The Meta-Architecture Toolbox
- The Toolbox
- Toolbox FAQs – 1/2
- Toolbox FAQs – 2/2
- What an Architect Must HAVE
- What an Architect Must DO
- What an Architect May Use – 1/2
- What an Architect May Use – 2/2

Chapter 3. What Every Architect Must Have

- Toolbox Overview
- Essential Knowledge
- Business-focused Domain Knowledge
- Technology-focused Domain Knowledge
- Knowledge Rule of Thumb
- Been There, Done That
- The Importance of Experience
- Essential Experience
- Experience Rule of Thumb
- Exercise – "Knowledge and Skills Inventory"
- The Importance of Aptitudes
- Core Architecture Aptitudes
- Exercise – "Aptitudes Inventory and Survey"
- "Thinking Like an Architect" Survey
- Survey Results
- Adapting to Aptitude Gaps
- Exercise – "Setting Improvement Goals – Bottom Row"

Chapter 4. What Every Architect Must Do

- Toolbox Overview
- The Importance of an Architecture Method
- Popular Methods
- Comparing & Contrasting Methods / Processes
- Exercise – "Describe your Methodology"
- The Value of Structure
- Putting a Method into Action
- Method / Process Gotchas
- Method / Process Rules of Thumb
- Exercise – "Setting Improvement Goals – Middle Row"

Chapter 5. What Every Architect May Use

- Toolbox Overview
- The Purpose of Instruments
- Don't Blame the Instruments
- When Good Instruments Go Bad
- Instrument Rules of Thumb
- Defining Terms
- Using Techniques to Create Artifacts
- Sample Techniques and Artifacts

- Techniques and Artifacts Rules of Thumb
- The Purpose of Reference Models
- Popular Reference Models
- Reference Models Rules of Thumb
- Using Patterns and Templates
- Types of Patterns and Templates
- Patterns and Templates Rules of Thumb
- Exercise – "Setting Improvement Goals – Top Row"

Chapter 6. Connecting the Dots

- Toolbox Connections
- Exercise – "Architecture Tools Scattegories"
- Revisiting Some Definitions
- Connecting Techniques to Processes
- Using Instruments to Document the Architecture
- Generating Artifacts from Reference Models
- Incorporating Patterns and Templates into the Process
- Connecting the Dots

Chapter 7. Populating Your Toolbox

- Toolbox Recap
- Cannibalizing Frameworks and Methodologies
- Dissecting the Zachman Framework
- Populating the Toolbox with Zachman Assets
- Dissecting TOGAF
- Populating the Toolbox with TOGAF Assets
- Dissecting Six Sigma
- Populating the Toolbox with Six Sigma Assets
- Dissecting PMI
- Populating the Toolbox with PMI Assets
- Collecting Tools

Chapter 8. Putting it into Action

- Using the Toolbox on a Real Project
- Developing an Approach
- Selecting Assets from the Toolbox
- Project Scenario – Background
- Project Scenario – The Approach
- Project Scenario – Using the Assets
- Project Scenario – The Results
- Exercise – "Using the Toolbox"

Chapter 9. The Meta Architecture Maturity Model

- Architecture Risks
- Introducing the Meta Architecture Maturity Model
- Level 0 – Ad Hoc
- Level 1 – Initial
- Level 2 – Repeatable
- Level 3 – Defined
- Level 4 – Managed
- Level 5 – Optimizing
- Progressing in Maturity

Appendix A. Why Architecture Matters

- Architects
- Architects and Architecture
- Group Discussion
- Enterprise Architecture Definitions (Wikipedia)
- More Enterprise Architecture Definitions
- A Rose By Any Other Name
- Enterprise, Solution, and Technical Architectures
- City Planners
- City Planning and EA
- Examples of Enterprise Architecture
- Solution Architecture
- Examples of Solution Architecture
- Solution Architecture Example: SOA for Insurance
- Technical Architecture
- Examples of Technical Architecture
- Technical Architecture Example
- Architecture Is Not Only Design

Appendix B. Strategic Architecture

- Architecture Domains
- EA Domains
- Architectural Abstraction Levels
- Each Abstraction Level Has a Unique Goal
- Conceptual Architecture Answers the 'What'
- Conceptual Architecture Example
- Logical Architecture Answers the 'How'
- Logical Architecture Example
- Physical Architecture Answers the 'With What'
- Physical Architecture Examples
- Aligning the Enterprise