Beyond the Technical: Succeed at Leading a Software Architecture Team

Maggie Carroll
So it begins . . . .
“Hello Maggie,

I attended your talk last year in London, and really appreciated your recommendations on how to take the time to deal with stakeholders. They turned out quite useful and effective for me too.”

H.D. Lead Architect (Paris, France)

Received August 16, 2019 via LinkedIn. . . 10 months after the talk in London.
Software Architecture

- Novel Technical Solution
- Tailors Sets of Processes
- Solve the Problem
Software Architecture

Novel Technical Solution

Influence

Tailored Set of Processes
“Master one unit of performance and then use that as the stepping stone to the next one.”

-James Clear, author of Atomic Habits
A Tale of Two Architecture Challenges . . . .

Renew

Integrate
A Tale of Two Architecture Challenges . . . .

- New EA Function in Org Chart
- New Web Presence
- Align Business Areas

Renew

#OREillySACon
A Tale of Two Architecture Challenges . . . .
A Tale of Two Architecture Challenges . . . .

“Integration Effort not Development Effort”
Multiple Vendor Integration
Crunch Schedule

Integrate
A Tale of Two Architecture Challenges...
Starting with the end in mind: What is the goal?

- Technology Refresh to enable business and future business
- Business Areas – Individual Goals
- Project Managers – Successful Project Execution
- IT – Successful Software Releases

Renew
Starting with the end in mind: What is the goal?

Integrate New Features, Improvements to Mission

Ensure Vendor Interfaces are Solid

Open Communication

Identify Gaps

Create review and governance systems
Starting with the end in mind: What is the goal?

Main Goal:
Technology enables the business.

Stakeholder Alignments:
Membership: The user experience guides new members to renew membership after one year and two years.
Membership: The experienced members consider our site to be their main source for knowledge products.
UIX Team: The user experience of the website feels unified with the user experience for events.
Marketing: Marketing data is available and actionable, and easy to generate new marketing materials.
Project Managers: The projects are aligned and sized to meet objectives.
IT Dev Ops: The selected software aligns with our stack, is compatible, and does not duplicate.
Starting with the end in mind: What is the goal?

Main Goal:
Integration effort, not development effort.

Stakeholder Alignments:
The platform supports key business system and external interfaces.
The key business system integrates seamlessly with the established platform.
The integration team has knowledge of compatible software versions and hardware requirements.
The test team has a detailed understanding of scope and changes.
The system operators are able to easily understand what action is necessary for health and status condition notifications.
### Sample Contact List

<table>
<thead>
<tr>
<th>Name</th>
<th>Role</th>
<th>Responsibilities</th>
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<tbody>
<tr>
<td>Bob</td>
<td>Project Manager</td>
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<tr>
<td>Charlie</td>
<td>Business owner</td>
<td>Membership goals</td>
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<tr>
<td>Alfred</td>
<td>Business Owner</td>
<td>Writer</td>
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<tr>
<td>Angela</td>
<td>UIX Designer</td>
<td>UIX Clear for Users</td>
</tr>
<tr>
<td>Elizabeth</td>
<td>UIX Designer</td>
<td>Beautiful for Users</td>
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<tr>
<td>Joan</td>
<td>IT Dev Ops</td>
<td>Ensure disaster recovery</td>
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<tr>
<td>Anna</td>
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<td>Increase membership</td>
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<td>Daniel</td>
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<tr>
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</tr>
<tr>
<td>Damien</td>
<td>Marketing</td>
<td>Easy to find Home Page/SEO Optimization</td>
</tr>
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</table>
Starting with the end in mind: What is the goal?

Main Goal: Technology enables the business
Artifacts:
- Roadmap for Projects
- Governance Specification
- Vendor Selection Rubric

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Main Goal: Integration effort, not development effort
Artifacts:
- Architecture Diagrams which clarify Interfaces
- Data flow
- Interface Specifications
- Event Traces

Integrate
## Contact List Updated

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Enterprise Architecture

A spectrum of goals, scopes, and entry points

Business Value

Cost Reduction
- Design for extensibility
- Aim for a single solution
- Minimize duplication
- Reduce complexity

Risk Reduction
- Buy vs Build
- Technology fast follower
- Security is managed at enterprise level
- Avoid single points of failure
- Identify a single system of record

Improve Business Agility
- IT Roadmaps align architecture updates to support business goals
- Analytics support business decision making
- Separation of concerns

Stakeholder Value
- UI drives customer experience
- Support 360 View
- “Try before buy”

Enabling <our company> to Turn Change into a Competitive Advantage
EA Guiding Principles

- Link Enterprise Roadmaps with Business Strategy
- Demonstrate Business Value
- Lead and Support Technology Change Enabling Business Outcomes
- Roadmaps are Incremental, Agile, Evolving
- Outcome Oriented
- Enterprise Scope: Technology, Business, People, Process, Information
Gaining Influence Starts with Ownership

Main Goal:
Technology enables the business.

Stakeholder Alignments:
Project Managers: The projects are aligned and sized to meet objectives.

Renew
Gaining Influence Starts with Ownership: contact list updated

<table>
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<td>Delivery schedule includes DR updates</td>
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Gaining Influence Starts with Ownership

Main Goal: Integration effort, not development effort.

Stakeholder Alignments: The platform supports key business system and external interfaces.
Energizing the Team – Team “Business Rhythm”

EA Team Meeting . . Weekly
Scrum Masters . . Weekly
Innovation Meetings . . Occasionally

Working Group . . Weekly
Team Tag Up. . Weekly

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Integrate
Energizing the Team – Innovation Meetings

Challenge:

Estimate

“Too hard to estimate”
“Not enough time”
“Just not good at it”

Estimation Exercise – works due to trust

Adding “T Shirt Estimation” to our process . . .
. . Without fully including the implementation team . . . leads to distrust

Writing a process and asking for review . . .
Gains no adoption

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Energizing the Team – Governance that works

Challenge:
Select vendor software

1. Response to PM request for EA
2. Meet with EA weekly
3. EA Technical Investigation
4. EA Recommendation (Templated)
5. EA “Proof Of Capability”
6. Vendor Selection Rubric (Business Analyst)
Energizing the Team – Governance that works

Challenge:

1. Identify Interfaces “not well known”
2. Create Event Trace
3. Vendor Walk through
4. Update
5. Vote to promote to baseline review board
Lather, Rinse, Repeat

Technology enables the business

Integration effort, not development effort

Renew

Integrate
Communicate with Stakeholders

- On the business rhythm
- Continually update and pitch your artifacts, articulate your value, and continually sell
- Implement useful changes, even if they don’t have acceptance yet
Please Rate This Session . . . .

Beyond the technical: Succeed at leading a software architecture team

Maggie Carroll (MAG Aerospace)
11:00–11:45 Wednesday, 6 November 2019
Location: Hall A5

Enterprise architecture
Secondary topics: Best Practice, Case Study, Overview

Who is this presentation for?
- Software architects and software architecture leaders
Let’s stay in contact:

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CarrollApproach@gmail.com
Margaretann.Carroll@magaero.com

Later today . . . Stop by and chat at Meet the Experts from 2:20 – 3:00 located next to the O'Reilly booth (in the Expo Hall, Booth #401)