DEVELOPING GREAT ARCHITECTS:
CREATING THE RIGHT ENVIRONMENT FOR GROWTH

Jean Bordelon
February 6th 2019
AGENDA

1. Introduction
2. The challenge
3. What makes a great architect
4. What we’ve tried
5. Our Results
6. The Way Forward
7. Q & A
INTRODUCTION

Jean Bordelon – Lead Architect, Bounteous

Bounteous is a Digital Solutions consulting company. We help leading companies create big-picture digital solutions by optimizing the flow of data, insights, and interactions across the digital brand experience. Our expertise includes Strategy, Experience Design, Technology, Analytics and Insight, and Marketing.
INTRODUCTION

As an organization we’ve had our share of challenges developing our Architecture Competency. Today we’re going to talk about how we have tried to foster a suitable environment for our Architects and team members looking to cultivate their Architectural skill-sets to develop professionally.
THE CHALLENGE

• Technology is hard.
  • You need Architects to solve complex challenges with technology.
• Finding great architects is hard.
  • It’s a specialized skill-set. Tough to do well.
• Becoming a great architect is hard.
  • Limited opportunities to practice or develop real-world experience.
SCORECARD: WHAT MAKES A GREAT ARCHITECT

- Technical Knowledge
- Problem Solving
- Creative Thinking
- Active Listening
- Communication Skills
- Management Skills
WHAT WE’VE TRIED?

- Book Clubs
- Roundtables
- Training Sessions
- Hackathons
- Katas
- Shadowing/Coaching
- Etc.
BOOK CLUBS

What is it?

A book club is a group of people who meet to discuss a book or books that they have read and express their opinions, likes, dislikes, etc.
# BOOK CLUBS: SCORECARD

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BOOK CLUBS: HOW WE DO IT

• Participation – Voluntary / Mandatory
  • Didn’t seem to make a huge difference

• Read all at once
  • Less overhead, more flexibility, usually a single discussion for the entire book

• Read and discuss sections at a time
  • More organization needed (scheduling can be tough), richer discussions, better for small groups

• Previous Books
  • 97 Things Every Software Architect Should Know
  • The Pragmatic Programmer
BOOK CLUBS: PROS/CONS

Pros:

• Easy to organize
• Easy to participate
• Focused content

Cons:

• Active discussions are not always natural
BOOK CLUBS: PRO-TIPS

• Facilitated group discussions seem to work best.
• Don’t get hung up if everyone doesn’t like the book. It’s a feature (not a bug)!
What is it?

An organized group discussion which can be structured or unstructured in its format and content.
## ROUNDTABLES: SCORECARD

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ROUND TABLES: HOW WE DO IT

• Monthly

• Formats
  • Architecture Review - Discuss past or current project architectures
  • Group Problem Solving - Discuss specific issues on current projects
  • Technical Topics - A team member presents a researched topic of interest
  • Case Study - Presenting project work to the group
ROUNDTABLES: PROS/CONS

Pros:

• Discuss real world issues people are facing.
• Creates an open forum within the organization.

Cons:

• It can be challenging to keep people engaged.
• Build a backlog of topics to use as standby when no current issues to discuss.
• Have a set of alternating formats for the roundtable to keep things interesting.
KATAS

What is it?

Something we picked up from Neal Ford’s website. Basically it's an activity where architects work in small groups to come up with a solution to a problem in a specified scenario.
# KATAS: SCORECARD

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KATAS: HOW WE DO IT

- Two teams
- Everyone works on the same challenge
- 1:30-2:00 activity duration
- Teams are assigned in advance
- Judging by members of Architecture competency
KATAS: PROS/CONS

Pros:
- Working "scenarios" allows team members to develop "practical" experience
- Rotating roles force participants to think critically from different view

Cons:
- Uneven participation
- Takes time/effort to organize and execute
KATAS: PRO-TIPS

- Set up the teams in advance
- Rotating panel of judges and moderators
- Distribute the scenario just before the meeting
HACKATHONS

What is it?

A hackathon (also known as a hack day, hackfest or codefest) is a design sprint-like event in which computer programmers and others involved in software development, including graphic designers, interface designers, project managers, and others, often including subject-matter-experts, collaborate intensively on software projects.

The goal of a hackathon is to create usable software or hardware with the goal of creating a functioning product by the end of the event. Hackathons tend to have a specific focus, which can include the programming language used, the operating system, an application, an API, or the subject and the demographic group of the programmers. In other cases, there is no restriction on the type of software being created.
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HACKATHONS: HOW WE DO IT

• Annually
• 2 Days (during the regular work week)
• Team members are encouraged to submit ideas and then recruit to staff their ‘projects’
• Everyone presents their results
• Awards (based around our core principles)
HACKATHONS: PROS/CONS

Pros:

• Huge opportunity for growth
• Take on meaningful challenges
• Try non-traditional project roles
• Cool things can result

Cons:

• Significant time needed to organize and execute
• Engaged community needed
HACKATHONS: PRO-TIPS

• Consistency
• Clear rules
• Get ideas out early to build teams and excitement
WHAT IS IT?

SHADOWING:

A team member observes an architect through the execution of a project.

COACHING:

A team member steps into an architect role with support/oversight from more senior architects.
### SHADOWING/COACHING: SCORECARD

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• Tried both Shadowing and Coaching and feel Coaching is much more effective
• The team member is ramped up on the project with the coach having a larger role up front and pulling back as the project becomes more underway
• The coach is usually a senior architect or higher person
• Regular 1 on 1’s are held to ensure the project is progressing and any issues can be identified and addressed before they can negatively affect the project
SHADOWING/COACHING: PROS/CONS

Pros:

• Actual project experience
• Controlled environment
• Support system

Cons:

• You need the right opportunity
• Role support
SHADOWING/COACHING: PRO-TIPS

• Take time to find the right project
• Make sure team members get the support they need
What is it?

Training Sessions are 1-3 days of structured educational activities. Often including prepared slides and other training materials.
## TRAINING SESSIONS: SCORECARD

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TRAINING SESSIONS: HOW WE DO IT

• We’ve usually done half-day or full-day training sessions
• Small groups
• Example training sessions we’ve done
  • Architecture Bootcamps
  • Effective communication for Architects
  • Common Architectural Patterns
TRAINING SESSIONS: PROS/CONS

Pros:
• Highly structured
• Specific content/focus

Cons:
• Rigid
• Larger time commitment
TRAINING SESSIONS: PRO-TIPS

Pro-tips:

• Clear agenda
• Schedule far in advance
• Make the material conversational/interactive
• Included lunches/snacks
OUR RESULTS

• Everyone is different
• No Silver Bullet
• Needs a holistic approach
• Achieving consistent engagement is tough
HOLISTIC APPROACH

Use a combination of techniques

• Unstructured
  • Provides space for creative thinking and thinking on your feet

• “Practical” Experience
  • Nothing works quite like having to do the real thing

• Focused skill building
  • Fills in those skills gaps with targeted training
THE WAY FORWARD

- Own It
- Start Small
- Get Feedback
- Iteration is your friend
### SUMMARY SCORECARD: WHAT MAKES A GREAT ARCHITECT

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THE END?

Questions, comments, complaints?
# RATE TODAY’S SESSION

**Effective enterprise architecture**

**Eben Hewitt** (Sabre)

1:15pm - 2:05pm Wednesday, February 6, 2019

**Location**: Grand Ballroom West

**Level**: Intermediate

**Secondary topics**: Architecture, Framework-focused

### Rate This Session

**Who is this presentation for?**
- Architects of all stripes, tech leads, senior developers, and managers

**Prerequisite knowledge**
- Experience as a senior developer or architect working on software projects

**What you’ll learn**
- Learn a holistic approach to architecture that explains how to bring business architecture, information architecture, data architecture, application (software) architecture together to have the best chance for your system’s success
- Explore a practical set of architecture practices to create winning technical architectural guidance
- Understand how architecture works effectively with development teams, management, and product management teams through the value chain
- Getusable templates you can start incorporating into your teams immediately

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**Session page on oreillysazon.com/ny**

**O’Reilly Events App**