

DEVELOPING GREAT ARCHITECTS: CREATING THE RIGHT ENVIRONMENT FOR GROWTH

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bounteous

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

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

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)!

ROUNDTABLES

What is it?

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

ROUNDTABLES: SCORECARD

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

ROUNDTABLES: 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.

ROUNDTABLES: PRO-TIPS

- 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

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

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.

HACKATHONS: SCORECARDS

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

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

SHADOWING/COACHING

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

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

SHADOWING/COACHING: HOW WE DO IT

- 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

TRAINING SESSIONS

What is it?

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

TRAINING SESSIONS: SCORECARD

Technical Knowledge	
Problem Solving	
Creative Thinking	
Active Listening	
Communication Skills	
Management Skills	

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

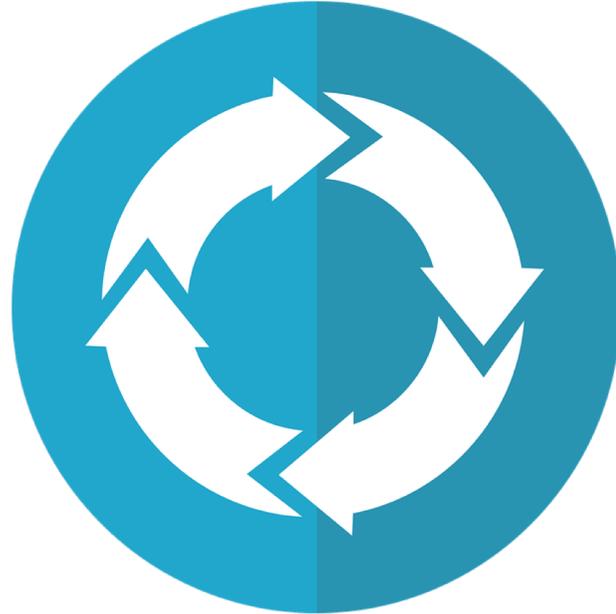
HOLISTIC APPROACH

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

	Technical Knowledge	Problem Solving	Creative Thinking	Active Listening	Communication Skills	Management Skills
Book Clubs						
Roundtables						
Training Sessions						
Hackathons						
Katas						
Shadowing/ Coaching						

THE END?

Questions, comments,
complaints?



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Effective enterprise architecture

Eben Hewitt (Sabre)
1:15pm-2:05pm Wednesday, February 6, 2019
Enterprise architecture
Location: Grand Ballroom West
Level: Intermediate
Secondary topics: Best Practice, Framework-focused

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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
- Get usable templates you can start incorporating into your teams immediately

Session page on oreil.ly/sacon/ny

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Effective enterprise architecture

1:15 PM - 2:05 PM, Wed, Feb 6, 2019

Speakers

 **Eben Hewitt**
CTO
Sabre

Grand Ballroom West

Eben Hewitt shares a holistic approach to enterprise architecture that explains how to bring business architecture, information architecture, data architecture, application architecture, and infrastructure architecture together into a comprehensive design. You'll also learn how to incorporate design thinking principles and work effectively with Agile teams.

SESSION EVALUATION

Track

50-minute session

Topic

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