

Agile Dev Better Software DevOps **WEST**

A TECHWELL EVENT

BW4

People & Teams

Wednesday, June 6th, 2018, 1:30 PM

A Case Study in Building a Culture of Continuous Improvement

Presented by:

Kevin Goldsmith

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Kevin Goldsmith

Kevin Goldsmith is the chief technical officer at Avvo, where he oversees the development and IT teams. Prior to joining Avvo, Kevin was the VP of Engineering at Spotify, the popular digital music service, where he led a team of 175 engineers, testers, and agile coaches for the company's mobile, desktop, and web platforms. He also served as a director of engineering for Adobe Systems for nearly a decade, where he built the company's first products using lean methodologies. Kevin has been building products, teams, and organizations using agile and lean methodologies since 2000. He earned degrees in applied mathematics and computer science from Carnegie Mellon University.

KEVIN GOLDSMITH, CHIEF TECHNOLOGY OFFICER

BUILDING A CULTURE OF CONTINUOUS IMPROVEMENT

CONTINUOUS IMPROVEMENT

CONTINUOUS IMPROVEMENT IS AN ONGOING EFFORT TO IMPROVE PRODUCTS, SERVICES OR PROCESSES. THESE EFFORTS CAN SEEK “INCREMENTAL” IMPROVEMENT OVER TIME OR “BREAKTHROUGH” IMPROVEMENT ALL AT ONCE.

American Society for Quality

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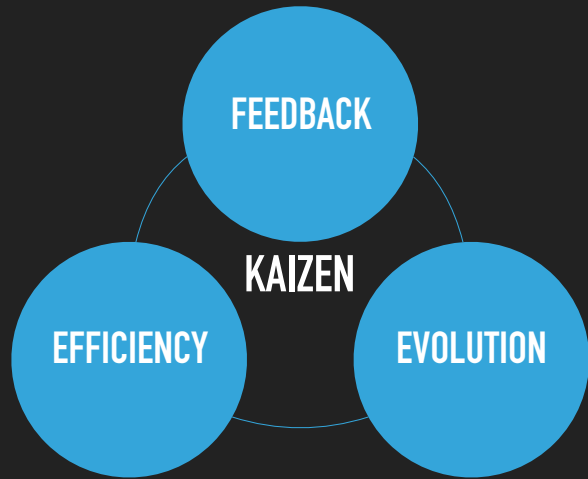
KAIZEN (改善)

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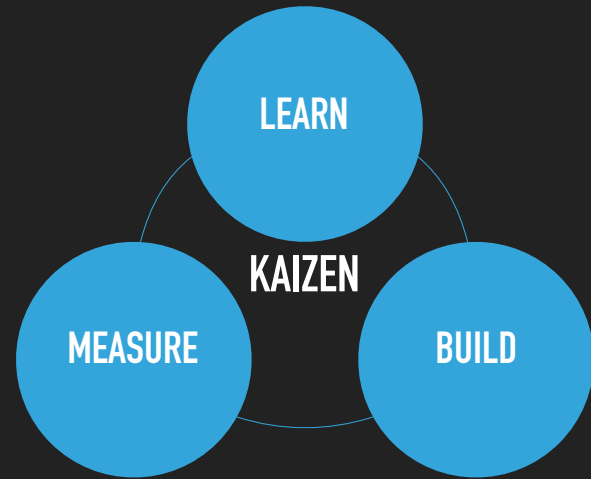
KAIZEN (改善)

"GOOD CHANGE"

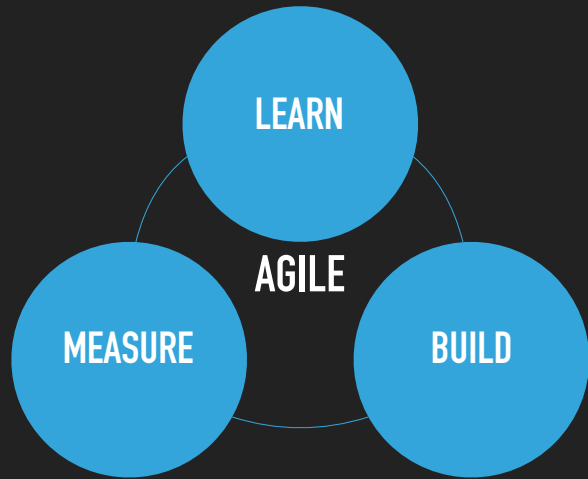
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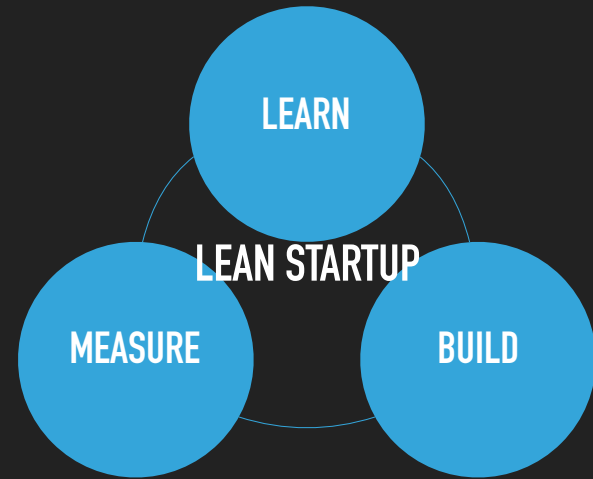
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**WHAT DOES THIS LOOK
LIKE AS CULTURE?**

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NO STATUS QUO

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NO "THAT'S HOW WE DO IT HERE"

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**CONTINUOUSLY ASKING
"CAN WE DO THIS BETTER?"**

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A DELIBERATE CULTURE

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PEOPLE OVER PROCESS

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HOW TO GET THERE?

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OUR JOURNEY AT AVVO

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CONTINUOUS IMPROVEMENT REQUIRES

- ▶ Transparency with clarity
- ▶ Objective Measurement
- ▶ Autonomy
- ▶ Team ownership of change
- ▶ Blameless team self-reflection

TRANSPARENCY WITH CLARITY
MAKE PRIORITIES CLEAR

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WIGS/SWIGS

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WIGS

- ▶ From Covey's Four Disciplines of Execution
- ▶ Wildly Important Goals
- ▶ Company-level Strategy
- ▶ Set by SLT yearly
- ▶ WIP-limited (currently 2)

SWIGS

- ▶ sub-WIGs
- ▶ Tactical cross-functional, cross-team projects
- ▶ Scoped to 1-2 Quarters
- ▶ Reviewed bi-quarterly
- ▶ WIP-limited (currently 4)

OBJECTIVE MEASUREMENT

BUILD A DATA-DRIVEN MINDSET

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DUHBS

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OBJECTIVE MEASUREMENT

DUHB(R)

- ▶ Data
- ▶ Understandings
- ▶ Hypotheses
- ▶ Bets
- ▶ (Results)

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OBJECTIVE MEASUREMENT

INFLUENCES

- ▶ Kaizen Cards
- ▶ Toyota A3 Problem-solving sheets
- ▶ Spotify DIBBs

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DUHB(R): DATA

- ▶ Incontrovertible
- ▶ Internal product or external industry data

DUHB(R): UNDERSTANDINGS

- ▶ Interpretation of the data
- ▶ Must follow from the data
- ▶ Semi-incontrovertible

DUHB(R): HYPOTHESES

- ▶ Based on the Understandings
- ▶ Strategic interpretation of how to address the situation/problem outlined by the Data and Understandings
- ▶ Debatable

DUHB(R): BETS





- ▶ Tactics to validate the strategic hypotheses
- ▶ Can be sequential or parallel
- ▶ Reasonably small scope
- ▶ Debatable

OBJECTIVE MEASUREMENT

DUHB(R): RESULTS

- ▶ Documentation of the bets and their outcome
- ▶ Used for future reference and to inform future DUHBs

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DUHB / Pages / DUHB Home / Write a DUHB   DRAFT  

Title of your DUHB

[Title/Problem Statement]

Author: Key Stakeholders: Who has a say in this decision?

Decision to be made: Do this LAST. This is just to set context for the reader, and should be worded as neutrally as possible. This is not the how (Bets) or the why (Hypotheses) of this DUHB.

DATA

Start with data, not the strategy. If you start with the strategy, you will pull data to support it. If you start with data, you will identify innovative strategies backed with facts. Include specific data points and key metrics, and be sure to add a link to the source, wherever possible. To ensure this is easy to read through, include links to images of graphs or tables and add salient points here.

UNDERSTANDINGS

Based on the above data, what are your understandings? What insights or conclusions can you extract from the data?

HYPOTHESES

Given the understandings you've gleaned from the above data, what are your hypotheses? This does not have to be 1:1. Your collection of understandings will result in a hypothesis or hypotheses. These can be positive or negative! If you hypothesize that something will or can improve, ask yourself if that is at the detriment of something else, and include it here.

BETS

What is the quickest way to begin to test the above hypothesis or hypotheses? What experiment can we run today to minimize risk/learn more? You must include an impact here, for example: by doing X, we expect Y impact, by [whom]. Make sure to highlight any staffing and resource requirements for each Bet. For example, who will be pulling and tracking the results of the Bet(s)?

RESULTS

Once you have executed on the Bet(s) above, add the results here. If this leads to additional DUHB documents, include a link to those as well.

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Avvo Product Engineering Operations Board (Physical)

Nic Tucker
Last modified Jan 04, 2016

Title/Problem Statement:	Increasing alignment on strategic goals and building a shared understanding about the opportunities and work-in-progress across Avvo.
Author:	Nic Tucker
Key Stakeholders:	Mark, Jason, Kevin, Sachin,
Decision to be made:	Should SLT and PIE management set aside 30 minutes every 2 weeks to talk about the work in progress using a physical board to facilitate the conversation.

DATA

- Anecdotal data:
 - Expectations of what is to be delivered by the teams is incongruent with reality.
 - Projects taking longer than expected
 - Disinterest in the work being done, or lack of understanding of how work relates to company mission
 - Disagreement on the priority of work being done
 - Comments from CEO about there being a lack of urgency
 - Difficult to trace the day to day work back up to company strategy, goals, or vision.
 - Teams have no sprint goals
 - Team report lower levels of satisfaction with Goals and Strategies, Alignment, and Decision Making
 - Lots of work in progress, less work getting completed.

UNDERSTANDINGS

There are a number of potential causes for each of the item listed, these are my understanding based on my experience.

- Expectations of what is to be delivered by the teams is incongruent with reality.
 - This is a symptom of a communication break down, where as new information was identified but not shared with other people who felt they needed to know.
- Projects taking longer than expected
 - This can be a symptom of not understanding the work, or simply a misunderstanding of what was expected.
- Disinterest in the work being done, or lack of understanding of how work relates to company mission.
 - This can be a symptom of not seeing / understanding how the work aligns to the purpose and goals of the company.
- Disagreement on the priority of work being done.
 - This can be a symptom of people holding different ideas of how to deliver solutions, or it can be that there isn't agreement that the strategic goal is the correct one.
- Comments from CEO about there being a lack of urgency
 - This could be a symptom of a lack of transparency, or a lack of understanding in what is important to the company.
- Difficult to trace the day to day work back up to company strategy, goals, or vision.
 - This is a symptom of not having enough transparency due to a multitude of different document systems, and not enough shared storytelling.
- Sprint goals are lacking, or are not goals that help the team focus.
 - This is a symptom of having multiple priorities and giving each it's own land. This is also difficult if you aren't

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AUTONOMY
GIVE TEAMS ABILITY TO OWN THEIR
IMPROVEMENTS

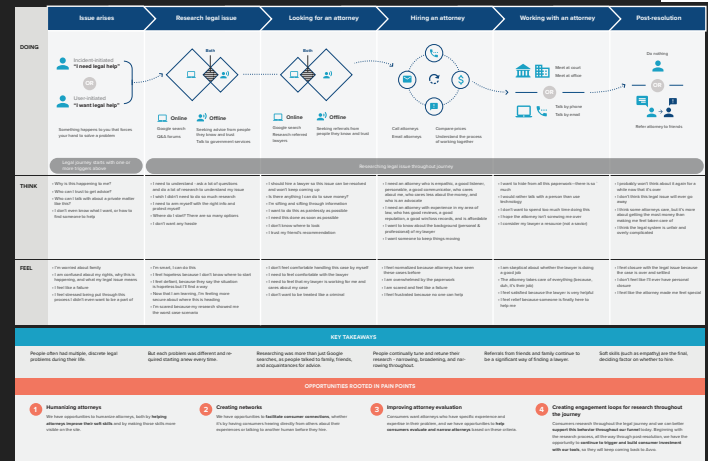
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JOURNEY TEAMS

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Hire an Attorney Journey

Avvo



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AUTONOMY

JOURNEY TEAMS

- ▶ Focused on an external (or internal) customer journey
- ▶ Fully cross-functional, autonomous organization
- ▶ Can drive reasonably large efforts independently

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AUTONOMY

JOURNEY TEAMS

- ▶ Accountable to unique business metrics
- ▶ Primary unit of organizational execution

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AUTONOMY

JOURNEY TEAMS GOALS

- ▶ Minimize execution bottlenecks
- ▶ Minimize coordination bottlenecks
- ▶ Minimize decision-making bottlenecks
- ▶ Maximize execution velocity

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TEAM OWNERSHIP OF CHANGE
IMPROVEMENT IS EVERYONE'S RESPONSIBILITY

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RFC PROCESS

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TEAM OWNERSHIP OF CHANGE

ORGANIZATIONAL CHANGE VIA RFC

- ▶ Someone in the organization identifies an issue
- ▶ That person creates a DUHB outlining the problem and proposed bets to mitigate
- ▶ The organization leadership team approves the DUHB
- ▶ A cross-functional working group is assembled
- ▶ The working group puts together a document outlining mitigation of organizational issue

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ORGANIZATIONAL CHANGE VIA RFC

- ▶ The working group presents the plan and document to the larger organization as an RFC
- ▶ People from the organization add comments / questions / request for clarifications to the document
- ▶ The working group iterates on the document and repeats with the larger organization until reasonable consensus around plan is reached

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EDW Naming Standards RFC

File Edit View Insert Format Tools Add-ons Help Last edit was 5 days ago

Docx Home

For Tables Names:

Database Name	Purpose	Naming Standards	Sample Name
srcmgd	Snapshot of yesterday's data	<source table name>_yesterday	ad_inventory_yesterday
	Sqoop tables from the source	<source table name>_sqoop	ad_inventory_sqoop
	Snapshot of Today's data	<source table name>	ad_inventory
src	Delta data from the source table	hist_<source name>_<object name>	hist_rnt_ad_inventory
	Current version of Source data	<source name>_<object name>	rnt_ad_inventory
stg	Monthly snapshot for Fact tables. This data is only used for resetting back the fact tables in case of data corruption or data loss. (this need to be changed to stg_ instead of hist_)	hist_<fact table name>	hist_order_line_ad_market_fact
	Preprocessing/temp tables	temp_<table name>	

Steve Fosco 10:17 AM
What is the reason "hist" be a prefix as "yesterday" be sufficient towards keeping it unless there is something I want something in

Sarbandu 10:27 AM
there is no specific have the consistency its only the way he tables. I would prefer to d way it will be sorted out

Reply...

Steve 9:26 AM
These stand always stick processing jobs working believe we r daily jobs we

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TEAM OWNERSHIP OF CHANGE

ORGANIZATIONAL CHANGE VIA RFC

- ▶ Working group owns rollout of change
- ▶ Long-term support for the change is part of the RFC

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BLAMELESS ORGANIZATIONAL SELF-REFLECTION

YOU CAN'T IMPROVE WHAT YOU DON'T EXAMINE

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RETROSPECTIVES EVERYWHERE

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BLAMELESS ORGANIZATIONAL SELF-REFLECTION

RETROSPECTIVES EVERYWHERE

- ▶ Building a practice of having retrospectives beyond the agile ceremony cycle and focus.

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TEXT

“WHEN IS THE RETROSPECTIVE?”

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BLAMELESS ORGANIZATIONAL SELF-REFLECTION

ASK

- ▶ What went well?
- ▶ What didn't go well?
- ▶ What will we do again?
- ▶ What will we do differently?
- ▶ What concrete actions will we take from this for future projects?

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ASK

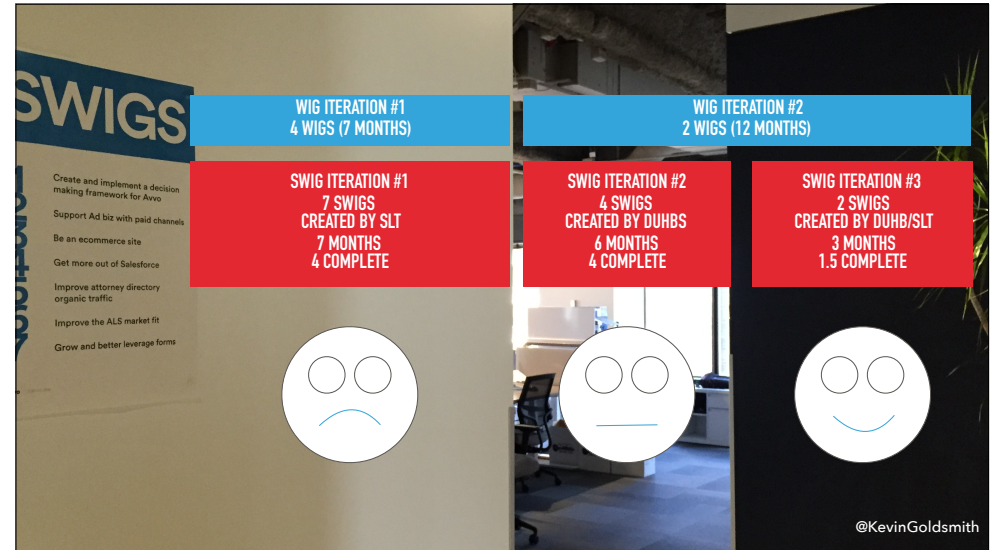
- ▶ What went well?
- ▶ What didn't go well?
- ▶ What will we do again?
- ▶ What will we do differently?
- ▶ **What concrete actions will we take from this for future projects?**

COLLECT THE LESSONS

- ▶ Central repository for retrospective notes. Make it easy to find the lessons.

SO, HOW DID IT REALLY WORK?

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Labelled content - Confluence x Avvo

Secure https://avvo.grafati.com/wiki/fabe/duhb

Apps PaperCal.io Dashboard | Lanrd Cuts for particiba... CTO - Technology O... Optimizely Budget T... Kevin Personal Kern...

Labelled content

This list shows content tagged with the following label: [duhb](#)

To add a label to the list of required labels, choose "+ labelname" from Related Labels.

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 - Feb 08, 2018 • Ashley Rafter
 - [duhb](#)
- Kubernetes (Infrastructure)
 - Feb 07, 2018 • Kyle Leaders
 - [duhb](#)
- SKU Consolidation DUHB (Attorney Journey)
 - Jan 29, 2018 • Cole Laine
 - [duhb](#) [a](#)
- Top Result Sponsored Listing - DUHB - (WIP) (Attorney Journey)
 - Jan 24, 2018 • Shemar Nwabueze
 - [duhb](#)
- Our frontend architecture is complicated and fragmented (DUHB)
 - Dec 20, 2017 • Wade Ogundipe
 - [duhb](#)
- Avvo Product Engineering Operations Board (Physical) (DUHB)
 - Nov 16, 2017 • Aid Turner
 - [duhb](#) [agile_process](#)
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 - Oct 18, 2017 • Victor Michalek
 - [duhb](#)
- hackathon success => More senior devs & more (DUHB)
 - Oct 05, 2017 • Wade Ogundipe
 - [duhb](#)

Prev 1 2 3 4 5 6 7 ... 17 Next

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Avvo Product and Data Teams RFC

kgoldsmith@avvo.com

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Comments Share

100% Heading 1 Arial 15 B I U A

Avvo

Request For Comment: Proposed Standard - Avvo Product and Data Teams Definition

Working Group: Brandon Sislow, Travis Shumaker, Sandra Bilbrey, Joni Vanderburg-Paner, Michael Garvais, Ian Witucki, Tim Ahlers

Contact: Ian Witucki
Last Updated: 12/14/2016

Contents

- [Introduction / Current Approach](#)
- [Proposal](#)
- [Scrum and Journey Teams - Definition](#)
- [Scrum Creation](#)

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Journey Teams 2017 Retrospective

 **Ian Witucki**
Last modified Feb 14, 2018

Notes, pics, and action items from the Retrospective are below. Active improvements will be tracked here as well. Please follow up with iwitucki@avvo.com if you have questions.



Kickoff

Agenda:

1. Kickoff (10 min)
2. 1-2-4-All Exercise (45 min)
3. 5-min Break
4. Breakout Sessions and sharing with the larger group (45 min)

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June 2016

WIGS/SWIGS

September 2016

DUHBS

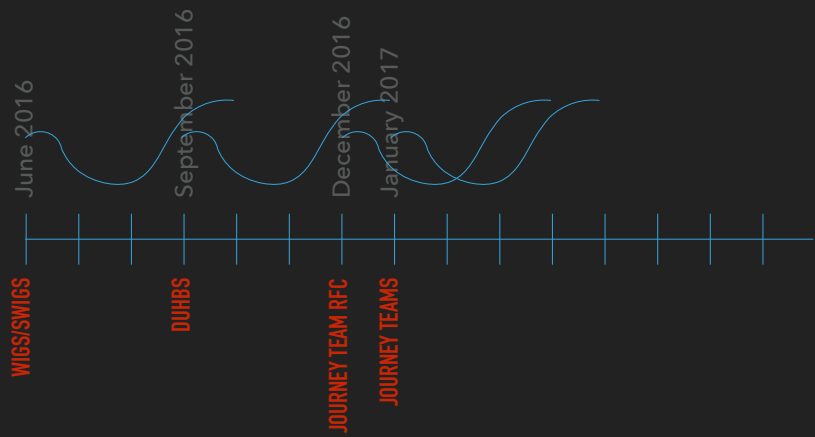
December 2016

JOURNEY TEAM RFC

January 2017

JOURNEY TEAMS

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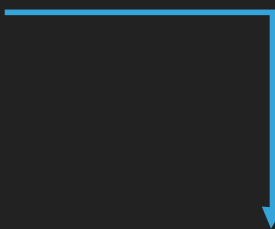
WITH

- ▶ Clear priorities
- ▶ Metrics-driven, autonomous, teams
- ▶ Data-driven decision making
- ▶ Organizational ownership of organizational change
- ▶ A practice of retrospectives
- ▶ An archive of lessons

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QUESTIONS?



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I WOULD LOVE YOUR FEEDBACK!

[HTTP://BIT.LY/AVVOCULTURE](http://bit.ly/avvoculture)

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