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OPEN SOURCE NORTH

## DRAMA-FREE DECISIONS IN SOFTWARE DEVELOPMENT TEAMS

- To be honest, I'm not in love with the title of this session.
- Disconnects between the perception of software development and reality of it
  - don't think of software development as having drama, but it's there
    - Perception
      - analytical
      - binary
      - test-for-the-right-result and you're done
    - Reality
      - roller coaster ride of emotions
      - incredible amounts of passion
- we spend way more time collaborating than a lot of people think
  - collaborations around decisions are what I'll be focusing on
  - trigger for drama in a lot of teams
    - right and wrong options are rarely apparent at first glance
    - deciding between two imperfect options
    - lots of flavors of decisions teams make
      - how to design a technical solution
      - how appropriate test coverage for a piece of work
      - how to estimate work
      - how to organize a sprint/iteration board on a wall or in Jira, etc.
  - the decisions are under the control of the team
  - can't do as much with drama around release dates shifting, disconnects with other departments
    - want to focus on something we can all impact
- This topic is important to me because
  - As an engineer and architect, I've seen how removing drama from decisions can improve a team's performance and happiness level
  - It's now the focus of my job.
  - As a manager at Jamf, I support teams. One of the most consistent needs for support I've encountered is helping teams make decisions.
  - To be clear, I'm not making the decisions a manager. I'm enabling them to make the best decision they can.

## DRAMA

SOFTWARE DEVELOPMENT

VS

HIGH SCHOOL

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- true story that helped me better understand the drama in software development and how I could help minimize it
- long, arduous process on defining the schema in a project
  - really frustrating for the team
    - lots of time wasted
    - not being heard
    - not moving forward
- wanted to talk through it with spouse
  - first asked her how her day went
  - spouse told me about her rough day at work as a high school counselor
    - ambulance ride in morning
    - police car ride in afternoon
  - that's on top of the normal day to day
  - I tried to explain my drama but failed to
  - forced me to rethink my perspective
- Moral of this story is not that software development isn't altruistic enough
- Point by point comparison
  - how we're trained
    - high school counselor
      - went to school for counseling - curriculum included strategies, expectations, etc.
    - software engineer
      - One class with "group project"
  - support systems in place
    - high school counselor
      - workers to do targeted, heavily lifting with issues at home
      - therapists for mental health counseling
      - dean for discipline
      - special education professionals for those who need it
    - software engineer
      - manager
      - scrum master / iteration manager
      - HR
  - objective of job
    - high school counselor
      - help those she can
      - work with others for specialized, harder cases
    - software engineers
      - deliver the work
      - you want to blame failure on drama?
- All that helps explain why this goes bad so often
- software engineers are not trained for drama, our support systems are imperfect, and our objectives are different

## DECISIONS



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- That's why we want to focus on decision making
  - often the event that triggers the drama
  - software teams control their decisions - why do we inflict this pain?
  - external vs internal triggers for drama
    - high school counselor
      - home/family life
      - drugs, mental health, etc.
    - software engineers
      - outside of deadlines and customer constraints, it's us
- decisions for development teams are about practical things
- when drama is introduced, reducing the drama becomes the primary goal
- compromise in these situations is often about feelings, not the practical details
- drama can and should be addressed, just as its own thing
- Not advocating that we ignore or avoid drama
  - drama can be good
  - should attack it head on
  - no need to take it on unnecessarily

## BETTER DECISIONS WITHOUT DRAMA

- ▶ Simple improvements to team decision making
- ▶ Make different decisions
- ▶ Pro tools
- ▶ People params (and how to factor them in)

# SIMPLE IMPROVEMENTS

TO TEAM DECISION MAKING

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problem is the default approach to decisions, just getting everyone together

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## SIMPLE IMPROVEMENTS

- ▶ Admit it (team is making a decision)

- clearly identify and acknowledge that the goal of the team is to make a decision
- designing a solution is different than asking “should we go with this solution?”
- RED BUTTON ISSUE EXAMPLE

## SIMPLE IMPROVEMENTS

- ▶ Separate brainstorming and deciding

- break brainstorming and identifying options away from decision making
  - clearly distinguished
  - can ideate and decide in same meeting, but why?

## SIMPLE IMPROVEMENTS

- ▶ Get ideas down on paper (early and often)

- whatever the input is for the decision, document it so people can absorb offline
- allows new people joining to catch up
- allows people how drop off and rejoin (because of time off, getting pulled away, etc.) to get back



## SIMPLE IMPROVEMENTS

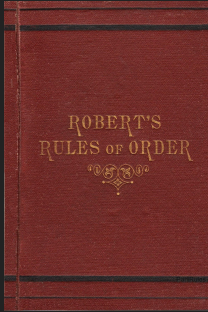
- ▶ Confirm criteria

- House hunting

## SIMPLE IMPROVEMENTS

- ▶ WRITE DOWN THE DECISION

## DOCUMENT THE DECISION



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- Robert's Rules of Order
- most widely used manual of parliamentary procedure in the United States
- first published in 1876
- It governs the meetings of a diverse range of organizations
  - church groups
  - county commissions
  - homeowners associations
  - nonprofit associations
  - professional societies
  - school boards
  - trade unions

## SIMPLE IMPROVEMENTS

- Admit it (team is making a decision)
- Separate brainstorming and deciding
- Get ideas on paper (early and often)
- Confirm criteria
- WRITE DOWN THE DECISION

**MAKE DIFFERENT  
DECISIONS**

## MAKE DIFFERENT DECISIONS

▶ small > big

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- don't think you're making a decision to solve all the world's problems
- example: big service vs. bunch of mini service
  - ended up needing either of them
  - don't try to accommodate hypothetical futures

## MAKE DIFFERENT DECISIONS

- ▶ less better than more

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Example: team only implementing slice of large POC that covered lots of new cloud technologies

## MAKE DIFFERENT DECISIONS

► kick the can

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- As a team, if your in the rut of drama, ask yourselves if there are any timing constraints.
- If there aren't or they allow for it, break for a while.
- Break for a while with the clear message: THINK ABOUT HOW WE CAN GET THROUGH THIS DECISION. NOT WHAT THE RIGHT ANSWER IS, BUT HOW DO WE AVOID THIS DRAMA ON THE JOURNEY THERE.



## MAKE DIFFERENT DECISIONS

▶ data decisions

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Decide on what data you need:

- Essentially deferring the decision, but deciding on what data is going to make that decision for you.
  - APM tools, such as AppDynamics
- Experiments
  - Testing team members on delivery teams

## MAKE DIFFERENT DECISIONS

- ▶ small > big
- ▶ less better than more
- ▶ kick the can
- ▶ data decisions

Bob Martin's architecture philosophy:

- good architecture is one that allows major decisions to be deferred
- secondly that a good architecture maximizes the number of decisions not made

# PRO TOOLS

## PRO TOOLS

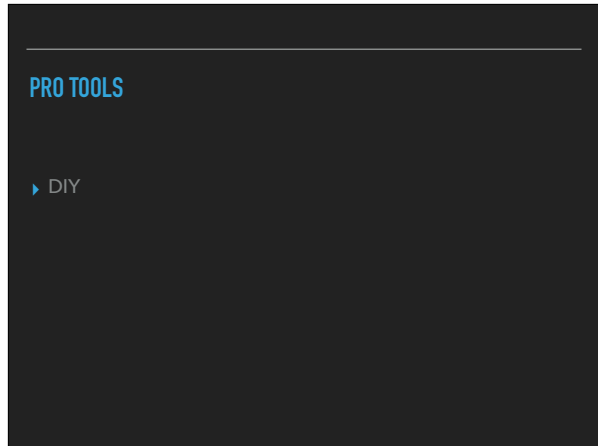
- ▶ Pugh matrix

## PUGH MATRIX

Criteria	Weight	Existing Implementation (Baseline)		Single-page Concept (HTML5+AngularJS)		Refactored JSP Concept	
		Score	Result	Score	Result	Score	Result
Voice of User							
Responsive Design (phone/desktop)	High	Same	0	Better	3	Same	0
Responsiveness	Critical	Same	0	Better	4	Same	0
Enhance User Productivity	Medium	Same	0	Same	0	Same	0
Competitive User Experience	Critical	Same	0	Better	4	Same	0
Personalizable Experience	Medium	Same	0	Same	0	Same	0
Simple Installation	Critical	Same	0	Same	0	Same	0
Responsive Design (phone/desktop)	High	Same	0	Better	3	Same	0
Voice of Business							
Customization	Medium	Same	0	Better	2	Better	2
Allow Specialized UI Component Design	Critical	Same	0	Better	4	Better	4

- ranking off of a baseline
- is each criteria better, worse, or the same than the baseline?

- Drama Free Decisions - Martin Hertz - OSN 2018.key - July 9, 2018



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Weighting factors on spreadsheet at GATX. (Couldn't find actual document.)

## PRO TOOLS

### ► The great debate

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Idea from *Radical Candor* by Kim Scott

- Talks about collision and tension between debaters and deciders
- Schedule debate times with no decision to be made
- Output
  - clear summary of the facts and issues that emerge
  - clearer definition of the choices
  - recommendation to keep debating or move on
- Unique to this solution:
  - Ask participants to switch roles halfway through each debate
    - ensures people are listening to each other
    - keeps focus on coming up with the best answer
    - people let go of egos / positions
- Side note: author wants to promote a culture of debate
  - lots of small debates for small corrections
  - big corrections create catastrophe



## PRO TOOLS

► Lock in

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- Literally lock people in a room until decision is made
- Counter intuitive when compared to the “kick the can” advice earlier
- Benefits
  - focus on issue
  - pain in dragging it out
  - forced engagement
- GATX quick-starts
  - stakeholders/SMEs colocated to map out high level project decisions

## PRO TOOLS

- ▶ Pugh matrix
- ▶ DIY
- ▶ The big debate
- ▶ Lock in

# PEOPLE PARAMS

(AND HOW TO FACTOR THEM IN)

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not learn how to be a team player, but practically understand how different people and approaches play into the process

## PEOPLE PARAMS

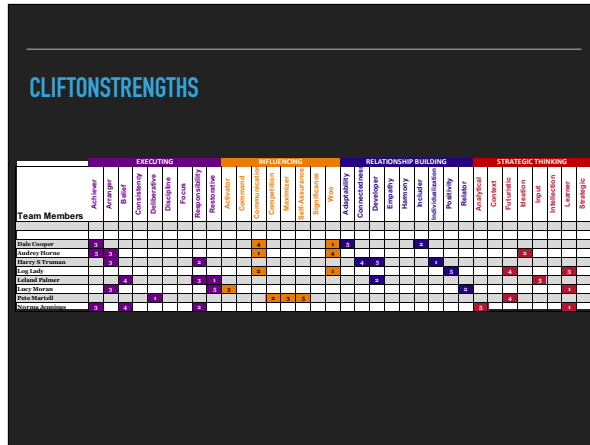
### ► CliftonStrengths

## Clifton StrengthsFinder

### Attribution/Notes:

- CliftonStrengths is the tool formerly known as StrengthsFinder. Both tools are the property of Gallup: <https://www.gallupstrengthscenter.com>.
- The document in this presentation is a “scrubbed” version of a report provided by a certified Strengths coach. We are lucky enough to have an agile coach at Jamf who is certified in Strengths. This spreadsheet is a tool that should only be used in conjunction with a full CliftonStrengths assessment by a certified professional.

Talk through examples of individuals and teams I've worked with and how attributes impacted decision making.



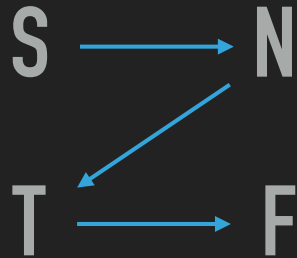
## PEOPLE PARAMS

### ► Myers Briggs - Zig Zag

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- Typically thought of as helping individuals
  - learning about each other helps
  - I'm a ISTJ
    - Introvert
    - Sensing
    - Thinking
    - Judging
- Example of sensing vs. intuition
  - Colleague and I with mapping technical and feature aspects of product

## MYERS BRIGGS - ZIG ZAG



- Decision model good for teams
  - Both as process to follow and to identify where people's strengths are in decision making
- Sensing
  - List all the facts about the situation and get more data if needed
  - Make sure the facts are all clear and relevant to the decision at hand.
- Intuition
  - After considering the facts, this is the time to brainstorm solutions, and no idea is too wild.
  - You can jot down ideas that could lead to a decision, considering multiple possibilities.
- Thinking
  - analyze what you've got
  - consider the consequences of the different solutions available, and identify which ones are realistic
  - Considering the decision dispassionately, as if you aren't involved, can sometimes help.
- Feeling
  - Consider the possible effects the decision on people.
  - What do you think others' reactions will be?
  - Can you live with those reactions? Talk about how teams work through decisions
- Understand which phase of decision process people are likely to shine or get frustrated in
  - Make sure there's space for each of these
- Benefits of these people tools
  - These can be guides to direct how process should be formed
  - Different teams with different types of people likely benefit from different decision mechanisms
- Resistance
  - I've faced a number of situations where individuals are scared of these processes. Feels like they are exposing themselves. This can be a violation of their privacy.
  - I can empathize with this.
    - I took the Myers Briggs test when I was in my early 20's
    - Felt like I was being pigeonholed
    - I wanted to be everything to everyone
    - Mostly, this had to do with being single
    - Also thought I could do anything
    - Took it again almost 20 years later
    - was like a warm blanket
    - doesn't mean I'm perfect
    - have a much better understanding of who I am
    - strengths and weaknesses

## PEOPLE PARAMS

▶ You



## PEOPLE PARAMS

▶ You

▶ Always, always be respectful

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decisions are about ideas fighting, not people

easy to miss

- example: technical lead repeatedly insisting we needed a “good” database schema

## PEOPLE PARAMS

▶ You

▶ be wrong

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be willing to be wrong

- don't encourage your own overconfidence or fear in others

## PEOPLE PARAMS

▶ You

▶ change your mind

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be willing to change your mind

## PEOPLE PARAMS

▶ You

▶ avoid emotional appeals

avoid emotional appeals

- Engineer saying we have to take on security work because we don't want to work for a company that doesn't do that
- Lots of other good reasons to do the work
- Not going to convince others who don't understand the emotion behind appeal

## PEOPLE PARAMS

- ▶ CliftonStrengths
- ▶ Myers Briggs - Zig Zag
- ▶ You
  - ▶ Always, always be respectful
  - ▶ be wrong
  - ▶ change your mind
  - ▶ avoid emotional appeals

## BETTER DECISIONS WITHOUT DRAMA

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**THANK YOU!**