

# DevOps for Defense

April 2019

Scaling Agile

JD Black



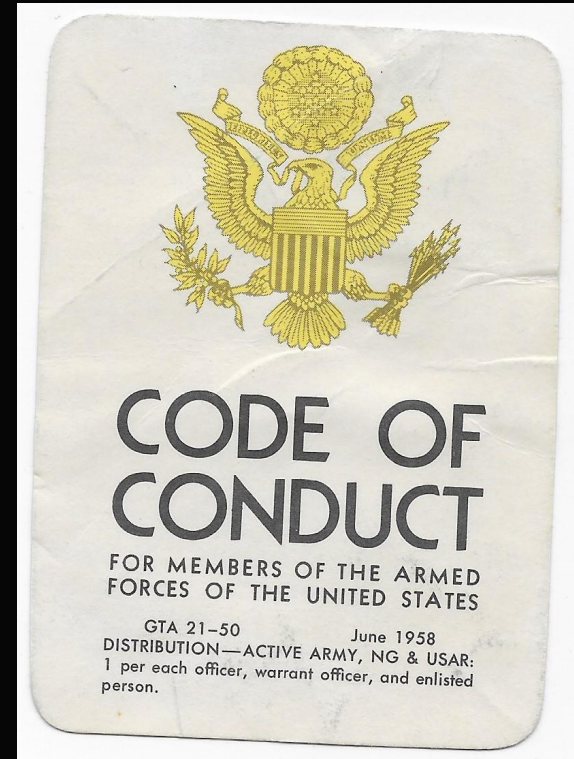
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<https://github.com/jondavid-black/DevOpsForDefense>  
[devopsfordefense@gmail.com](mailto:devopsfordefense@gmail.com)  
<https://twitter.com/devops4defense>

# DevOps for Defense Meetup: Code of Conduct

- UNCLASSIFIED ONLY!!!!
- Treat each other with respect and professionalism.
- Do not talk about private, sensitive, or proprietary work.
- Do talk about your experiences, needs, desires to improve work in our domain.
- Do share your thoughts.
- Do learn from others.
- Do respect & tip your bartenders!



# Be Heard!

What would you like to do in future months?

Presentations:

- Write a topic on a card & add it to the table in the Presentation area.
- If you'd like to volunteer to present the topic, add "Volunteer: **[YOUR NAME]**".

Books:

- Write the title & author on a card & add it to the table in the Book Club area.

Activities:

- Write a short name & description of the activity on a card & add it to the table in the Activity area.



**Please be an Active Part of our Meetup Success!**

# Announcement!

## DevOpsDays Nashville 2019

### Music City Center

### May 9-10th, 2019



From startups to banking and publishing, Nashville is home to a very large and awesome tech community. We're proud to bring back DevOpsDays Nashville for the third year at the Music City Center in 2019! DevOpsDays Nashville will bring 325+ development, operations, security, and management professionals together to discuss the culture, processes, and tools to enable better organizations and innovative products.

Tickets are on sale now for \$179.50 USD.



# Announcement!

<https://werockitconf.com/>

A premier event. WeRockIT Conf is an annual two-day conference that features all disciplines of technology and shows how they all can interconnect. We'll highlight a wide range of speakers to educate and inspire our guests. Our mission is to showcase and grow diverse voices in technology. This conference is being organized by a group of passionate developers who are dedicated to enriching the Huntsville, AL tech community. WeRockIT Conf will include a mix of panel discussions, keynotes, speakers, and hands-on workshops.

## WeRockIT Conf 2019

Developers Conference

Cloud Computing | Big Data | Web Development | Cybersecurity | Embedded Systems

May 3-4, 2019

Huntsville, AL

# Scaling Agile

How do you scale something built around small teams?  
How do others in industry scale?



# What do the Consultants Say?

“Use my framework!”

SAFe - [www.scaledagile.com](http://www.scaledagile.com)

- Release Trains
- Iteration Planning

Scrum Inc - [www.scruminc.com](http://www.scruminc.com)

- Scrum-of-Scrums



**Frameworks are Good - Ideas Tailored to Context are Better**

# Scaling is Hard...

Everyone who has worked in a company that is command-and-control, bureaucratic, or hierarchical for more than a few years agrees: the way we're working isn't working.

From military generals like Stanley McChrystal to reformed corporate heroes like Red Hat CEO Jim Whitehurst, the call for change is clear: our organizations need to be more open, fluid, adaptive, decentralized, and empowering.

<https://medium.com/the-ready/how-to-choose-a-model-of-self-organization-that-works-for-you-c093b5305712>

## Don't scale Agile...descale your organization.

- Henrik Kniberg, Spotify

<https://youtu.be/jyZEikKWhAU>



# 2017 State of DevOps Report - Loosely Coupled Architecture

## Tight Coupling:

- Connections are strong; Parts of the system, people, and work are *directly dependent* on one another, A change in one area *necessarily results in a change* in another, *Influence is immediate*, constant, & significant

Tightly coupled systems work great (when everything is working).

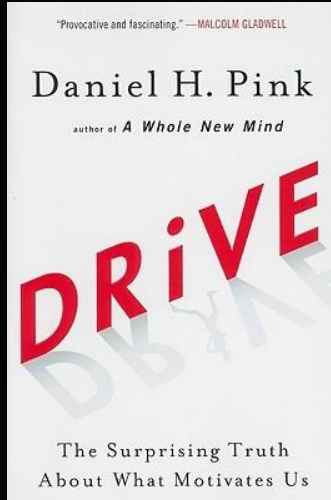
Tightly coupled systems **collapse when something goes wrong**.

## Loose Coupling:

- Parts of the system, people, and work are connected, but those *dependencies are weak, not as essential* as compared to tightly coupled organizations; The flow of work is *designed to be flexible*; Mutual *influence is diminished*

Loosely coupled systems **continue to work when problems occur**.

# Loose Coupling Enables Greater Autonomy



Purpose  
**Autonomy**  
Mastery

Productivity = Effort x Competence x Environment x Motivation <sup>2</sup>

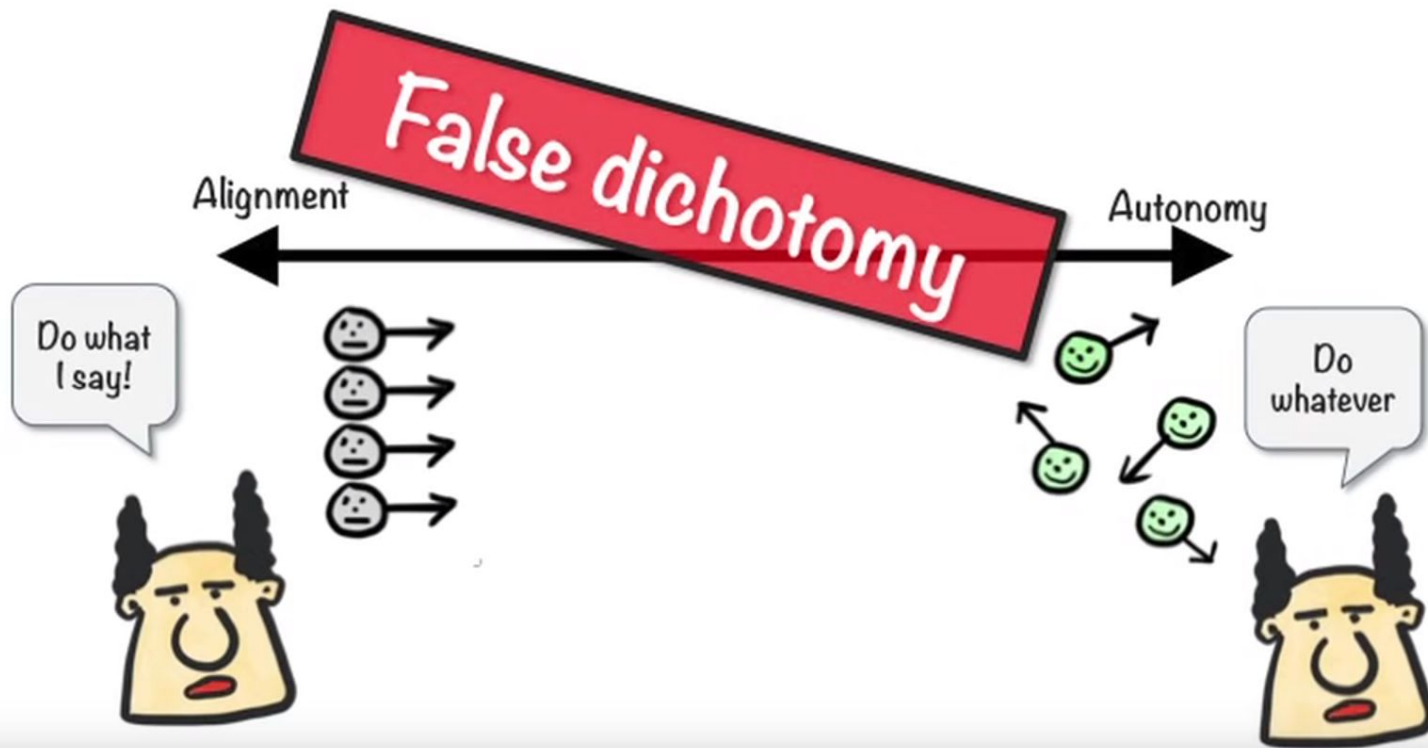
From Spotify



I see where this is going...



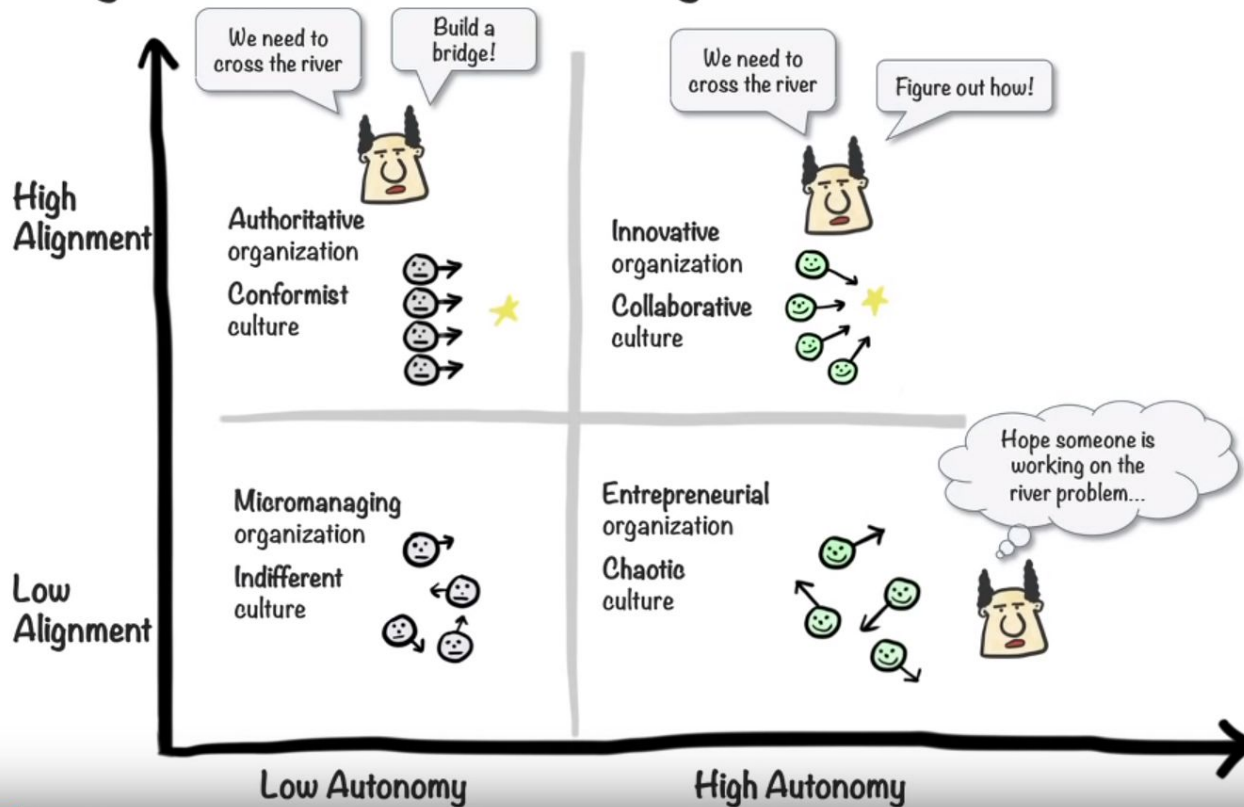
# Alignment & Autonomy







# Alignment enables Autonomy



So, what are leaders in the commercial industry is doing?



...and Minimize Handoffs!



***“The traditional model is that you take your software to the wall that separates development and operations, and throw it over and then forget about it. Not at Amazon. You build it, you run it.”*** – Dr. Werner Vogels - 2006



# VALVE ORGANIZATIONAL CHARTS

(AS ENVISIONED BY EMPLOYEES)

Diag. 1



Diag. 2



Diag. 3



Diag. 4



Diag. 5



\* "I'm the noob, coffee anyone?...Hello?"

**Not All Commercial Approaches Work in Our Context!**

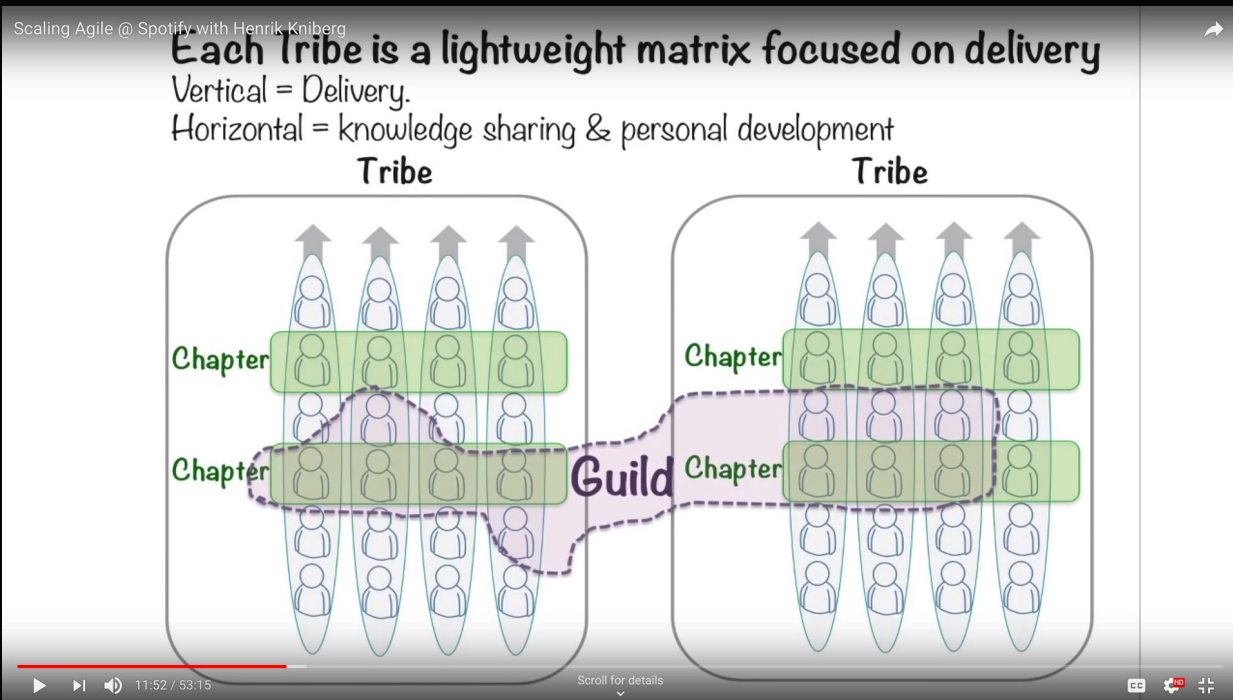
# Enable Agile Scale by - Frequent Communication to Drive Alignment and Respond to Feedback

Leader's job:  
Explain what problem needs to be solved.  
And Why.

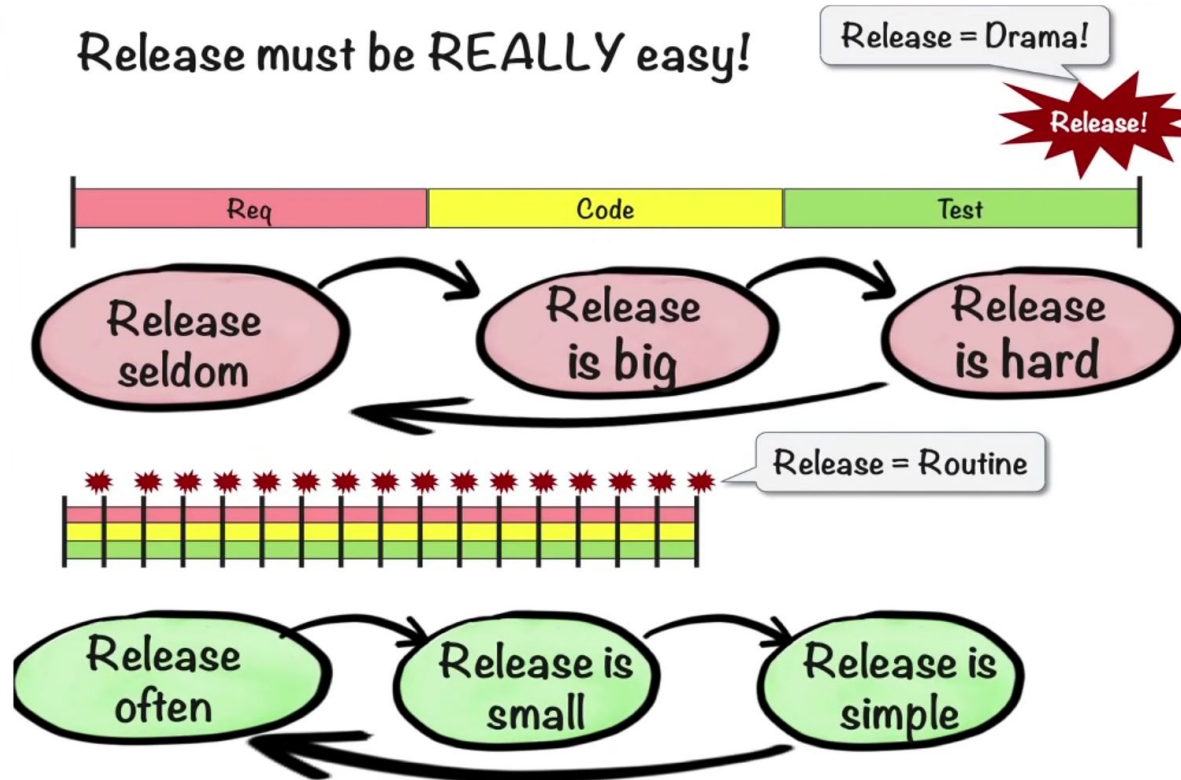


Henrik Kniberg

# Enable Agile Scale by - Establish Loosely Coupled Organization Around Architecture That Encourages Autonomy & Collaboration but Avoids Dependency



# Enable Agile Scale by - Make It Easy to Deliver





# Enable Scale by - Empower Your Team

## Build self-service solutions!

Analogy: I want to feed 200 people...how can I do that?

### Cook -> Plate -> Deliver

- Expensive / Complex / Slow



### Buffet

- Affordable / Simple / Fast



## In our world...

Infrastructure for teams (i.e. 1-click to provision a new VM).

Streamline new SW & Tools (i.e. pipeline to approve FOSS).

Status for management (i.e. generate progress metrics / dashboards).

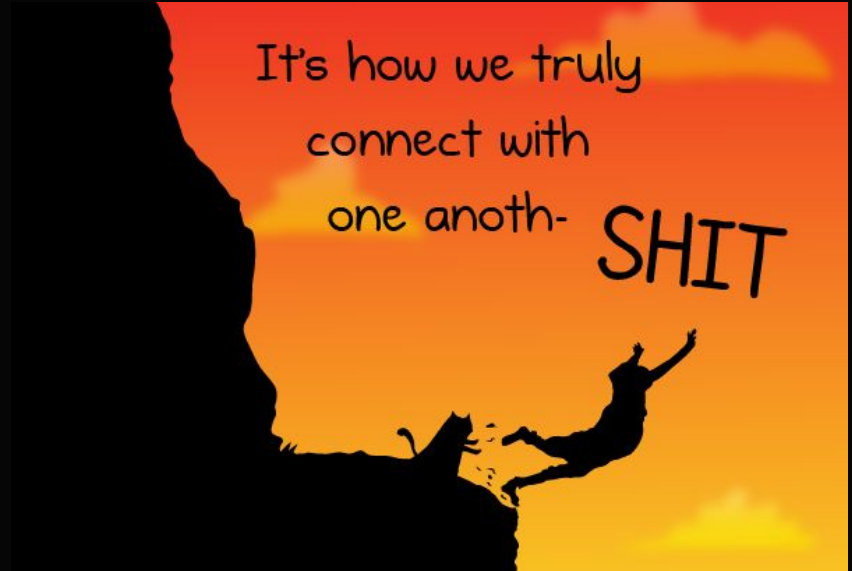
Others specific to your context?

# Enable Agile Scale by - Building **TRUST**

This...

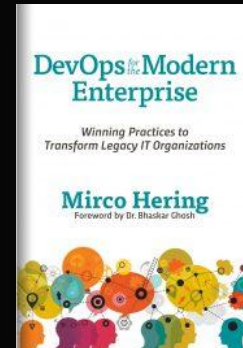
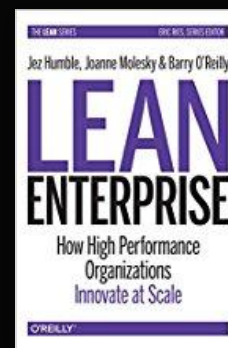
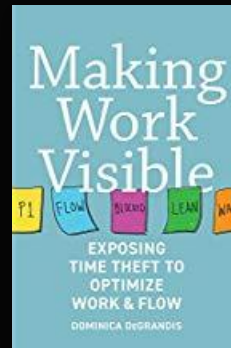
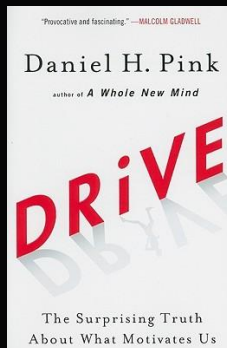
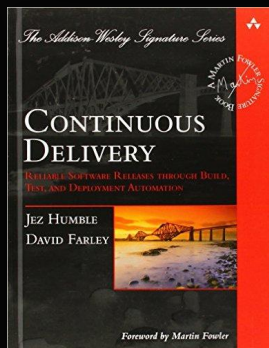
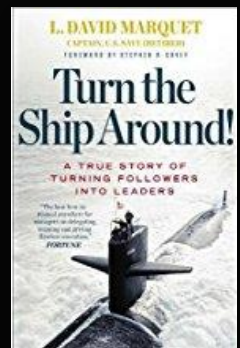
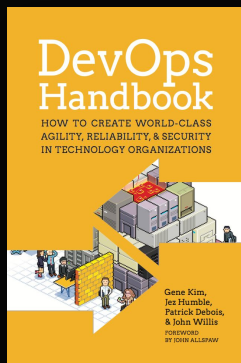
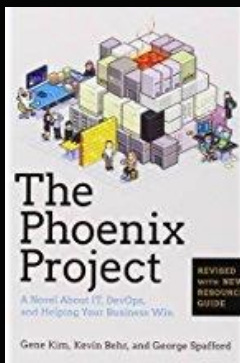


Not This...



# DevOps Resources

## Books / Publications:




<https://www.meetup.com/DevOps-for-Defense/>  
<https://github.com/jondavid-black/DevOpsForDefense>  
[devopsfordefense@gmail.com](mailto:devopsfordefense@gmail.com)

## Conference Presentations (YouTube):

- DevOps Enterprise Summit (DOES)
- IT Revolution
- Velocity
- GoTo

# Group Exercise 1: Feed-Forward

## Feedforward

- 
- A small illustration on the left side of the slide shows a person in a suit standing on a ladder, reaching up with one hand. The ladder is positioned next to the list of bullet points.
- The **feedforward** exercise
  - *Letting go* of the past
  - *Listening* to suggestions *without judging*
  - *Learning* as much as you can
  - *Helping* as much as you can
  - Learning points to help you be a great coach

1. Identify 1 small area of personal improvement.
2. Pair with someone
3. Introduce yourself and tell them what you would like to improve.
4. They provide immediate feedback.
5. You say "Thank You"
6. Reverse roles and repeat steps 3 through 5.
7. Repeat from step 2.



# Group Exercise 2: Lean Coffee & Book Club

## Book Club:

- Review & Discuss “The Phoenix Project”

1. Each table has a facilitator.
2. The facilitator has a short introduction.
3. Everyone write down questions or topics for discussion on the subject. Place them in the middle of the table.
4. The group votes on each question or topic by placing a dot on the card. 3 votes per person.
5. Cards with most dots goes first. Set a timer for 5 minutes and discuss.
6. After 5 minutes, either vote (thumbs up/down) to keep going or move on to the next card.



**Topics: “Agile Scaling Strategies”, and “Agile Scaling Enablers”**