Find a table to sit with people you don’t know and introduce yourself
About Us

Ø Agile, Lean and DevOps Thought Leader
Ø 23 years of product delivery experience in Financial Services
Ø CSP-SM, Certified Trainer “Training from the back of the room”
Ø Third degree black belt in Karate

Linda Fung
- Agile Enablement Team at AXA
- Scrum Master & Aspiring trainer
- A-CSM, CSPO
- Social Media Manager for Family owned restaurant

Anil Jaising
- Agile, Lean and DevOps Thought Leader
- 23 years of product delivery experience in Financial Services
- CSP-SM, Certified Trainer “Training from the back of the room”
- Third degree black belt in Karate
Quick Poll: MINDFULNESS

If I present for the next 4 Out of 8 minutes how much of that time will I have your attention?
FLASHBACK

1994
Real Time Messaging

Developers: 5
Users: 4000
Servers: 40
Deployments: 24
Fast forward to 2006
Client On-Boarding

- Developers: 25
- Testers & Operations: 14
- Users: 150
- Deployments: 2
A tale of two decades

<table>
<thead>
<tr>
<th>Year</th>
<th>Developers</th>
<th>Users</th>
<th>Servers</th>
<th>Deployments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>5</td>
<td>4000</td>
<td>40</td>
<td>24</td>
</tr>
<tr>
<td>2006</td>
<td>25</td>
<td>14</td>
<td>150</td>
<td>2</td>
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</tbody>
</table>
What is DevOps?

“DevOps is the practice, principle and capability of operations and development engineers participating together in from design through the development process to production support” – Jez Humble
<table>
<thead>
<tr>
<th>ARCHITECTURE</th>
<th>PRODUCT</th>
<th>LEAN</th>
<th>CULTURAL</th>
<th>CONTINUOUS DELIVERY</th>
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<tbody>
<tr>
<td>✓ Loosely coupled</td>
<td>✓ Customer feedback</td>
<td>✓ WIP Limits</td>
<td>✓ Westrum Organizational Culture</td>
<td>✓ Version Control</td>
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<tr>
<td>✓ Empowered Teams</td>
<td>✓ Value Stream</td>
<td>✓ Visualize work</td>
<td>✓ Supporting learning</td>
<td>✓ Deployment automation</td>
</tr>
<tr>
<td>✓ Small batches</td>
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<td>✓ Change approval</td>
<td>✓ Collaboration</td>
<td>✓ Continuous Integration &amp; Delivery</td>
</tr>
<tr>
<td>✓ Experimentation</td>
<td>✓ Experimentation</td>
<td>✓ Monitoring</td>
<td>✓ Job Satisfaction</td>
<td>✓ Trunk based development</td>
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<tr>
<td>✓ Proactive notification</td>
<td></td>
<td></td>
<td>✓ Transformation Leadership</td>
<td>✓ Test Automation</td>
</tr>
<tr>
<td>✓ Source: Accelerate: Building and Scaling High Performing Technology Organizations</td>
<td>Nicole Forsgren PhD, Jez Humble, Gene Kim</td>
<td></td>
<td>✓ Test Data Management</td>
<td>✓ Shift left on security</td>
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</table>
Three ways of DevOps

The First Way: Systems Thinking

The Second Way: Amplify Feedback Loops

The Third Way: Culture Of Continual Experimentation And Learning

Source: The Phoenix Project: A Novel about IT, DevOps, and Helping Your Business Win – Gene Kim, Kevin Behr, George Spafford
**Systems Thinking – Principles of flow**

<table>
<thead>
<tr>
<th>Ready</th>
<th>Investigate</th>
<th>Doing</th>
<th>Done</th>
<th>Doing</th>
<th>Done</th>
<th>UAT</th>
<th>Delivered</th>
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</thead>
<tbody>
<tr>
<td>Expedite</td>
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**The First Way: Systems Thinking**

**Source:** Kanban – David Anderson
Your Mission: Build Your Own Value Stream

Turn to page 3 in your handbook

Work with your team on your table, Choose one of the problems draw the Value Stream, identifying bottlenecks and discuss potential optimizations
## Systems Thinking: What to optimize?

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Amplify Feedback Loops

The Second Way: Amplify Feedback Loops

[Suggestion Box]
Quick Poll: Which one do you think works better to slow down drivers?

CONTROL

OR

GIVE CONTROL
The Garden Grove Experiment

Source: Harnessing the power of feedback loops by Thomas Goetz : Wired
Your Mission: Connection Game
Circle

1. Stand and assemble in a circle around your table.
2. Randomly choose two members from your circle, Do not tell anyone who they are.
3. The two will be your two equidistant partners.
4. Move to a point which is equidistant from your two partners. Do this with no talking.
5. Continue moving until all players are equidistant from each other and stop moving.

Source: Carbon cycle feedback loops – Carleton.edu
Feedback loop in Software development

Where do DevOps feedback loops come from...

Where does DevOps feedback go...

Source: Four key vectors closing DevOps feedback loops
Second way: What to optimize?

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The Third Way:
Culture Of Continual Experimentation And Learning
Your Mission: Build the tallest paper tower

1. Self organize the roles within your table

2. Plan how you will build the tower

3. Build the tower
<table>
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<tr>
<th>Pathological</th>
<th>Bureaucratic</th>
<th>Generative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information is hidden</td>
<td>Information may be ignored</td>
<td>Information is actively sought</td>
</tr>
<tr>
<td>Messengers are “shot”</td>
<td>Messengers are tolerated</td>
<td>Messengers are trained</td>
</tr>
<tr>
<td>Responsibilities are shirked</td>
<td>Responsibilities are compartmented</td>
<td>Responsibilities are shared</td>
</tr>
<tr>
<td>Bridging between teams is discouraged</td>
<td>Bridging between teams is allowed but discouraged</td>
<td>Bridging between teams is rewarded</td>
</tr>
<tr>
<td>Failure is covered up</td>
<td>Organization is just and merciful</td>
<td>Failure causes inquiry</td>
</tr>
<tr>
<td>New ideas are crushed</td>
<td>New ideas create problems</td>
<td>New ideas are welcomed</td>
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Third way: What to optimize?

**CULTURAL**
- Westrum Organizational Culture
- Supporting learning
- Collaboration
- Job Satisfaction
- Transformation Leadership

**SAFETY**
Enabling organizational learning and a safety culture

**DAILY WORK AND LEARNING**
Institutionalize the improvement of daily work and learning

**LOCAL DISCOVERIES**
Learning discovered locally should become global learnings

**RESILIENCE PATTERNS**
Performing “Game Day” exercises to rehearse large scale failures
Thumbs up?

Active participation
Thank You!

“Please share your feedback on post-its and add it to our Feedback Wall”

“Feedback is the breakfast of champions.” ~ Ken Blanchard