The Secret of Our DevOps Success: Fostering Human Behavioral Change

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@mark_of_quality
DevOps Champions are Not Born
DevOps Champions are Not Born
They are Forged
The Secret of Our DevOps Success
The Secret of Our DevOps Success
The River DevOps
I Fought Conway’s Law...
I Fought Conway’s Law...
(you know the rest)
Web Tier

App Tier

Web Dev

App Dev

White arrows indicate communication between Web Tier and App Tier, while red Xs indicate no communication.
Storage Team  

Storage Array  

Database  

DBA Team
Everything is Fine
Everything is Fine
We’re Exploding
Present Day

Planet Earth Forms
4.6 billion years ago

First Organic Life
3 billion years ago

Cambrian Period
540 to 485 million years ago

Present Day
Change is Inevitable
Change is Inevitable
Progress is Not
Human Beings Fear Change

- Failure
- Success
- Loss
- Rocking the Boat
- Unknown
When Venturing Into the Cultural Wilds
When Venturing Into the Cultural Wilds, Don’t Forget Your Compass
“I know exactly what to do.”
“I know exactly what to do.”

- an insane person
CREATE

OPERATIONALIZE
Scrum A

Difficult Tech

Brittle Operations

Delivery Inconsistent

Collaboration a Struggle

Scrum B
<table>
<thead>
<tr>
<th>Scrum A</th>
<th>Scrum B</th>
</tr>
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<tbody>
<tr>
<td>Difficult Tech</td>
<td>Commoditized Tech</td>
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<tr>
<td>Brittle Operations</td>
<td>Robust Operations</td>
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<td>Delivery on Time</td>
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<td></td>
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Scrum A

- Difficult Tech
- Brittle Operations
- Delivery Inconsistent
- Collaboration a Struggle

Scrum B

- Commoditized Tech
- Robust Operations
- Delivery on Time
- Despised Each Other
WHY
Kurt Lewin
Pioneer, Social & Organizational Psychology
1890 - 1947
Force Field Analysis

Driving Forces

Equilibrium

Resisting Forces
Force Field Analysis - Example

Upgrade Standard Platform from NT4 to Windows 2012 Server
Force Field Analysis - Example

Upgrade Standard Platform from NT4 to Windows 2012 Server

Driving Forces
- Better platform/patch support, lower cost to serve
- Actually has 3P support
- 64-bit arch = more performant application

Resisting Forces
Upgrade Standard Platform from NT4 to Windows 2012 Server

Driving Forces:
- Better platform/patch support, lower cost to serve
- Actually has 3P support
- 64-bit arch = more performant application

Resisting Forces:
- Upgrade is a distraction from current business objectives
- Cost to upgrade is a concern
- Change is scary!
<table>
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<th>UNFREEZE</th>
<th>Prepare the organization for change</th>
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<td>CHANGE</td>
<td>Execute the change</td>
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<td>FREEZE</td>
<td>Ensure the change becomes permanent</td>
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## Lewin’s Change Model

<table>
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<th>Stage</th>
<th>Description</th>
<th>Actions</th>
</tr>
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| UNFREEZE| Prepare the organization for change                      | • Review status quo, socialize the case for change  
• Increase driving forces  
• Decrease resisting forces |
| CHANGE  | Execute the change                                        | • Implement the changes  
• Provide training and documentation  
• Get people involved |
| FREEZE  | Ensure the change becomes permanent                      | • Socialize new way of doing things  
• Reward desired outcomes, highlight improvements  
• Reinforce cultural safeguards |
OPERATIONALIZE

CREATE

- Dev
- QA
- PO
- SCM
- DBA
- Apptech

- Dev
- Platform
- Monitor
- Load Balance
- Apptech
- DBA
Start a daily operationalization standup – attended by Dev and IT – with the intent of bringing health back to a core product database.

**Driving Forces**
- Database failure is more expensive to fix in production
- Solving root cause actually saves time in the long run
- Production failures are embarrassing

**Resisting Forces**
- Effort is a distraction from current business objectives
- Daily meetings are a drag!
- It won't be worth the cost of the effort we expend
**Fixed**

Believes in intrinsic abilities
Avoids steep challenge
Reacts to challenge with anger
Constantly trying to prove themselves
Sees failure as personal condemnation
Satisfied by high grades, performance scores
Makes conflict about themselves

**Growth**

Believes new abilities can be acquired
Relishes a challenge
Reacts to challenge with delight
Constantly trying to learn
Sees failure as opportunity
Satisfied by any learning opportunity
Solves conflict without personal bias
Mirror, Mirror, On the Wall...
Mirror, Mirror, On the Wall...

Who is the Fairest at Providing Robust Progressive Change in an Ever-Shifting Technical and Political Landscape
Mirror, Mirror, On the Wall...
Who is the Fairest at Providing Robust
Progressive Change in an Ever-Shifting
Technical and Political Landscape
...uh, of them all?
Characteristics of Successful Change Agents
No Moral or Ethical Attachment
Characteristics of Successful Change Agents

Criticize for Results!
Characteristics of Successful Change Agents

Solve Issues at Depth
Know When NOT to Interject
Characteristics of Successful Change Agents

Proper Self-Image
Characteristics of Successful Change Agents

Proper Self-Image

ROUGH
Characteristics of Successful Change Agents

Proper Self-Image

Rebel
Overlord
Underdog
Genius
Hero
Healthy Mindset

Characteristics of Successful Change Agents
Healthy Mindset

Characteristics of Successful Change Agents

Achievement unlocked
OG - Channeled 3 horrid archetypes simultaneously
Energy is Not Destroyed
Energy is Not Destroyed
It Merely Changes Containers
How to Fail
How to Fail

Forget the Nature of Your Debt
Succumb to Fads
How to Fail

Succumb to Fads

(this is why we can’t have nice things)
Solve for the Wrong Variable
How to Fail

Lose Control of the Conversation
DO
Set and foster a healthy growth mindset
Classify failure as a learning experience
Establish strong cultural safeguards
Solve your issues at depth

DON’T
Play ROUGH (Rebel, Overlord, Underdog, Genius, Hero)
Succumb to fads
Tie your work success, performance review, etc, to your own sense of value

KNOW
The answer to the question WHY
That you’re on the River DevOps, not the Island DevOps

BE
Humble
Ready to be wrong
Ready to sacrifice a short-term goal for the long game (disagree and commit)

USE
Lewin’s Change Method (Unfreeze, Change, Freeze)
Force Field Analysis
Socratic Method
Metrics! (MTTR, etc)
Write It All Down
“If you want to build a ship, don’t drum up people to collect wood and don’t assign them tasks and work, but rather teach them to long for the endless immensity of the sea.”

Antoine de Saint-Exupéry
Reference Material, Relevant Experience and Inspiration from:

CDK Global
Conway, Melvin
DeGrandis, Dominica
Dweck, Carol
Humble, Jez
IT Revolution Press
Kim, Gene
Lewin, Kurt
Microsoft
Pink, Daniel
Sinek, Simon
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