



**Leaner**

# **PROGRAMMER ANARCHY**

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**Experiences at...**

**Forward**

# Experiences at...



# Forward





# Agile Impact:

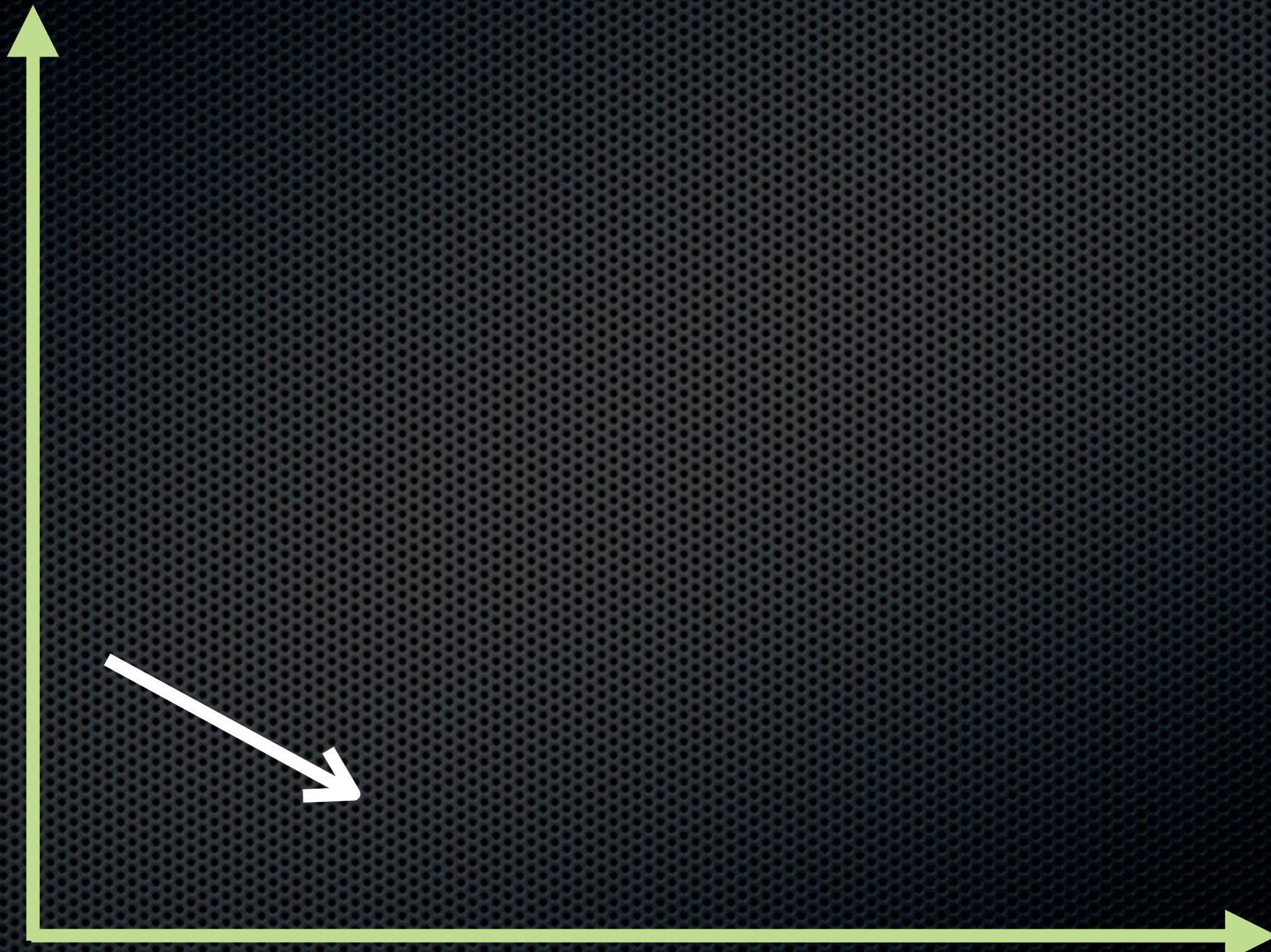
**Trust**

between **Customer** and **Developer**

**Trust**



**Trust**



**waterfall**

**Trust**



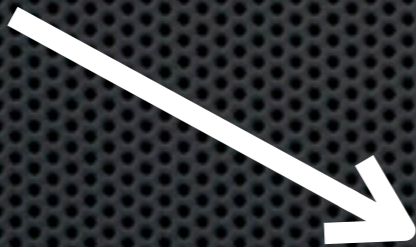
**waterfall**

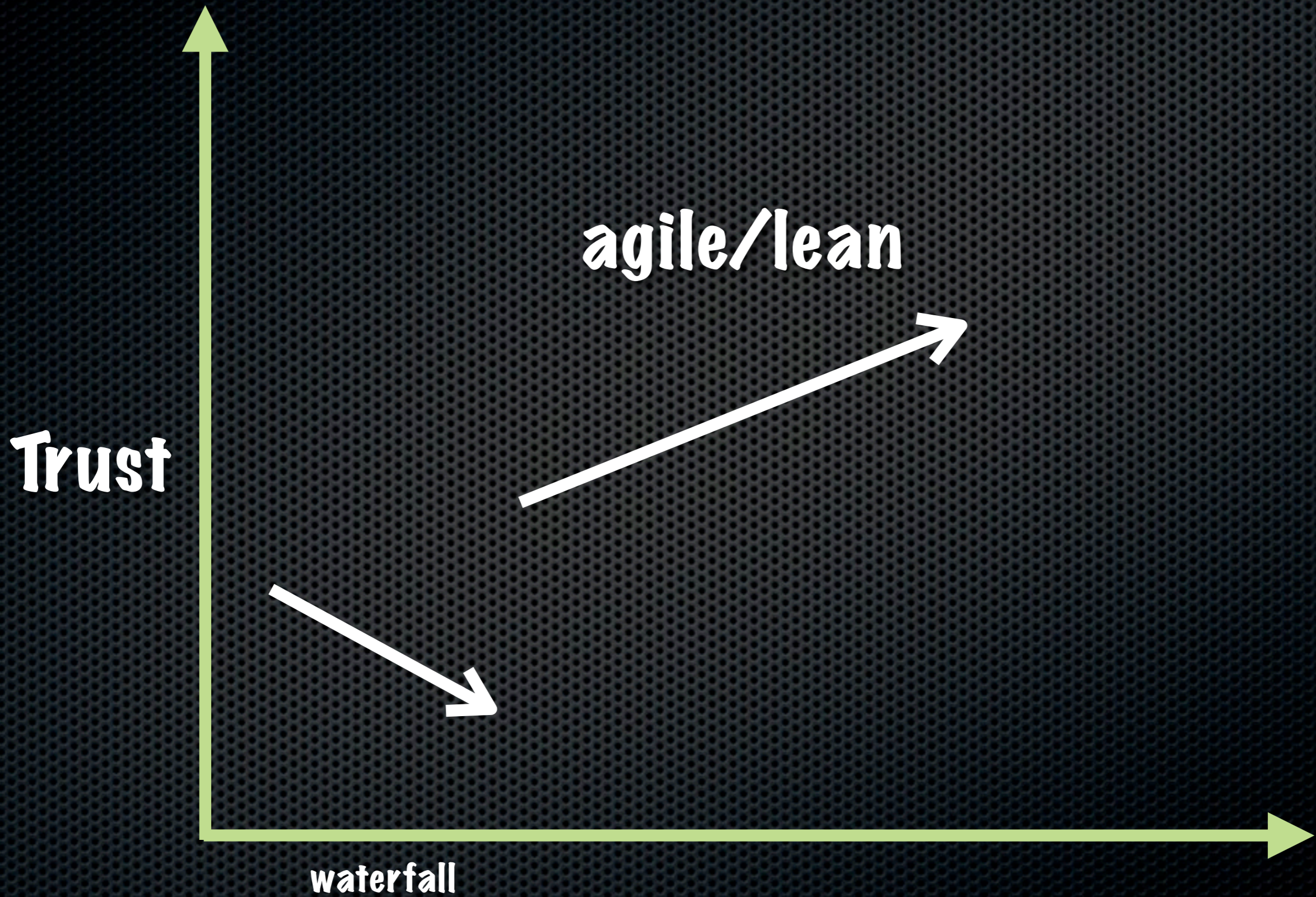
## **WHY?**

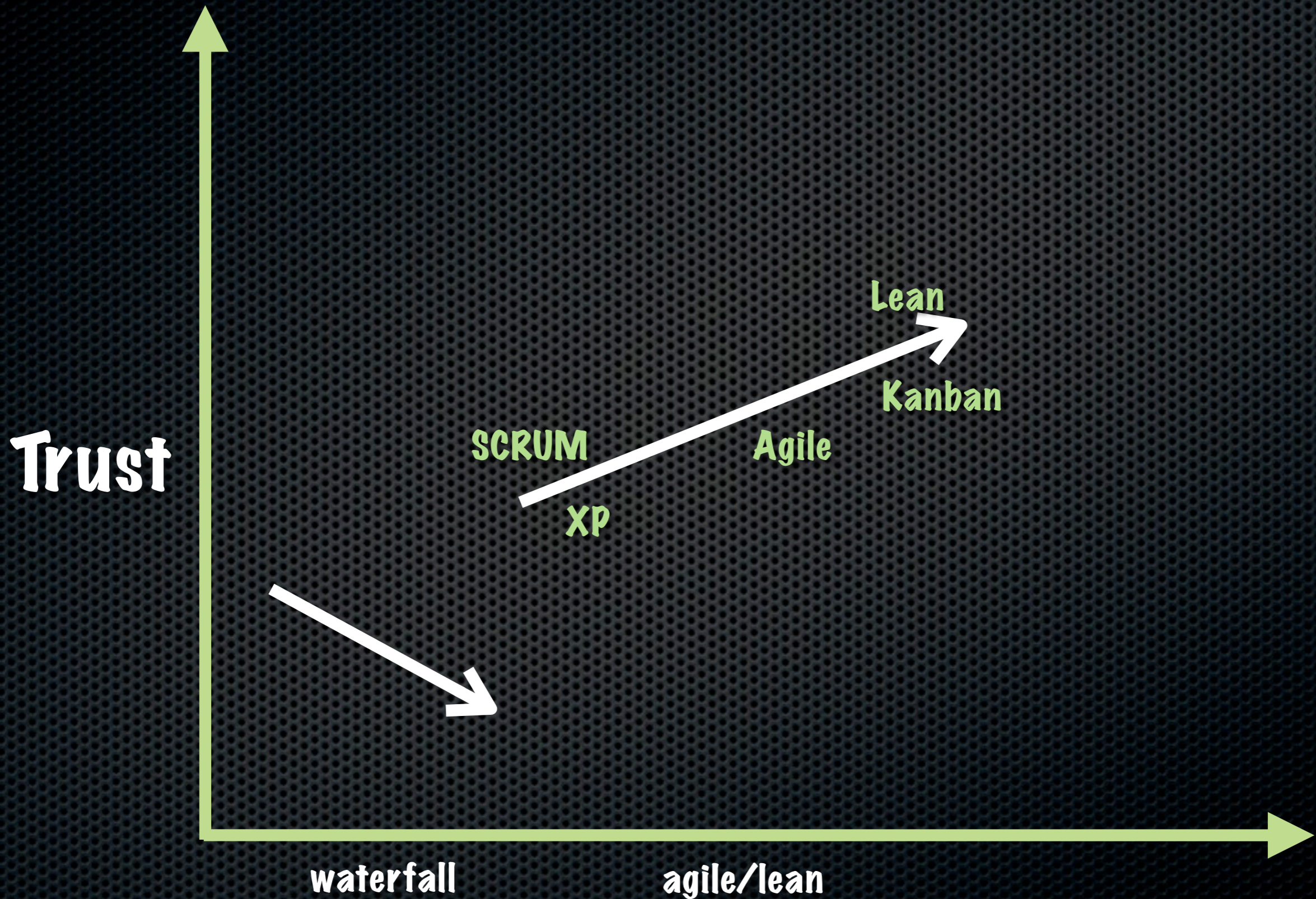
- ♦ **Larger systems**
- ♦ **Higher expectations**
- ♦ **Volatile commercial environments**
- ♦ **etc...**

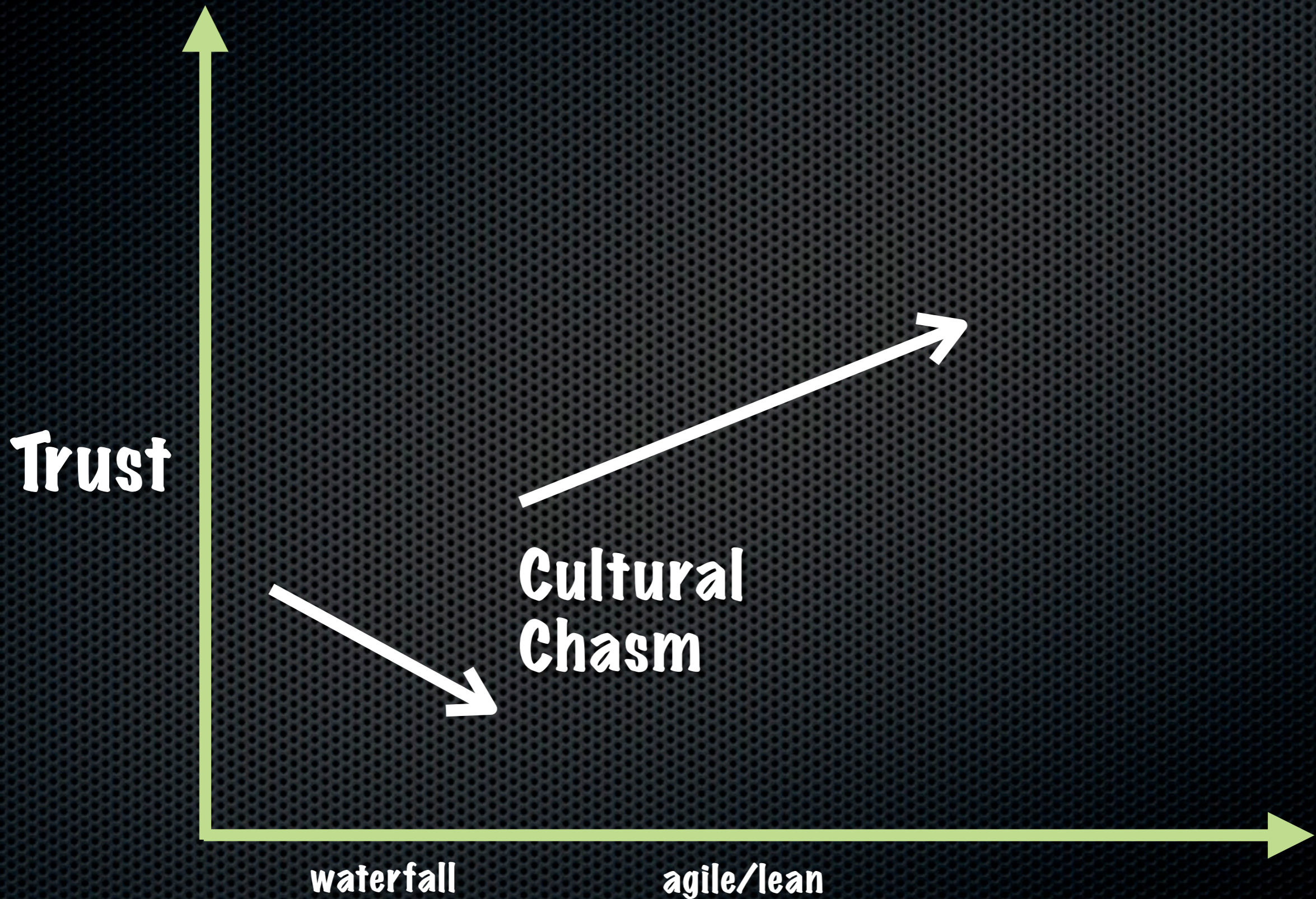
**Trust**

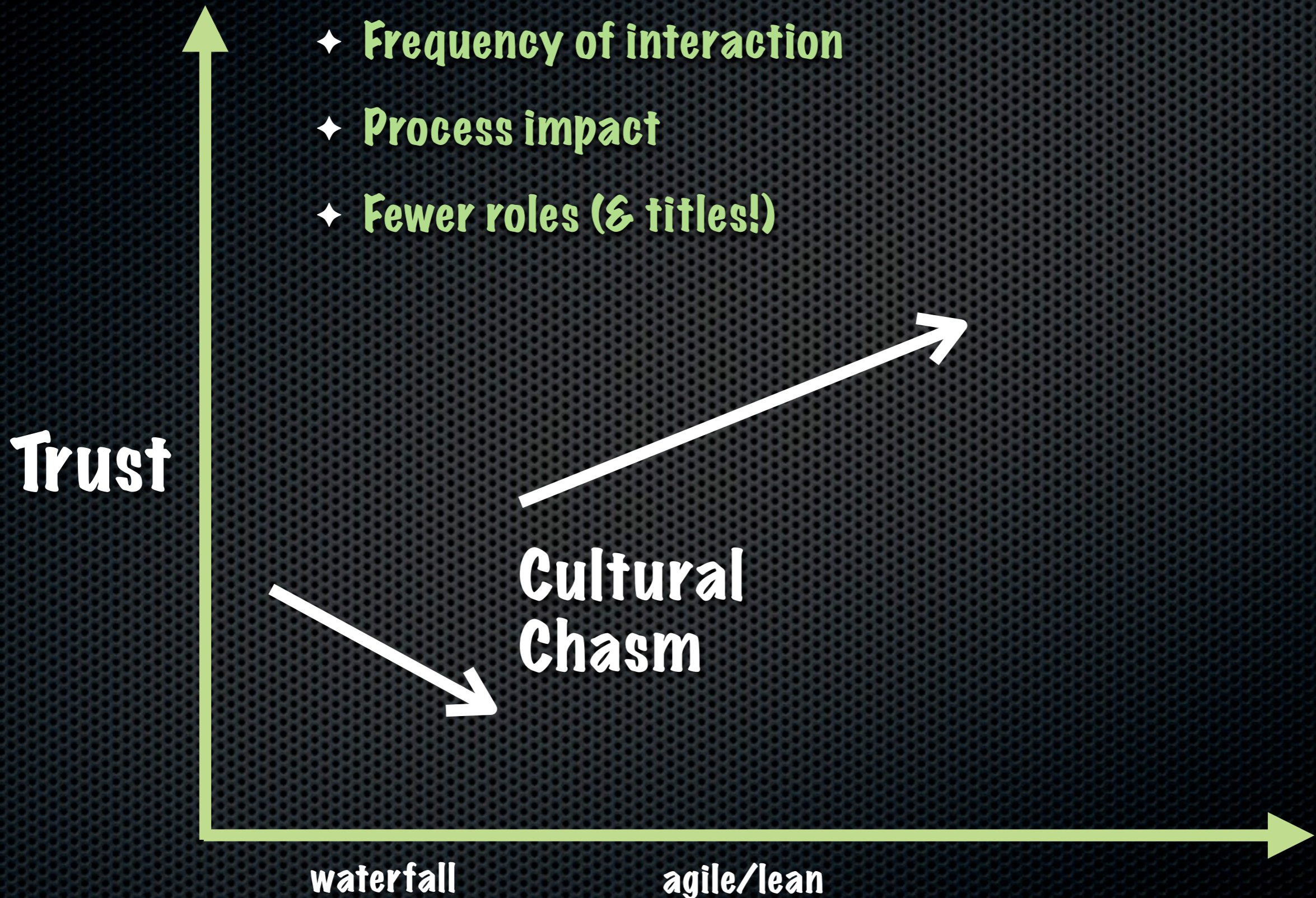
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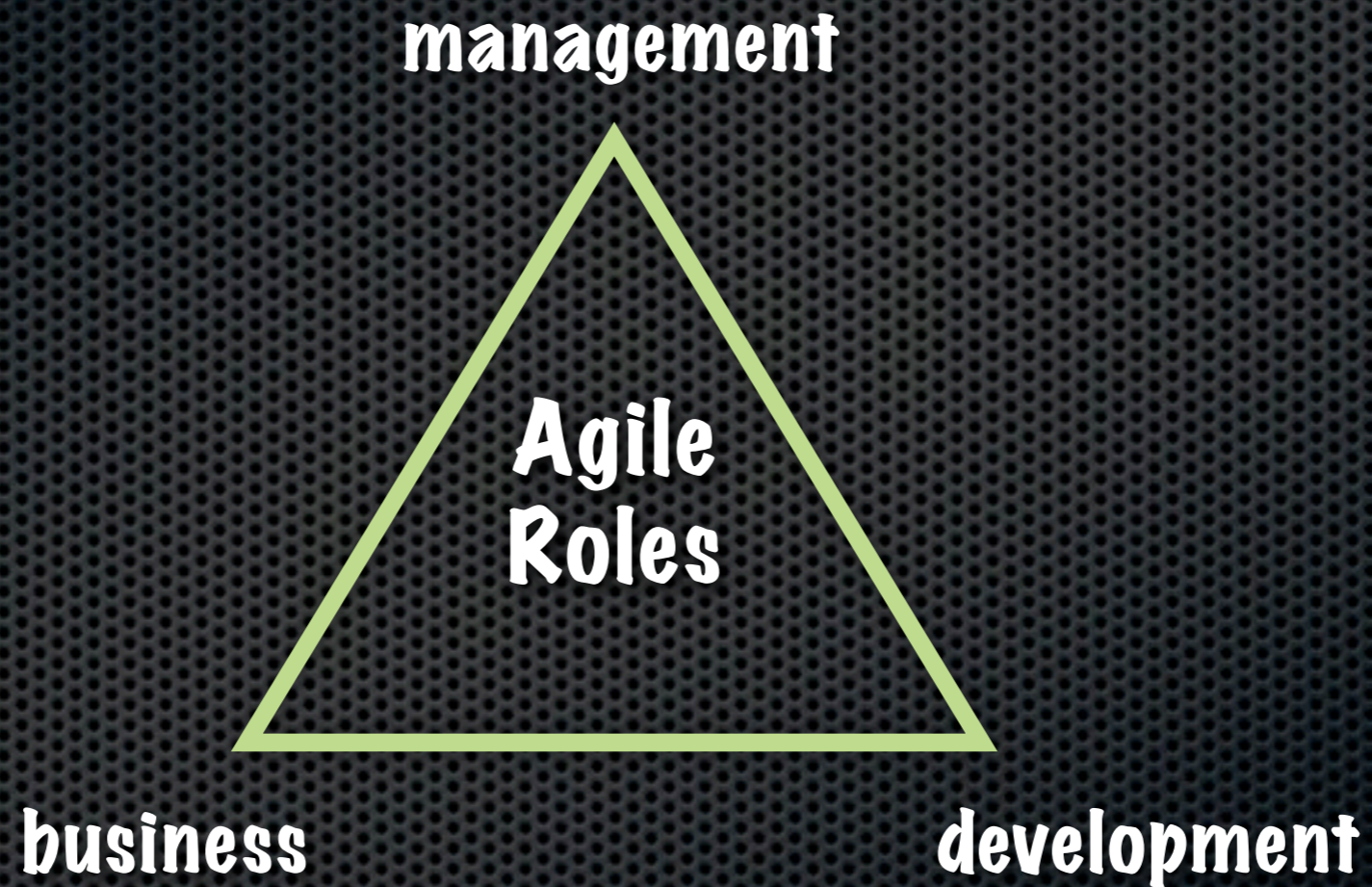




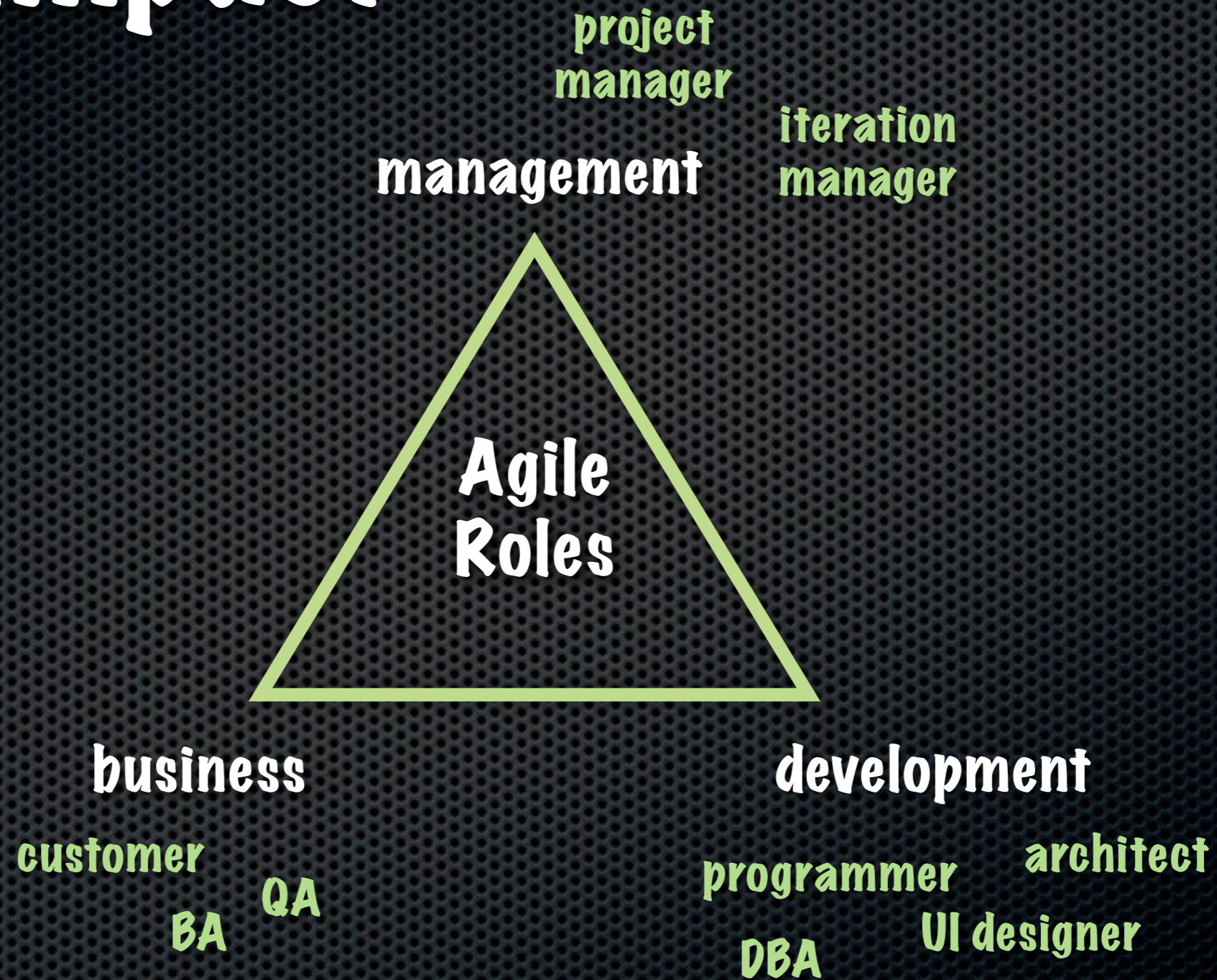




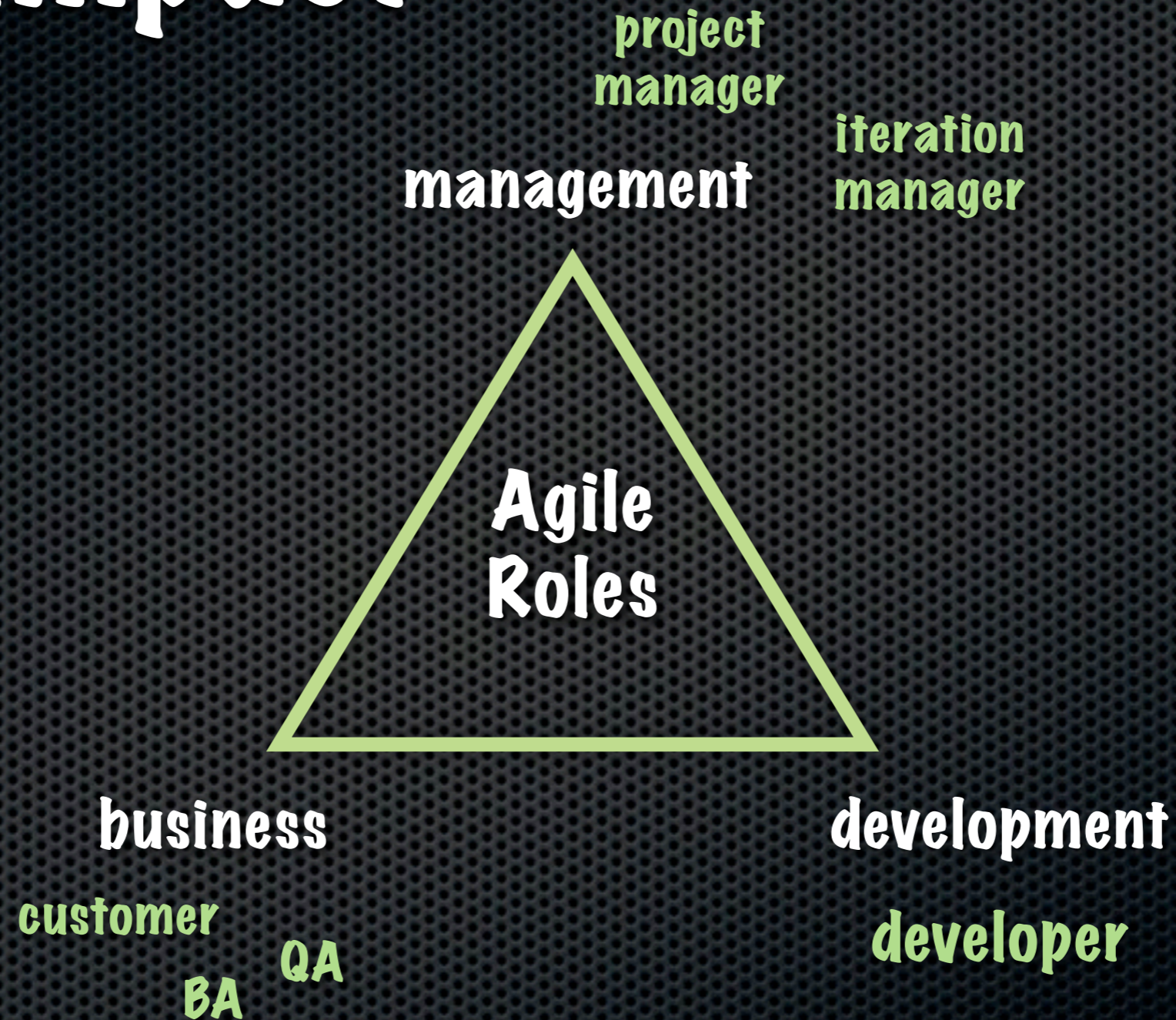
# Role impact



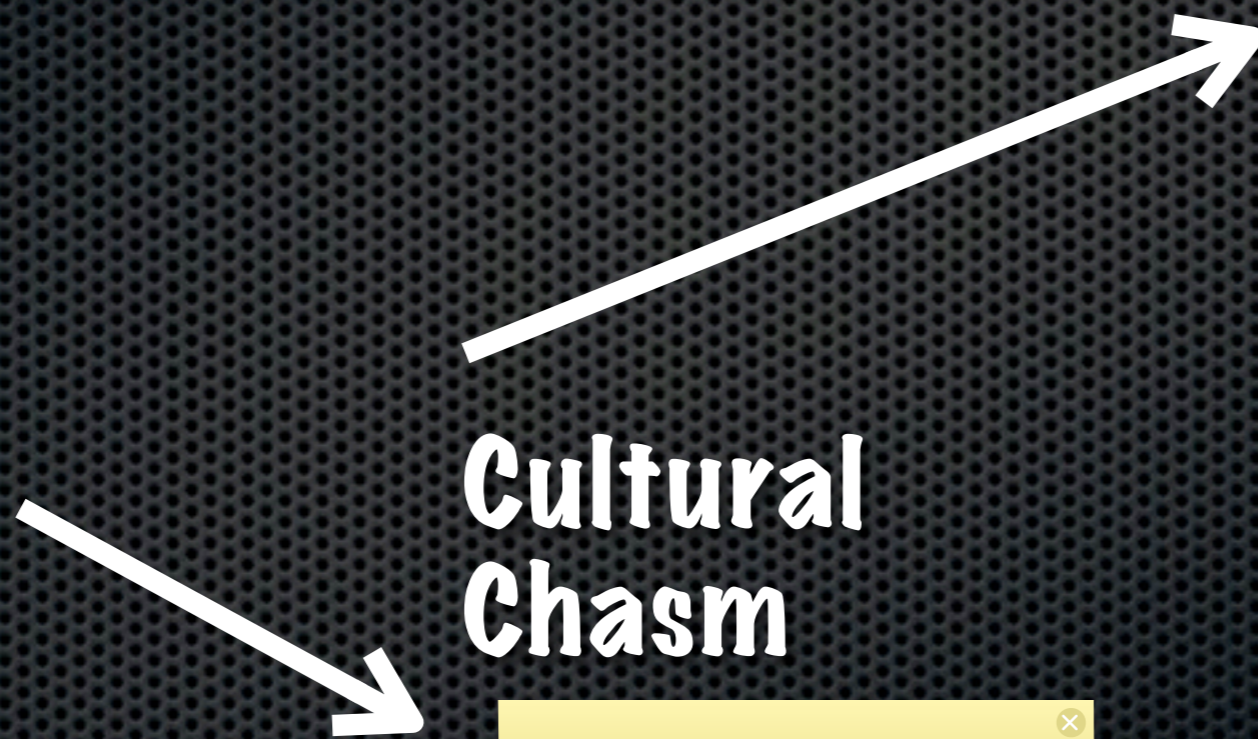
# Role impact



# Role impact



**Trust**

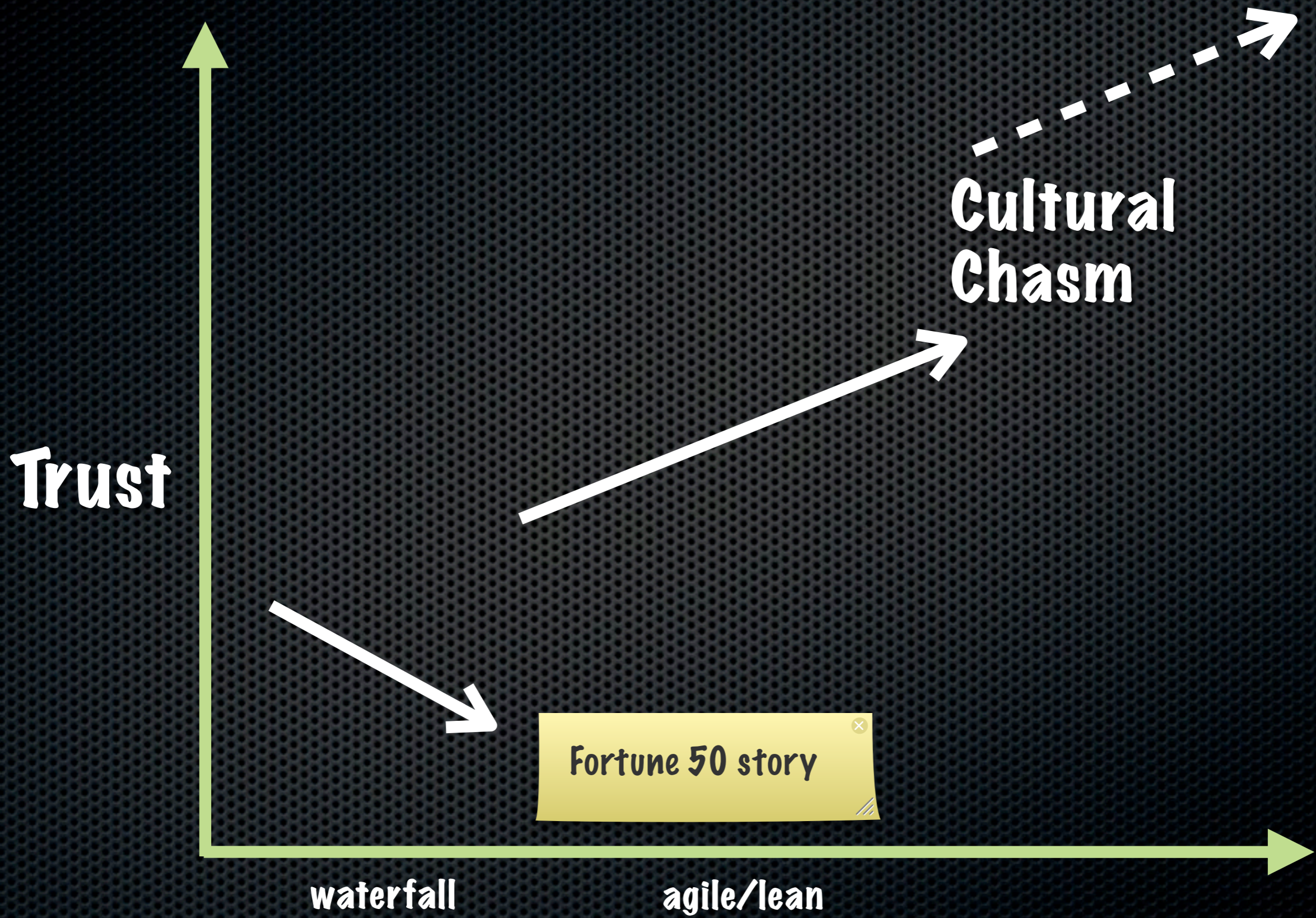


**Cultural Chasm**

Fortune 50 story

**waterfall**

**agile/lean**





# Agile Manifesto

- ✦ **Individuals and interactions** over processes and tools
- ✦ **Working software** over comprehensive documentation
- ✦ **Customer collaboration** over contract negotiation
- ✦ **Responding to change** over following a plan

# Agile Manifesto

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# XP Values

- ◆ **Feedback**
- ◆ **Communication**
- ◆ **Simplicity**
- ◆ **Courage**
- ◆ **Respect**

# XP Values

- ◆ **Feedback** ✓
- ◆ **Communication** ✓
- ◆ **Simplicity** ✓
- ◆ **Courage** ✓
- ◆ **Respect** ✓



# Agile Best Practices

- ◆ **Stand ups**
- ◆ **Story narratives**
- ◆ **Retrospectives**
- ◆ **Estimates**
- ◆ **Iterations**
- ◆ **Mandatory pairing**
- ◆ **Unit tests**
- ◆ **Acceptance tests**
- ◆ **Refactoring**
- ◆ **Patterns**
- ◆ **Continuous integration**

# Agile Best Practices **Not Used**

✦ ~~Stand ups~~

✦ ~~Story narratives~~

✦ ~~Retrospectives~~

✦ ~~Estimates~~

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# Agile Roles

- ◆ **Customer**
- ◆ **Project manager**
- ◆ **Business analyst**
- ◆ **Developer**
- ◆ **Quality assurance / tester**



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- ◆ **Customer** ✓
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# Agile Roles

- ◆ Customer ✓
- ◆ ~~Project manager~~ X
- ◆ ~~Business analyst~~ X
- ◆ Developer ✓
- ◆ ~~Quality assurance / tester~~ X

# Agile Roles Reduced Again...

- ♦ Customer ✓
- ♦ ~~Project manager~~ X
- ♦ ~~Business analyst~~ X
- ♦ Developer ✓
- ♦ ~~Quality assurance / tester~~ X
- ♦ ~~Manager of programmers~~ X



# Developer-Driven Development

**Developer-Driven Development**

**Open Source Business**

**Developer-Driven Development**

**PROGRAMMER ANARCHY**

**Open Source Business**





# Why "ANARCHY"

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## ✦ EMPOWERMENT

- ✦ Somebody "gives" it
- ✦ Somebody can "take it away"
- ✦ Leads to "Can I...?"

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## ✦ ANARCHY

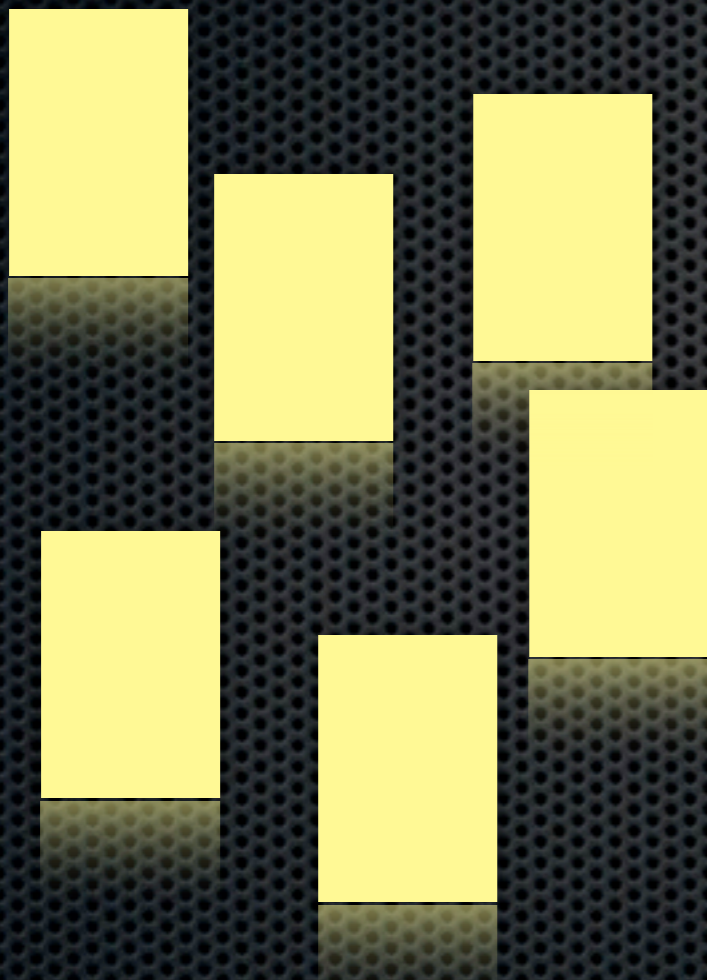
- ✦ Nobody to ask
- ✦ Can't stop someone else
- ✦ Disagreements expected



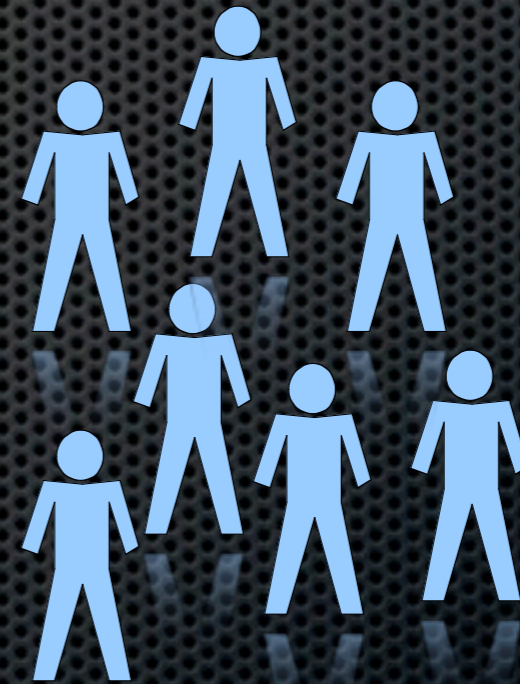
# Matching Work and Devs

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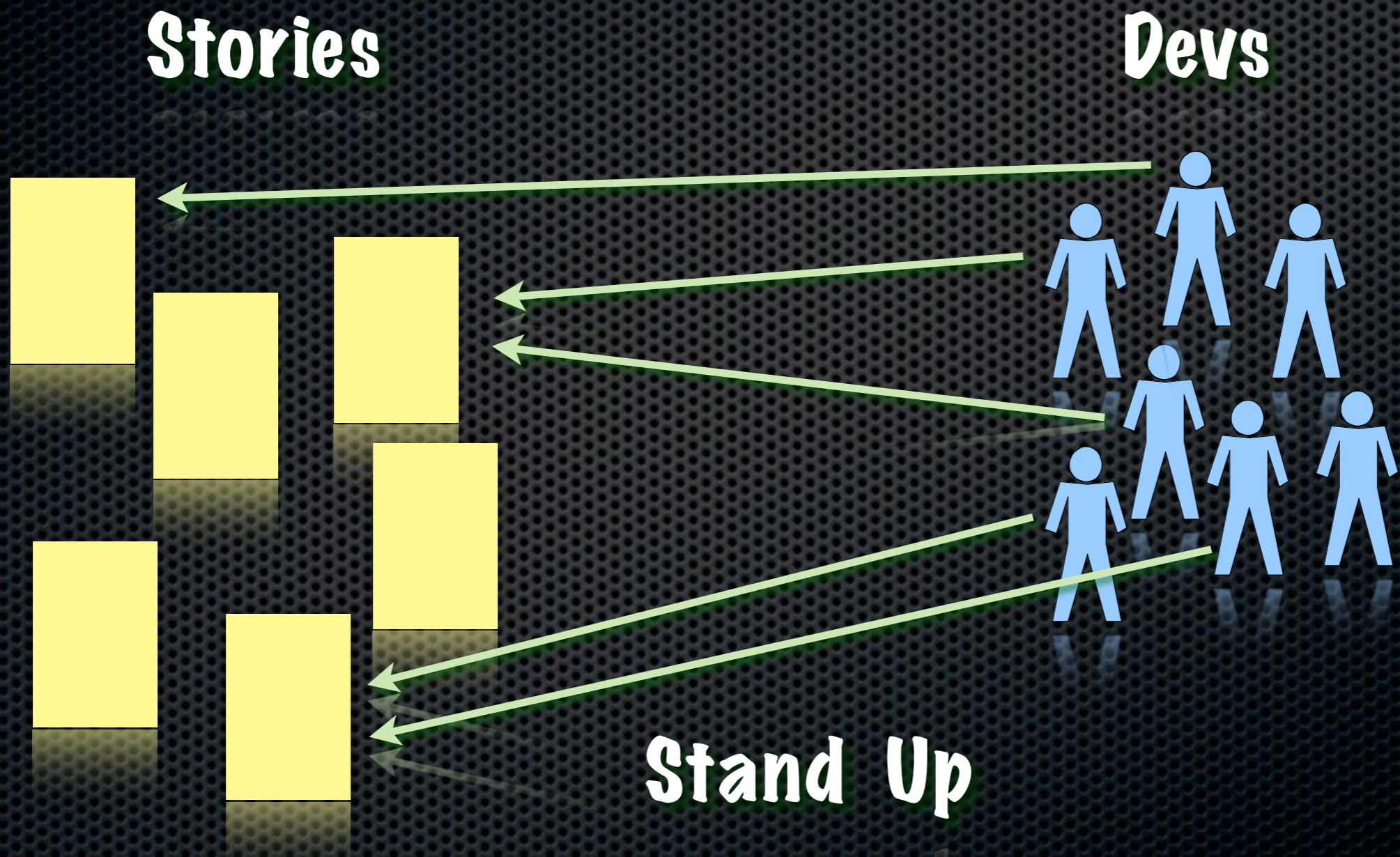
Stories



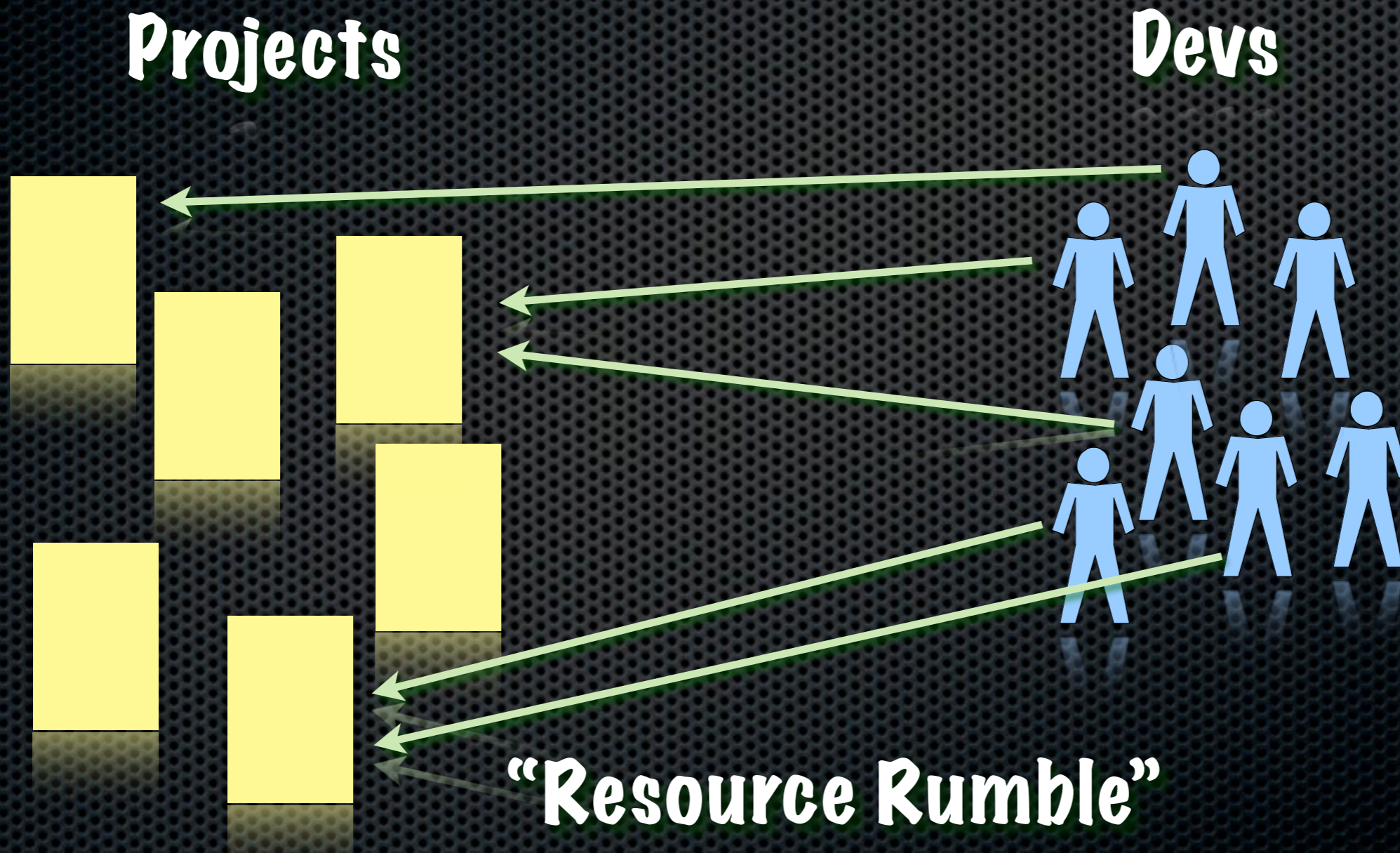
Devs



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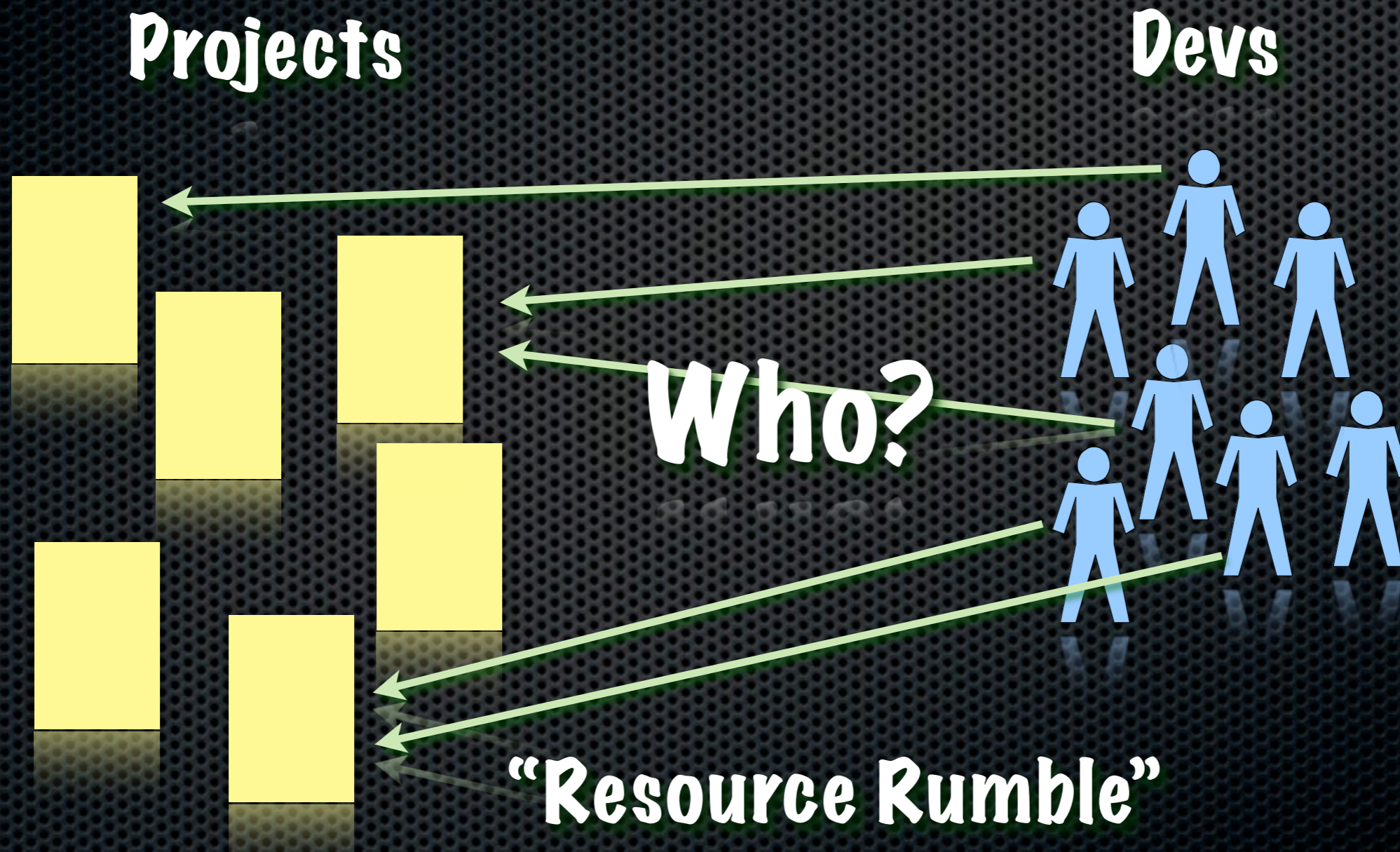


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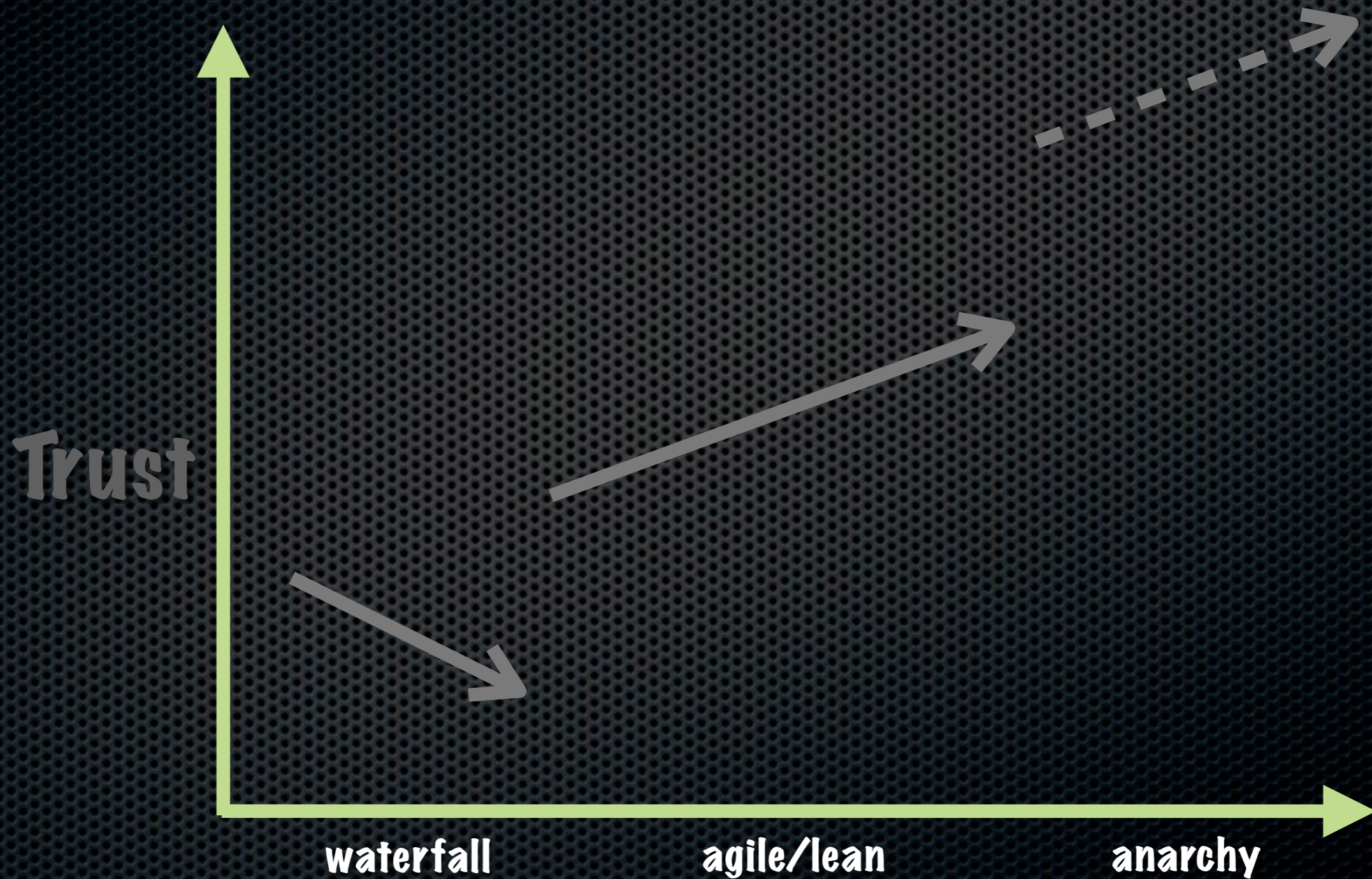


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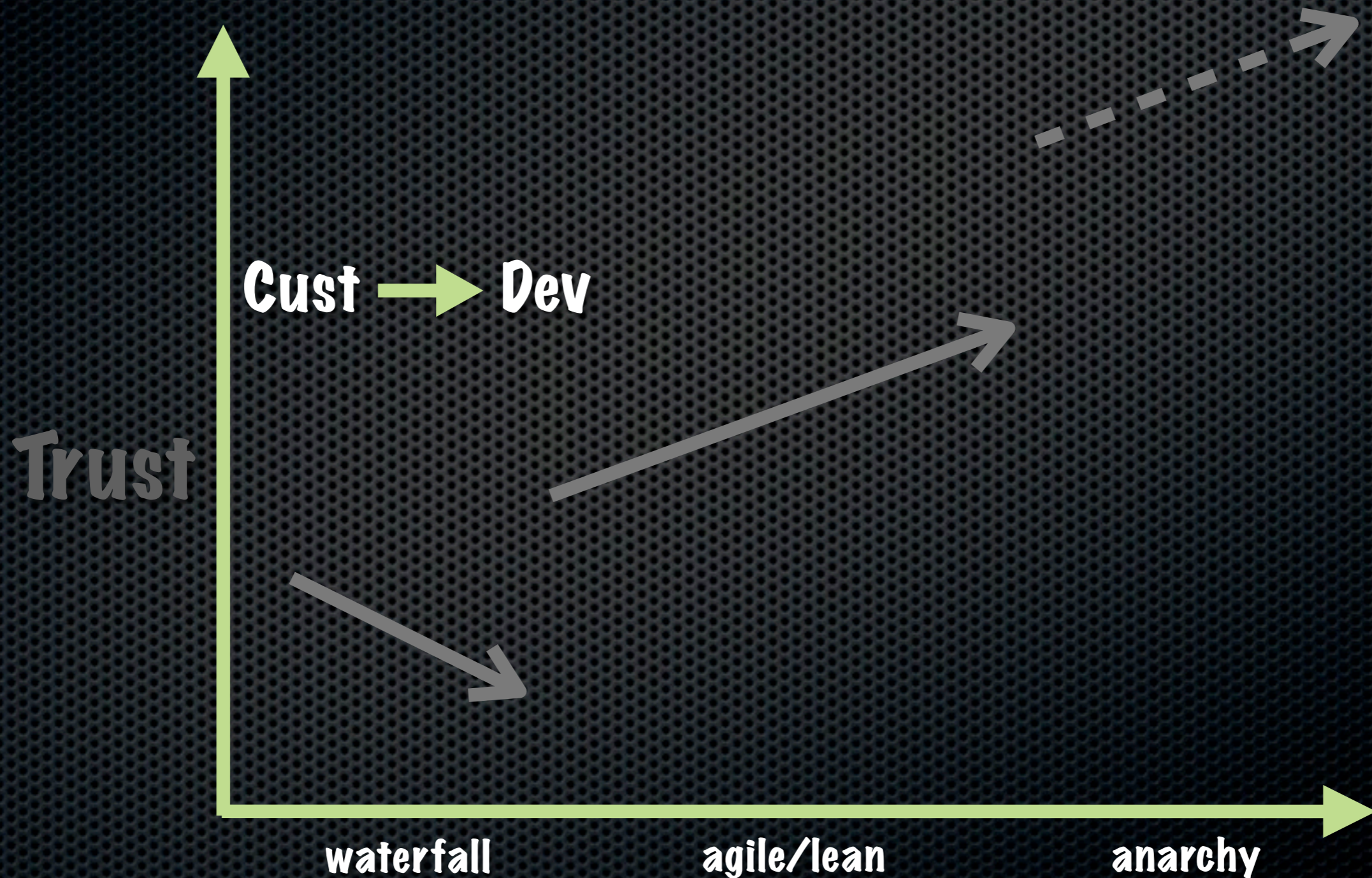




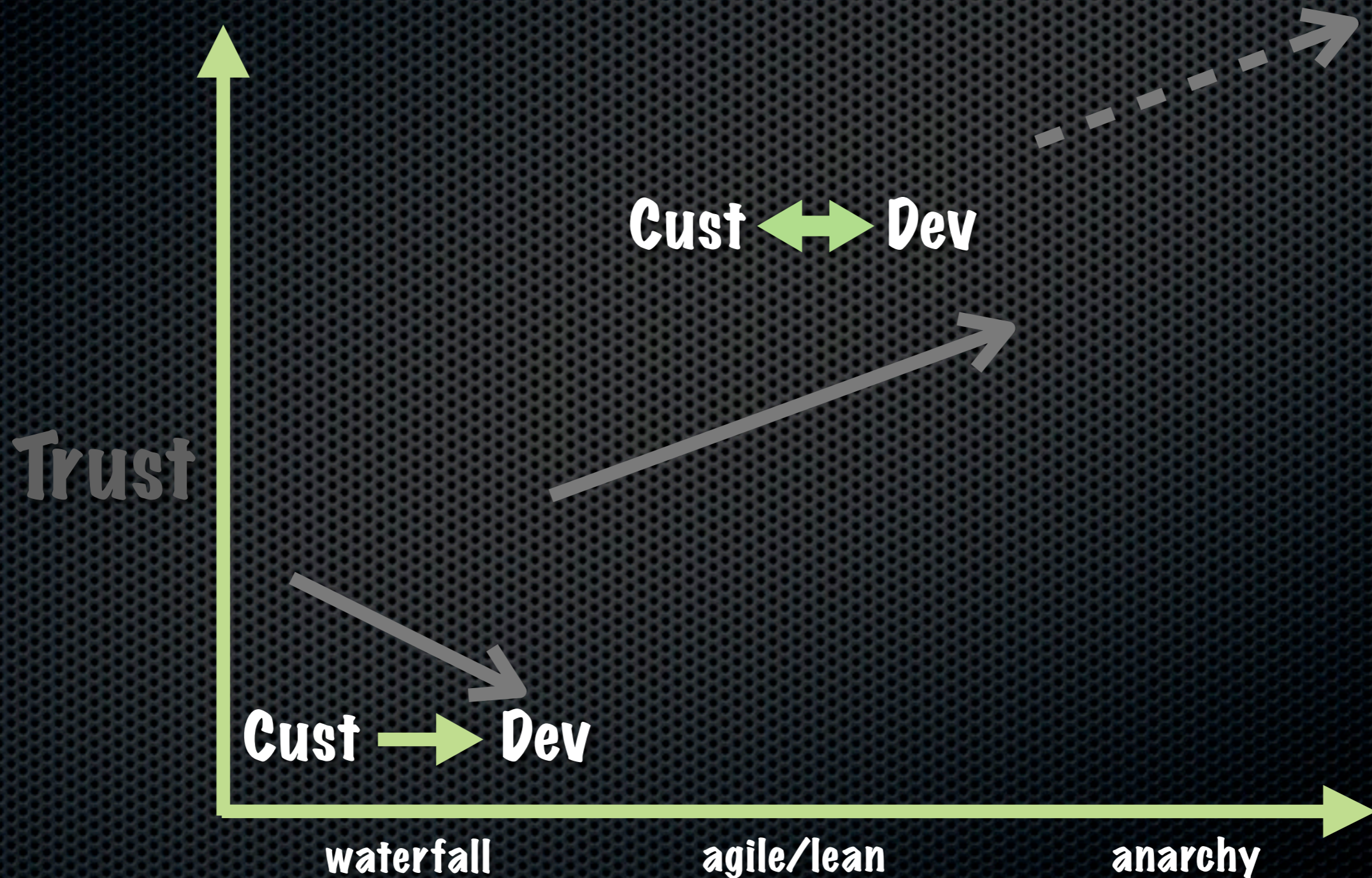
# Business Decisions Shift...



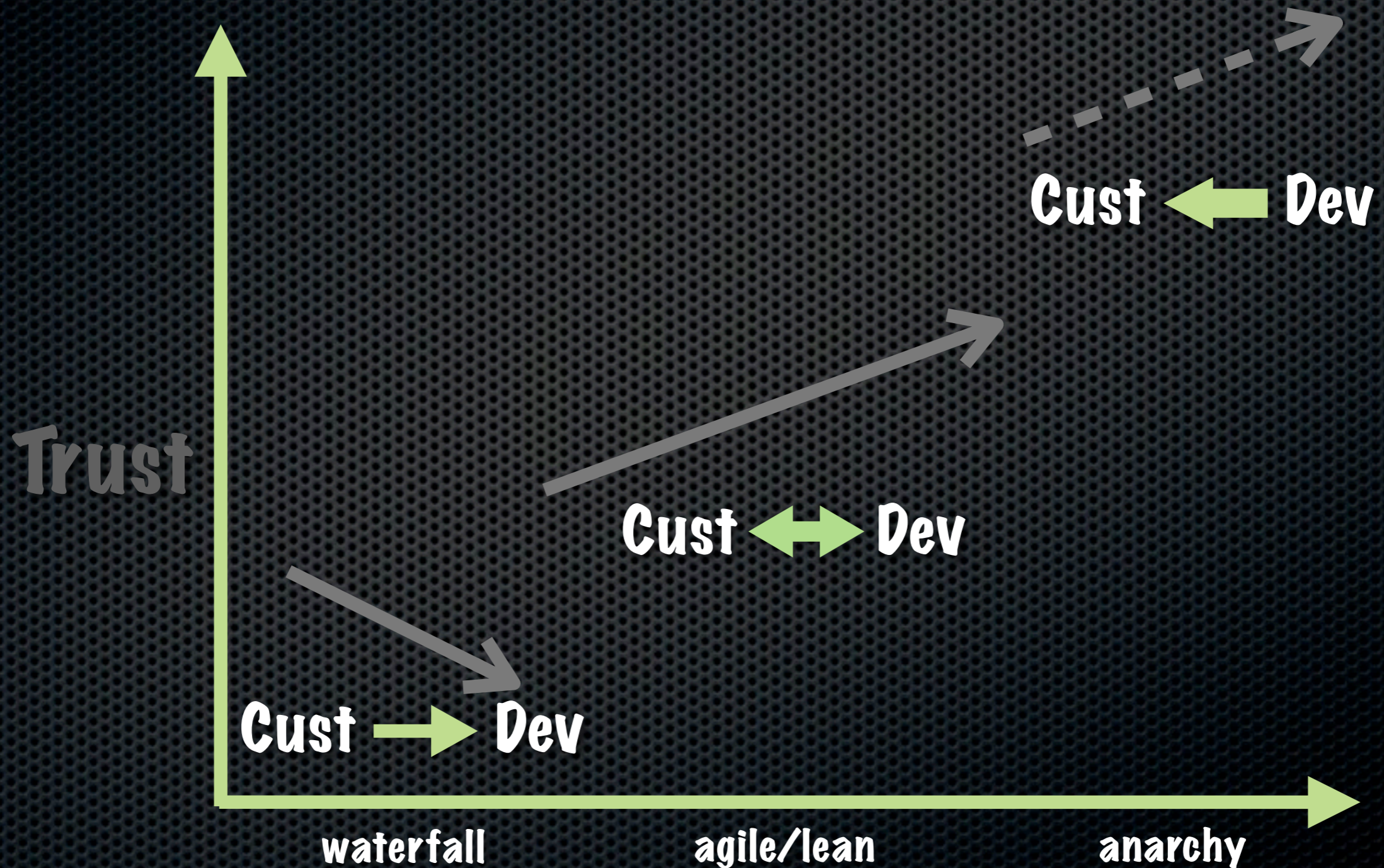
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**Agile Side Effect:**  
**Story Tyranny**



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- ✦ Development driven by stories
- ✦ Stories small
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## Problem:

Developers become disconnected  
from business problem (Drones)



# Cultural Enablers

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**Fear is the  
mind killer**

# Cultural Enablers

**Sound finances**

**Risk affine**

# Cultural Enablers

Sound finances

Risk affine

Clarity of  
success

Developer  
focused

Respected peers

# Cultural Enablers

Sound finances

Do or not do,  
there is no try

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If you are not failing,  
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The greatest barrier  
to success is  
the fear of failure



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- ✦ ~~Acceptance tests~~
- ✦ ~~Refactoring~~ **Small, short-lived apps**
- ✦ ~~Patterns~~
- ✦ ~~Continuous integration~~ **Continuous deployment**





# forwardtechnology.co.uk

Forward

We are Forward, a group of 38 geeks who share a passion for technology, blog and tweet about it. Oh, and we're hiring!

**In the last 7 days**

**38 developers have made**

**916 commits resulting in**

**492 deploys to 86 projects**



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- ✦ **Prior system:**
  - ✦ **.NET with SQLServer**

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- ✦ **Prior system:**
  - ✦ **.NET with SQLServer**
- ✦ **New system:**
  - ✦ **Ruby, Clojure, C++**
  - ✦ **MySQL, MongoDB**
  - ✦ **HAML, SASS**



# Example: Energy Revolution

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**Question:** What manager would let them to do it?

# Example: Energy Revolution

- ✦ **Ruby for energy calculation - big improvement!**
- ✦ **Rewrote in Clojure**
- ✦ **Rewrote in Clojure (again)**

**Question: What manager would let them to do it?**

**Hence: No manager!**



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- ◆ **Old system:**
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# Example: Click Tracking

- ◆ **Old system:**

- ◆ **Ruby-based, 32 servers with 40% utilization**

- ◆ **New system:**

- ◆ **Node.js, 22 servers with 10% utilization and lower latency**





# Reality Check

# Reality Check

- ✦ **Different extent by team**
  - ✦ **Talent, experience, apprehension**
- ✦ **Even our best Anarchists “ask” on occasion**
- ✦ **Commercial success driving freedom**



# Acknowledgments

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- ◆ **Anarchists**

- ◆ **Andy Kent**

- ◆ **Paul Ingles**

- ◆ **Mike Jones**

- ◆ **... and the rest of the Search Team**

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- ◆ **Enablers**

- ◆ **Carl Gaywood and Neil Hutchinson**





# PROGRAMMER ANARCHY

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