



# Driving a Successful Digital Transformation Using Abstraction and Change Agents

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West Corporation

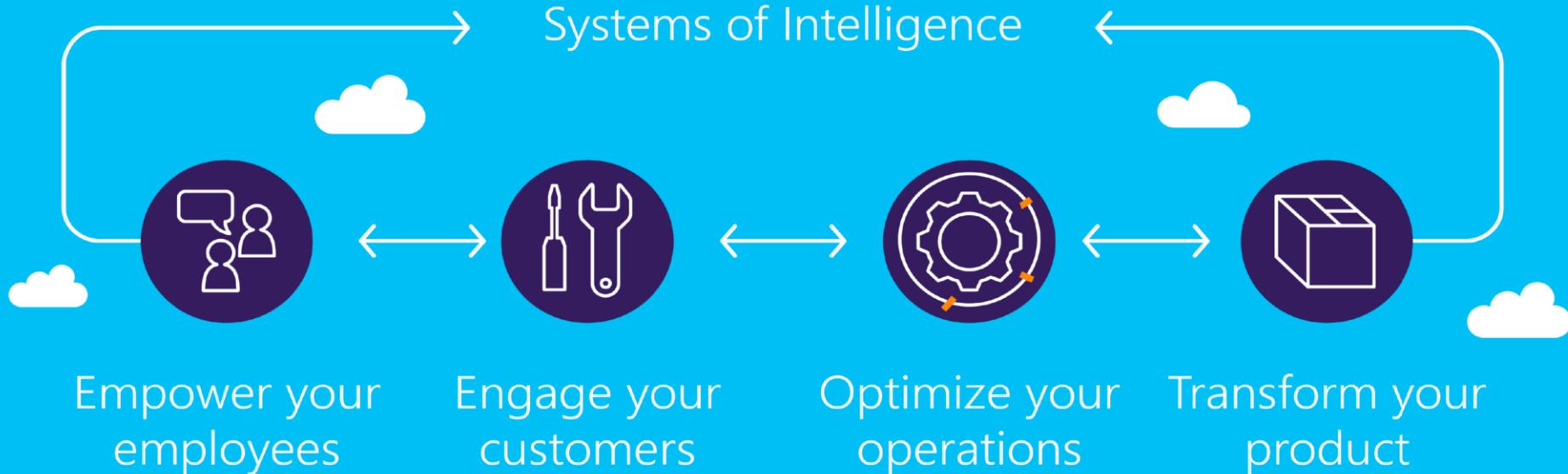
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# Digital Transformation

# Digital Transformation

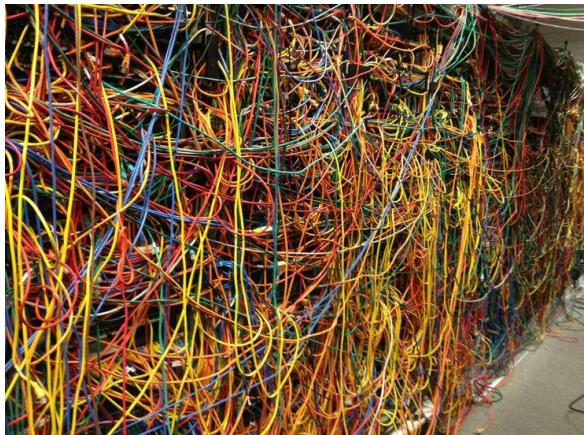


## West Corporation at a Glance

Market-leader with 30 years  
of experience,  
driving cloud-based  
communication solutions for  
a connected customer  
experience



## Problem



**Legacy Systems**

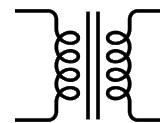
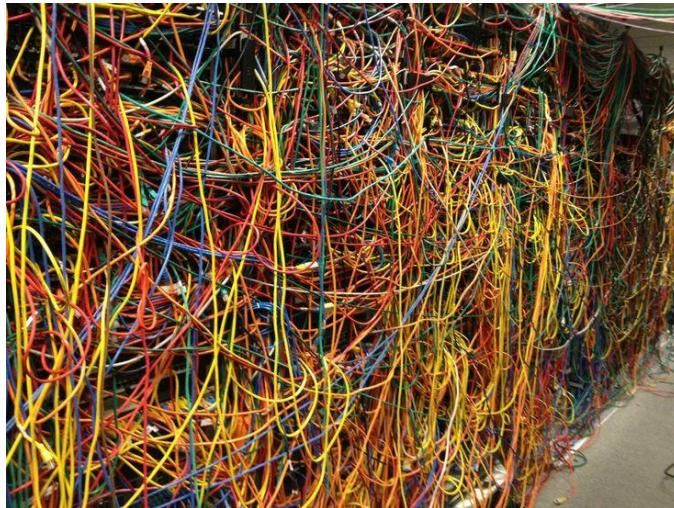




# Sprawl, Balk, Run!<sup>TM</sup>

# Transformation

$$F(s) = \mathcal{L}\{f(t)\} = \int_{-\infty}^{+\infty} e^{-st} f(t) dt$$



$$F(\omega) = \int_{-\infty}^{\infty} f(t) e^{-i\omega t} dt$$

$$f(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} F(\omega) e^{i\omega t} d\omega$$



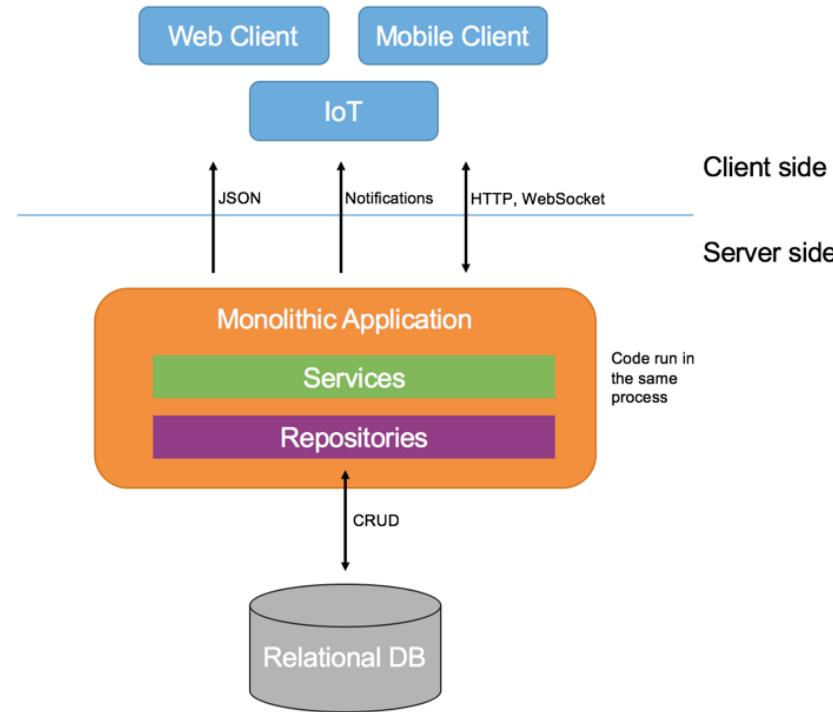
Legacy Systems



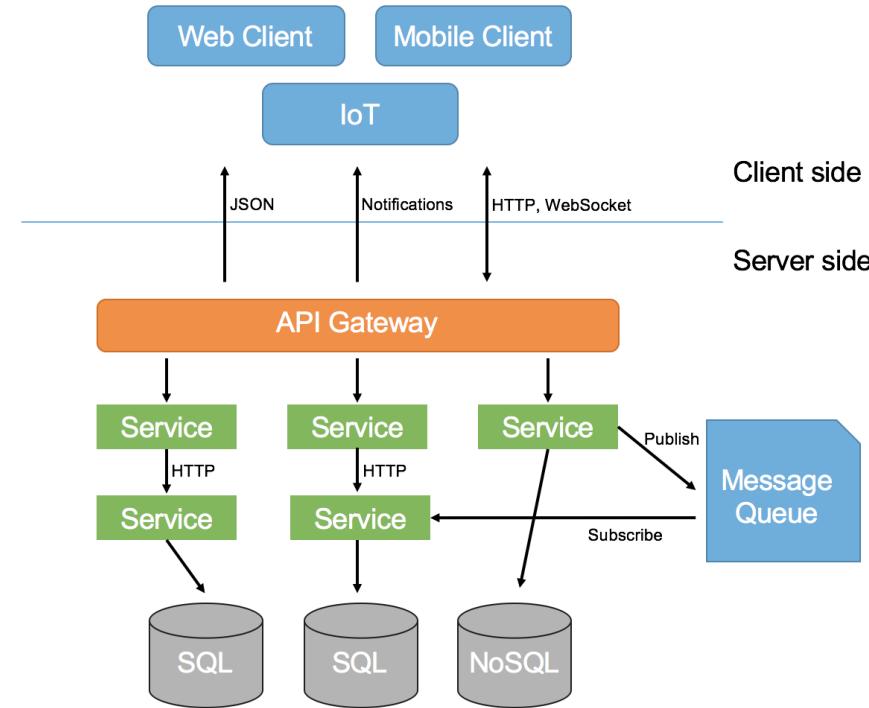
Transform

Encapsulated Systems  
(Abstracted complexity)

# From a Monolithic Architecture



# To a Cloud Native Architecture



Transforming brownfield tech is tough!





# Cultural Transformation

Foster a culture that will drive a digital transformation





# Lean

## Lean approach

Create value for customers by identifying,  
then eliminating or reducing waste

### Lean Six Sigma: 8 Wastes



Defects

Efforts caused by  
rework, scrap, and  
incorrect information.



Overproduction

Production that is  
more than needed or  
before it is needed.



Waiting

Wasted time waiting  
for the next step  
in a process.



Non-Utilized Talent

Underutilizing  
people's talents,  
skills, & knowledge.



Transportation

Unnecessary  
movements of  
products & materials.



Inventory

Excess products  
and materials not  
being processed.



Motion

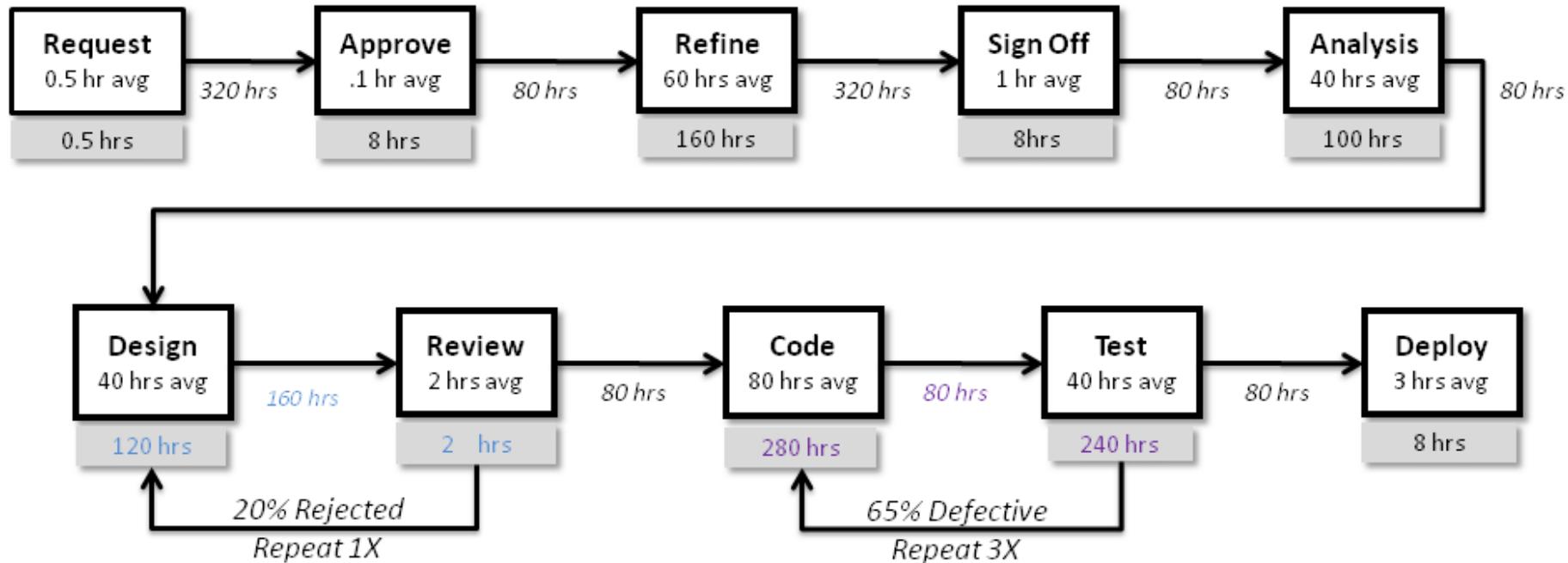
Unnecessary  
movements by  
people (e.g., walking).



Extra-Processing

More work or higher  
quality than is required  
by the customer.

# Value Stream Map

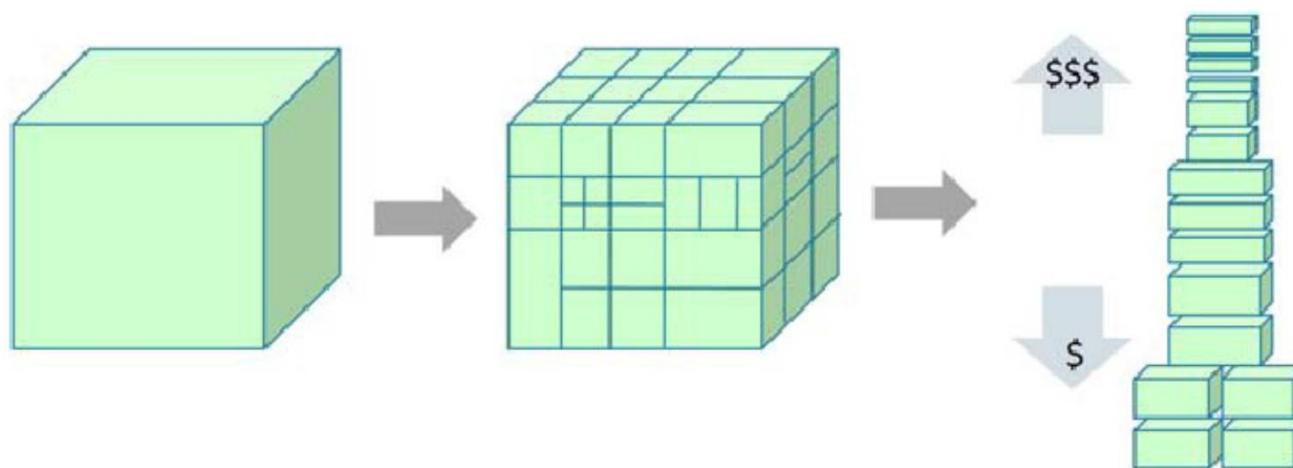




# **Software Development != Manufacturing**

# Agile

## From 'All at Once' to 'A Little at a Time'



# Agile: Scrum



## The Agile: Scrum Framework at a glance

Inputs from Executives,  
Team, Stakeholders,  
Customers, Users



Product Owner



The Team



Product  
Backlog

Team selects starting at top as much as it can commit to deliver by end of Sprint

Sprint  
Planning  
Meeting

Task Breakout

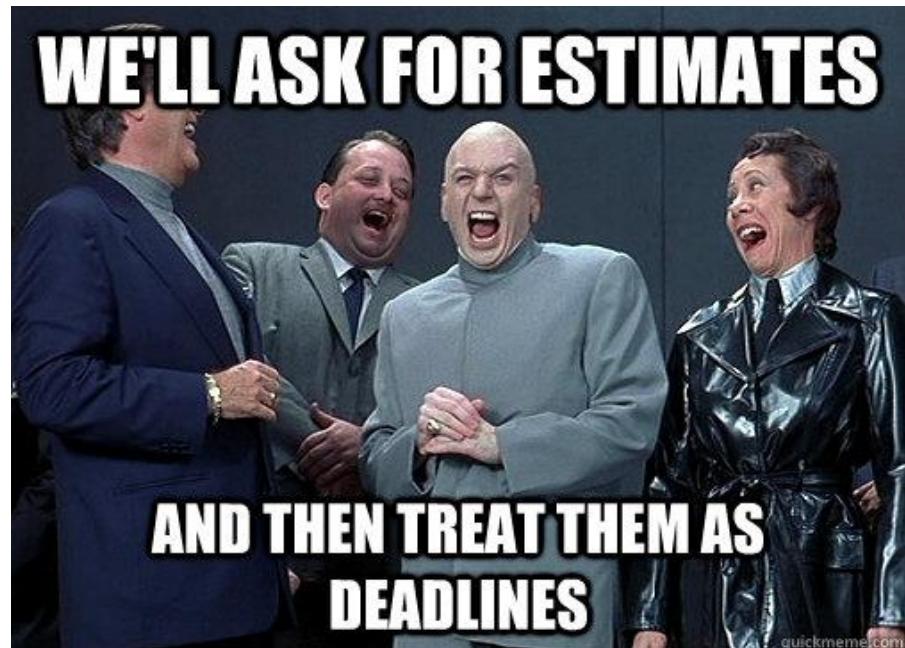
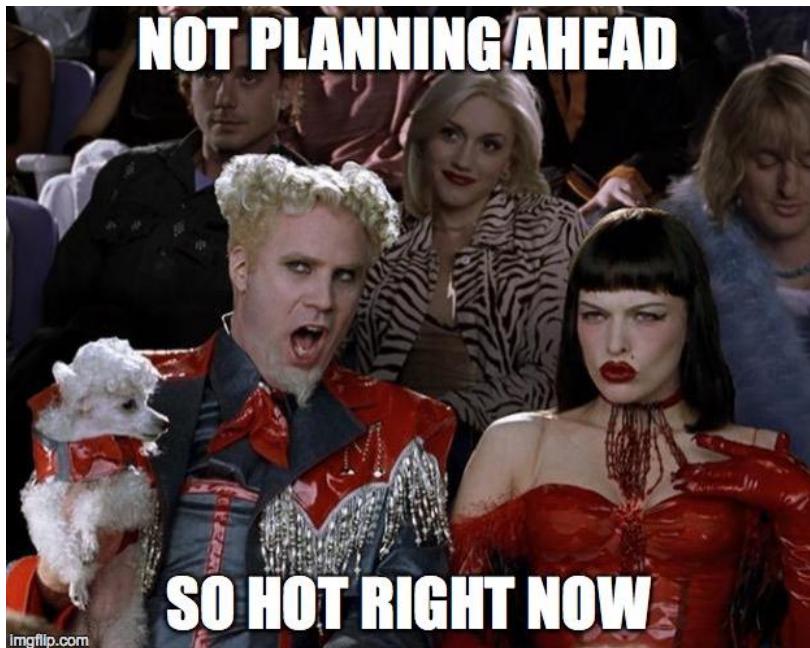
Sprint  
Backlog

Sprint end date and team deliverable do not change



## Some typical problems



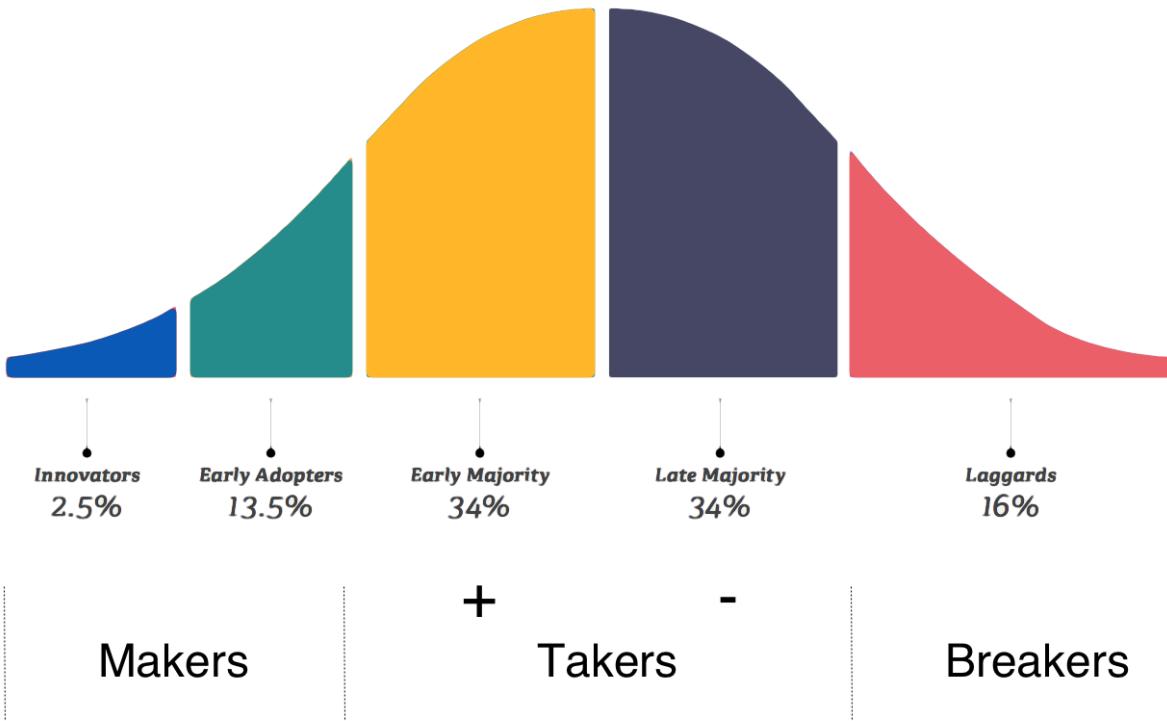


# Opinionated Approach

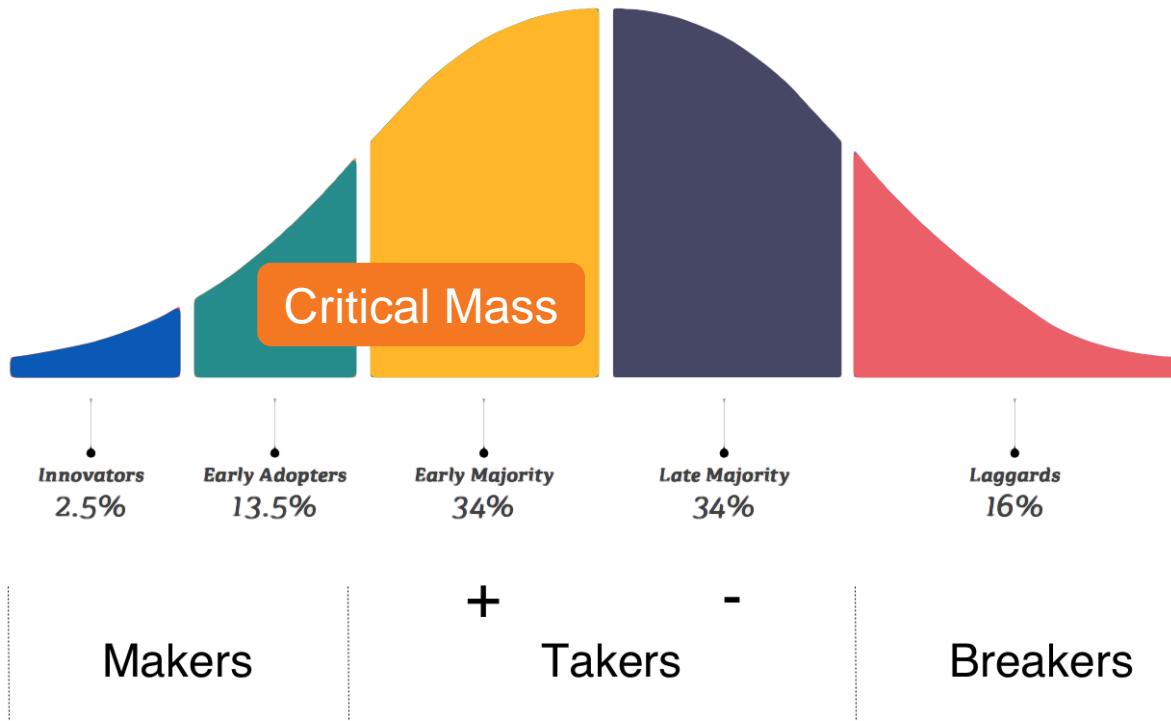


**Identify the Right Change Agents**

# Diffusion of Innovations



# Diffusion of Innovations



# Intrapreneurs

## Lean Principles

- Eliminate Waste
- Maintain simplicity

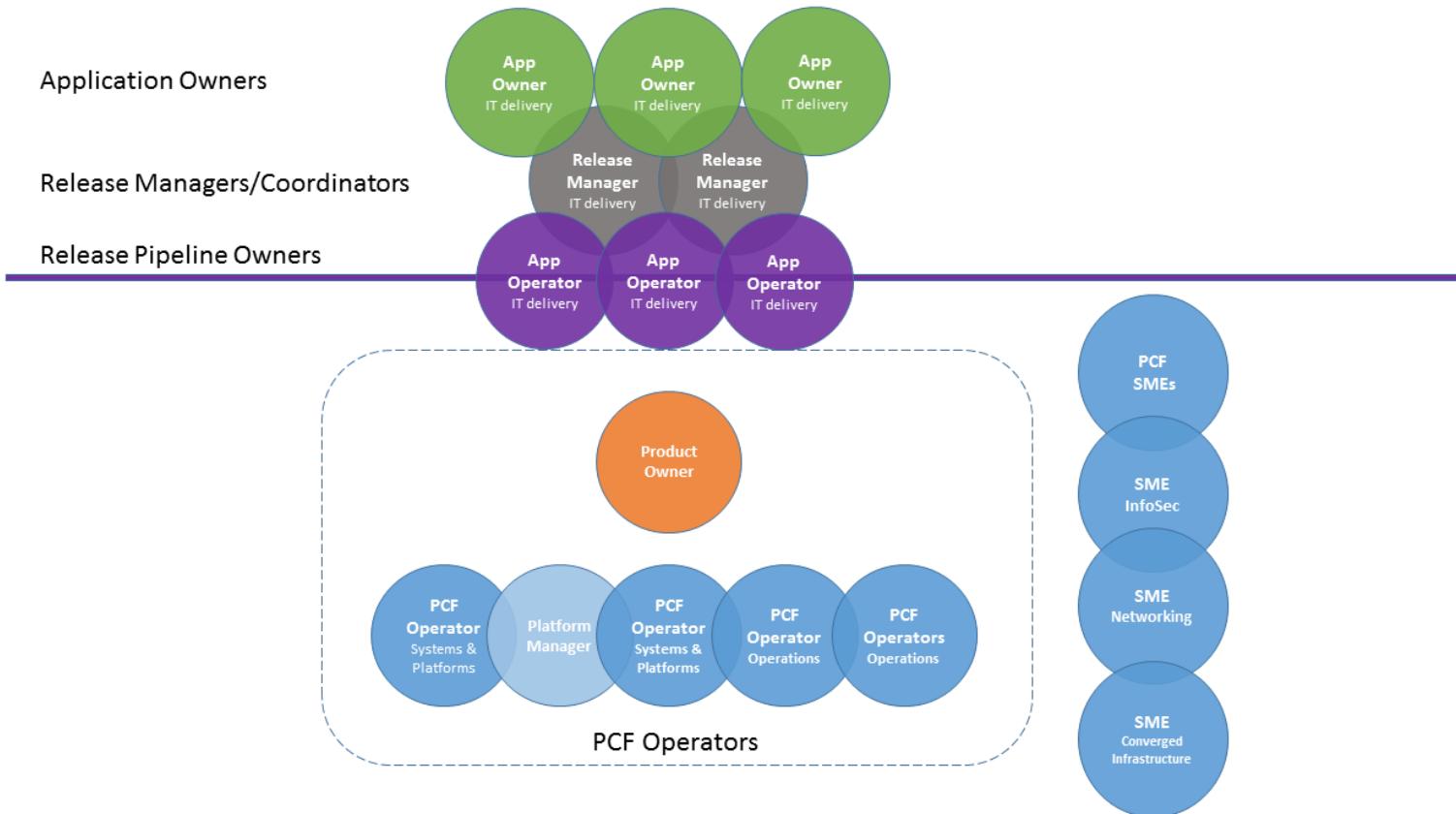
## Agile Principles

- Satisfy the customer
- Maintain simplicity

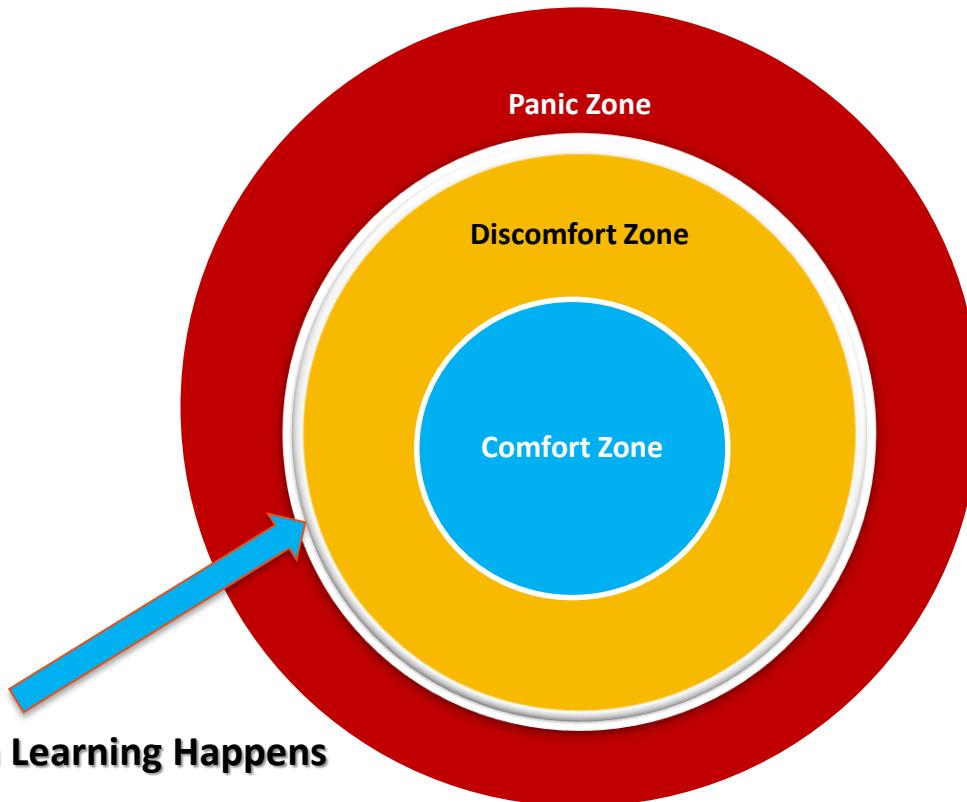
## Approach:

Progressive Elaboration (Agile) and Continuous Improvement (Kaizen – Lean)

# PCF Operators

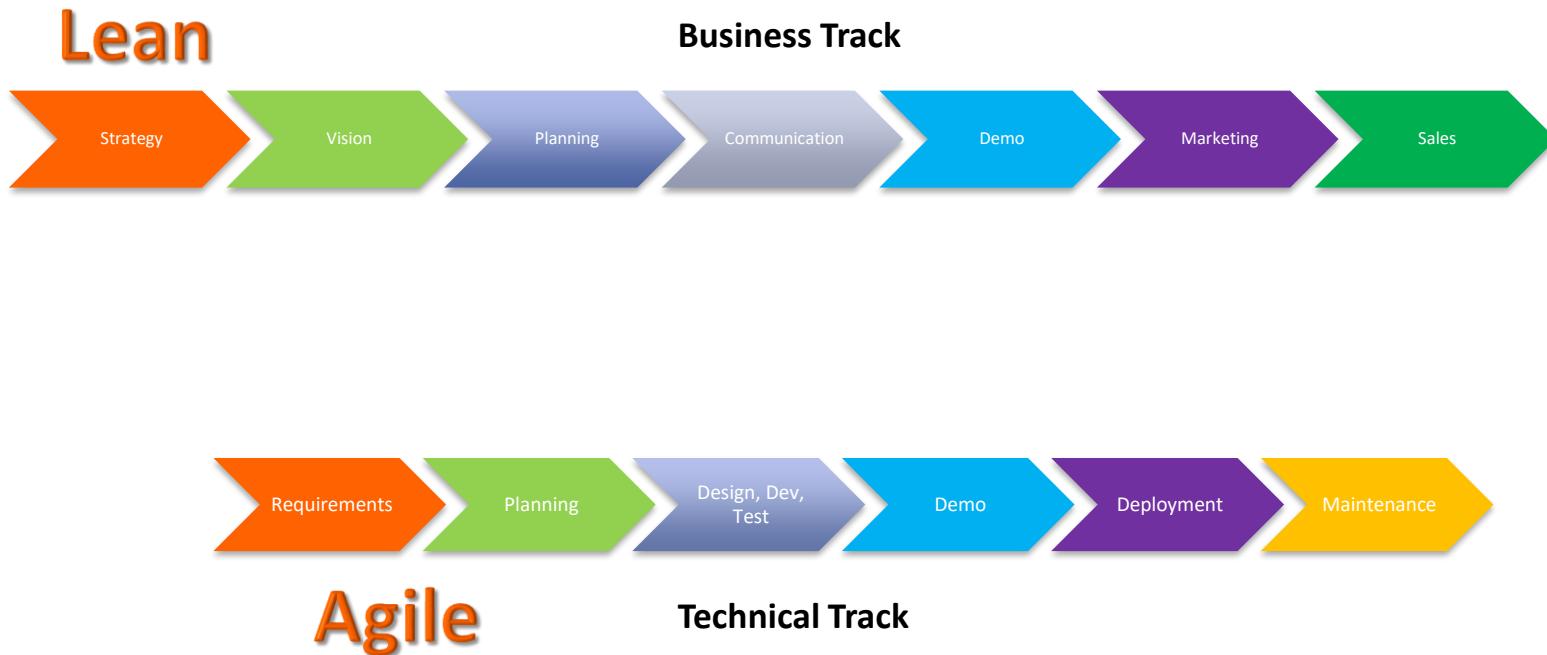


# Discomfort == growth()



**Where Maximum Learning Happens**

# Agile Engineering





# Application Transformation

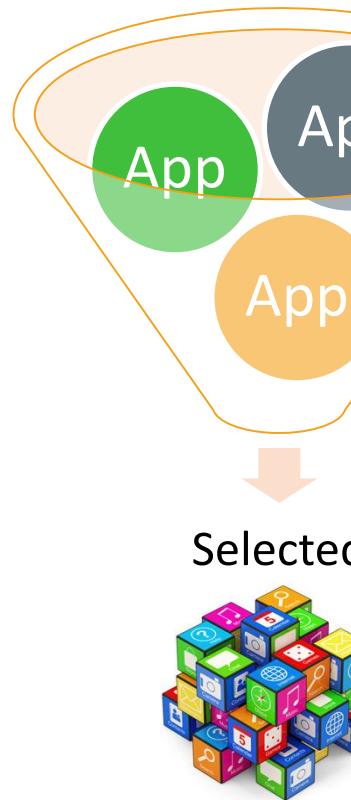
Monolithic to Loosely Coupled



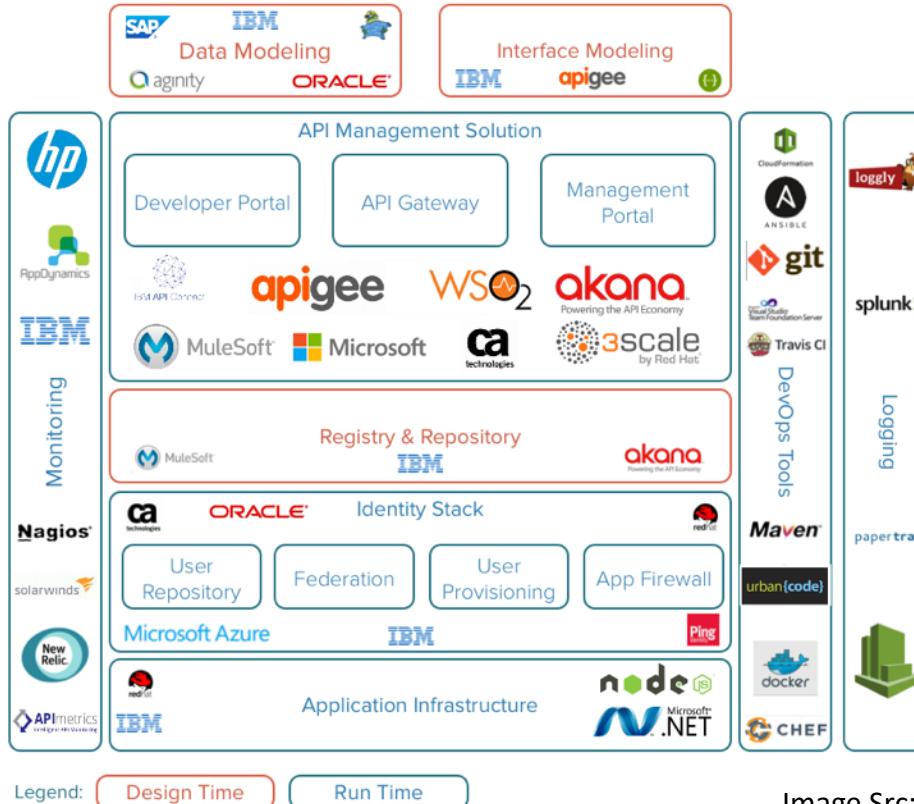
# Mise en place – Everything in its place



# Opinionated App Evaluation

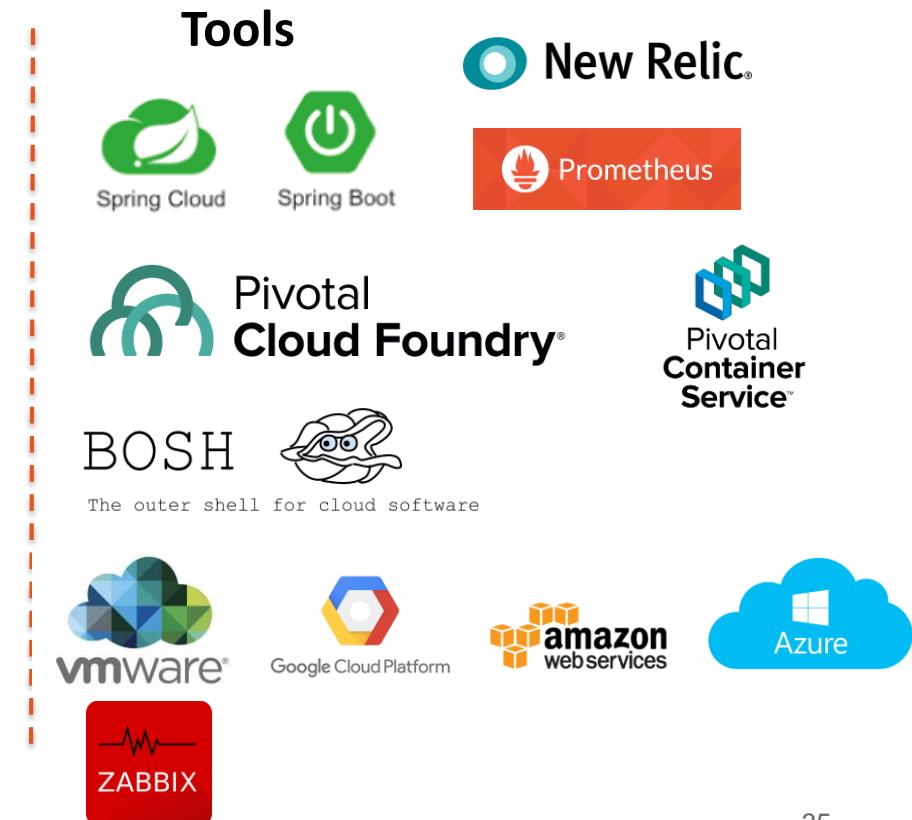
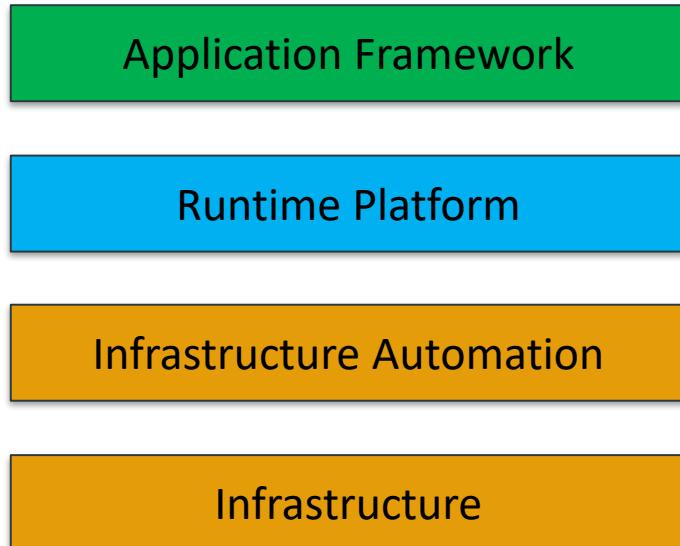


# Technology choices

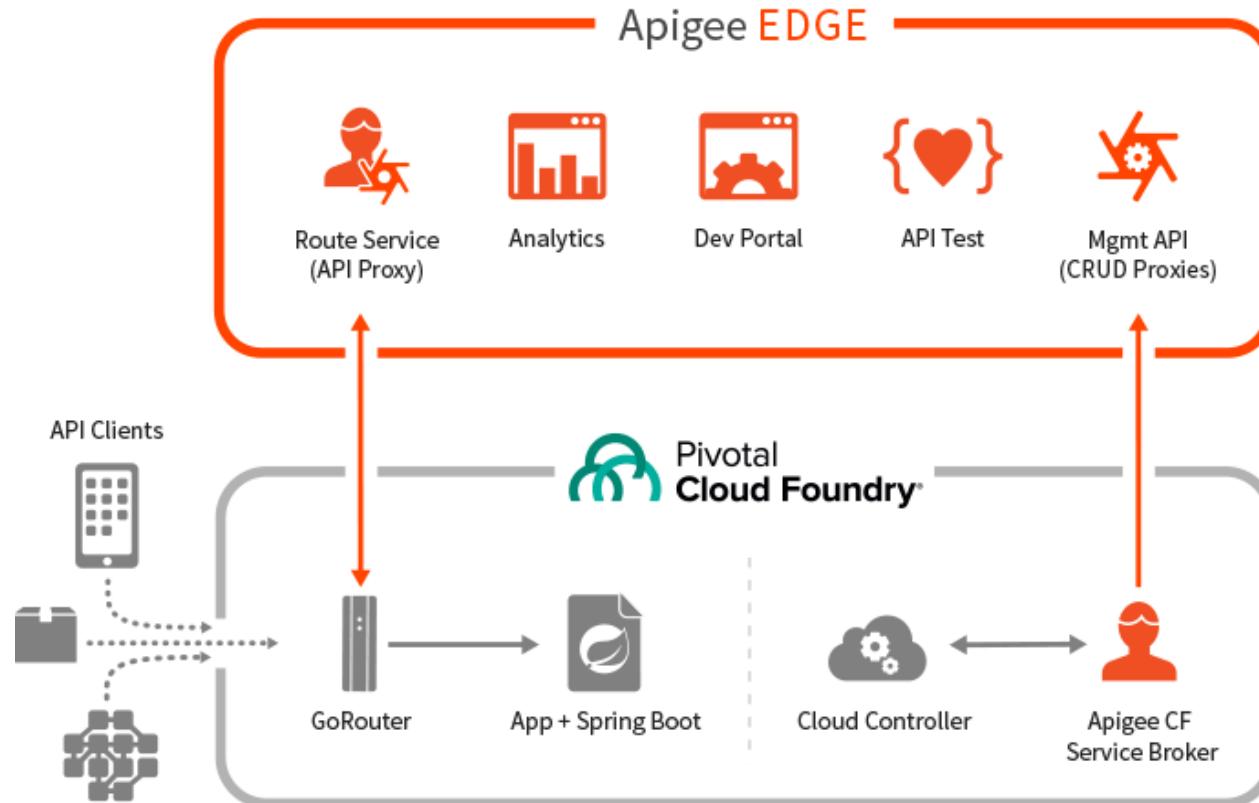


# Strategic Initiatives

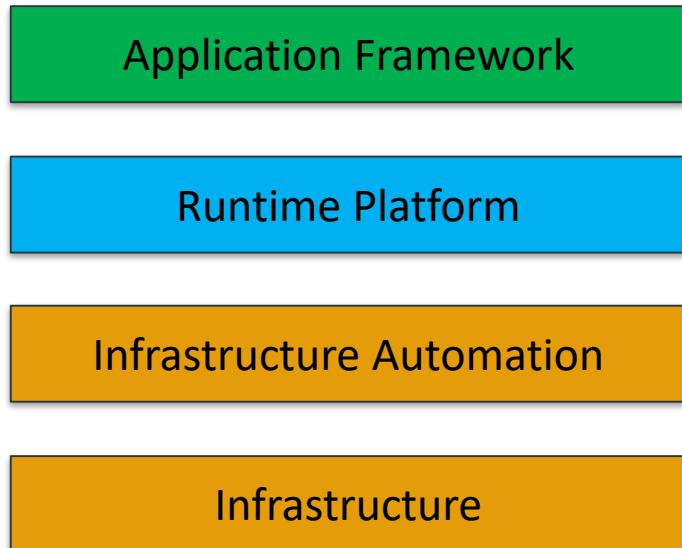
# Our Future Cloud Native Stack



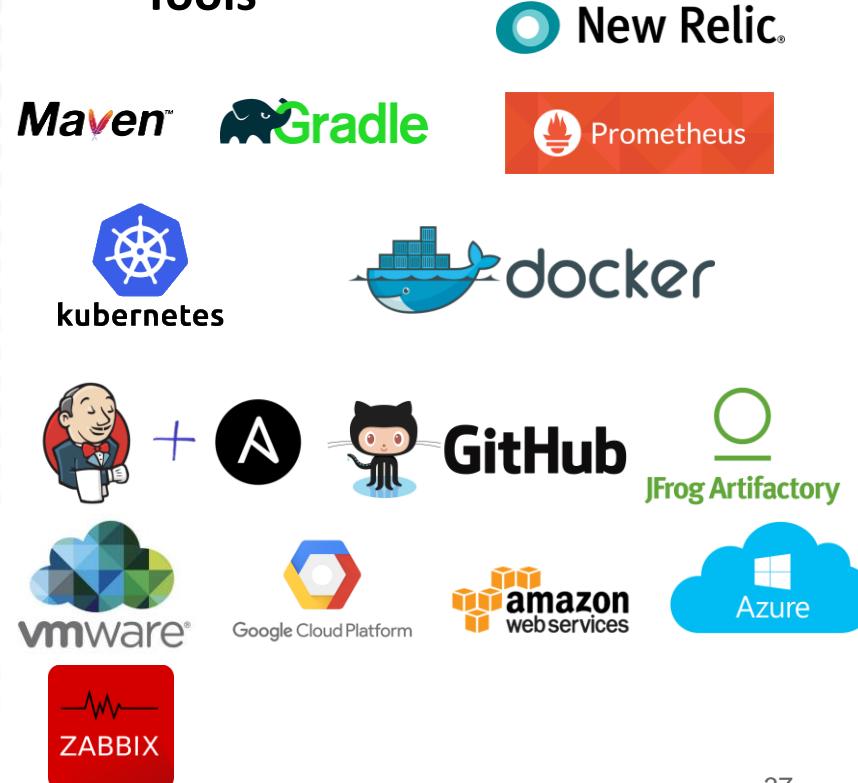
# Microservices



# Interim Cloud Native Stack



## Tools

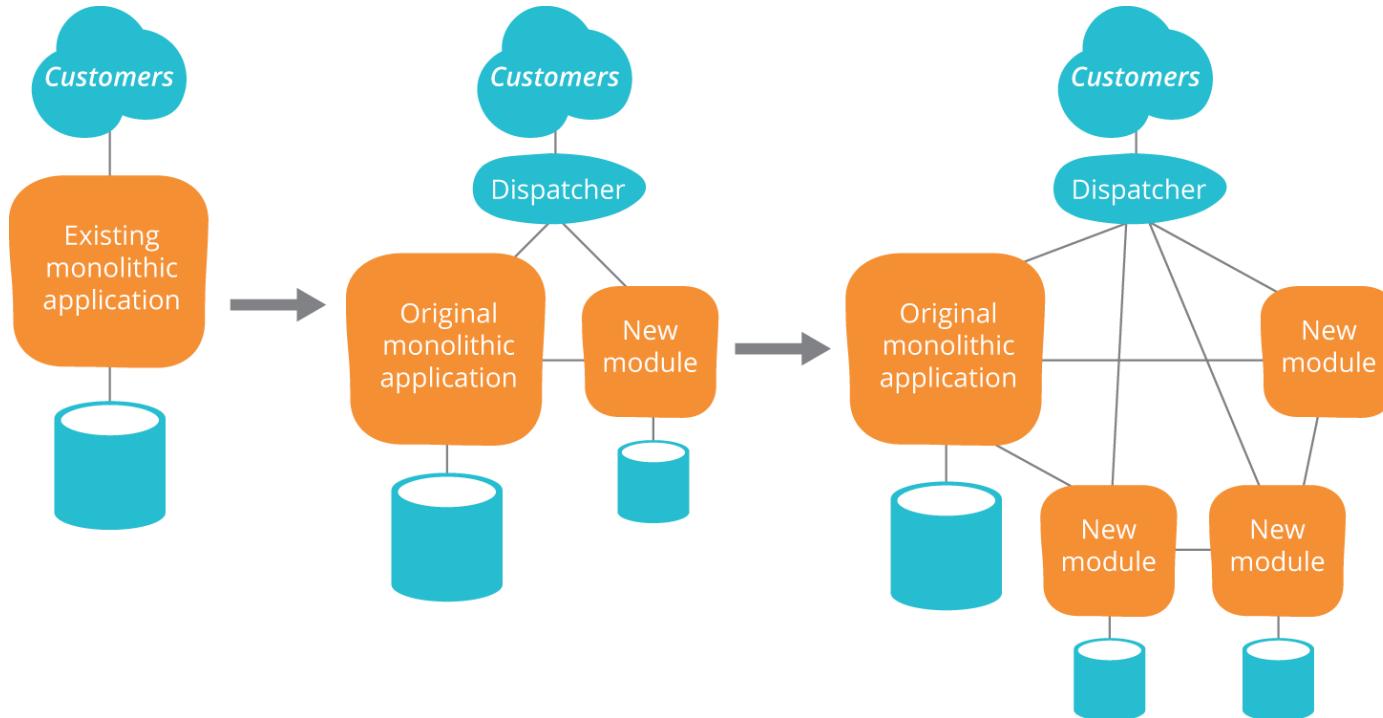


# Strangler Pattern



Strangler vines—seed in the upper branches of a fig tree and gradually work their way down to the soil—strangling and eventually killing the tree

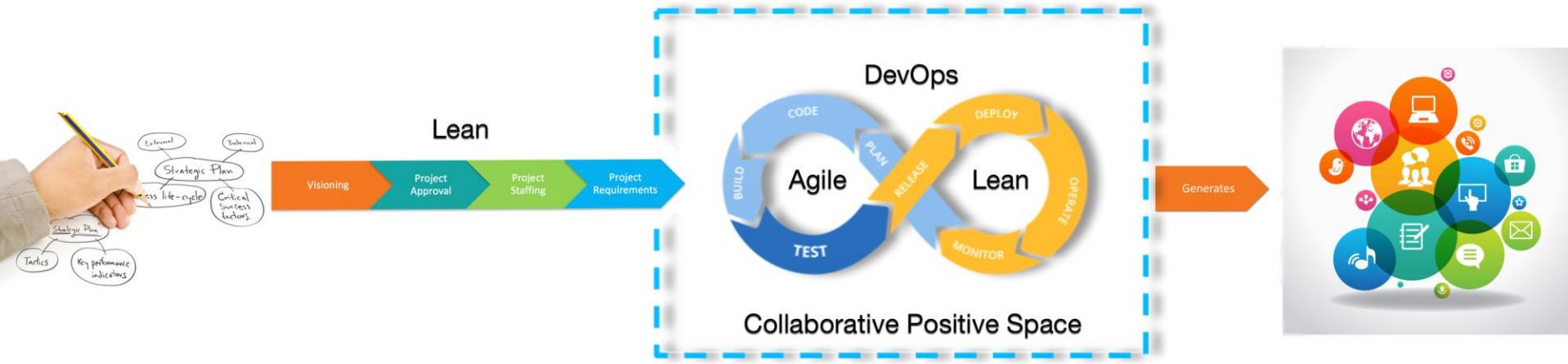
# Strangler Pattern





# 14 Months and Counting

# Agile Engineering



A successful digital transformation requires harmony among Lean, Agile, and DevOps practices  
- <http://bit.ly/2pqy4JQ>

# Agile Engineering



Culture



Automation

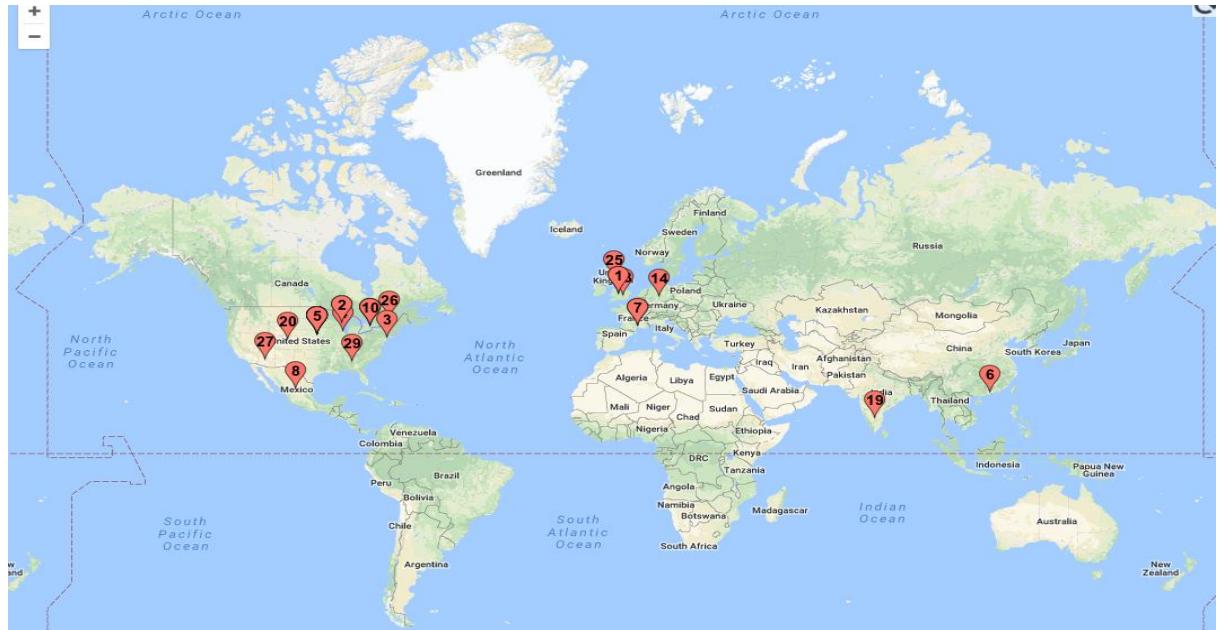


Metrics



Sharing

# First Annual Pi Day Hackathon



# First Annual Pi Day Hackathon



- March 12 – 14
- 48 hours of intense coding
- 26 teams
- Open to anyone at West
- Show off skills, bold ideas
- Demonstrate
  - Collaboration, Execution, Innovation



# My Belief: Strategic Disruption Leads to Progress





WHAT  
DIFFERENTIATES  
LEADERS IS HOW  
WE EMBRACE  
FAILURES IN OUR  
PURSUIT OF  
SUCCESS

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GAUTHAM PALLAPA

**Thank you!**