

# I Already Know Agile, Thank You Very Much

Agile 101

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## Alan Atlas

- Innovation Specialist, 18F
- CTO, Scanbuy Inc.
- 30 years in high tech – HW Eng, SW Eng, Development Mgr/Dir/VP
- Three industry-award-winning development projects (incl. Amazon S3)
- Certified Scrum Master Trainer (CST), 2006. Certified Enterprise Coach (CEC), 2008. Kanban Certified Professional, 2011.
- Instrumental in scrum adoption at [amazon.com](https://www.amazon.com)



# Agenda

**Why Agile**

**Agile Manifesto and Principles**

**Iterative Development**

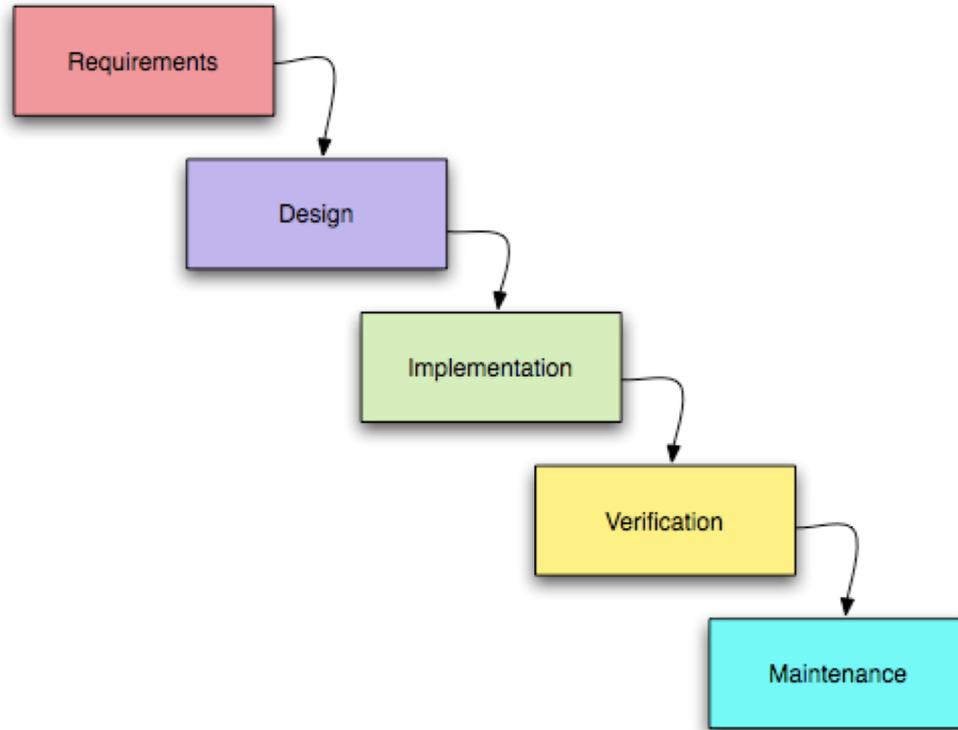
# Why did we need Agile?

- In the 80s, software development left much to be desired
  - **slow and unpredictable**
    - poor ability to deliver
  - **bad quality**
  - **wrong features**
  - **bad UX**

# Why was it so bad?

- Waterfall methodology
- Immature tools and technology
- Lack of understanding of user-centered design

# “Waterfall” Methodology



# Waterfall Challenges

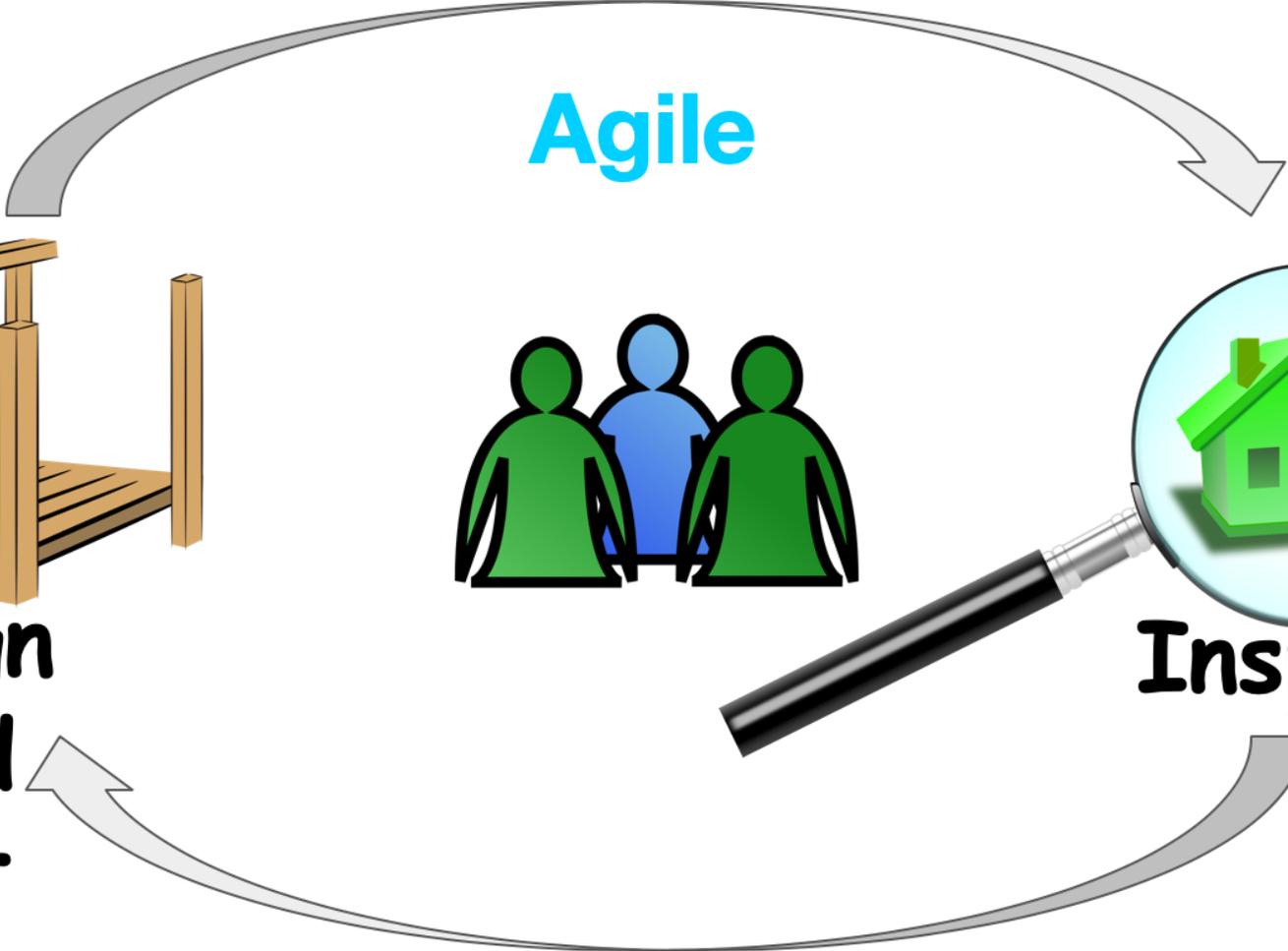
- **Cost of change**
- **Cost of release**
- **Large decisions with least knowledge**
- **Predicting the future**
- **Illusion of progress**
- **Inability to respond to change**
- **Ambiguous accountability**
- **Poor quality**

**Agile**



**Design  
Build  
Test**

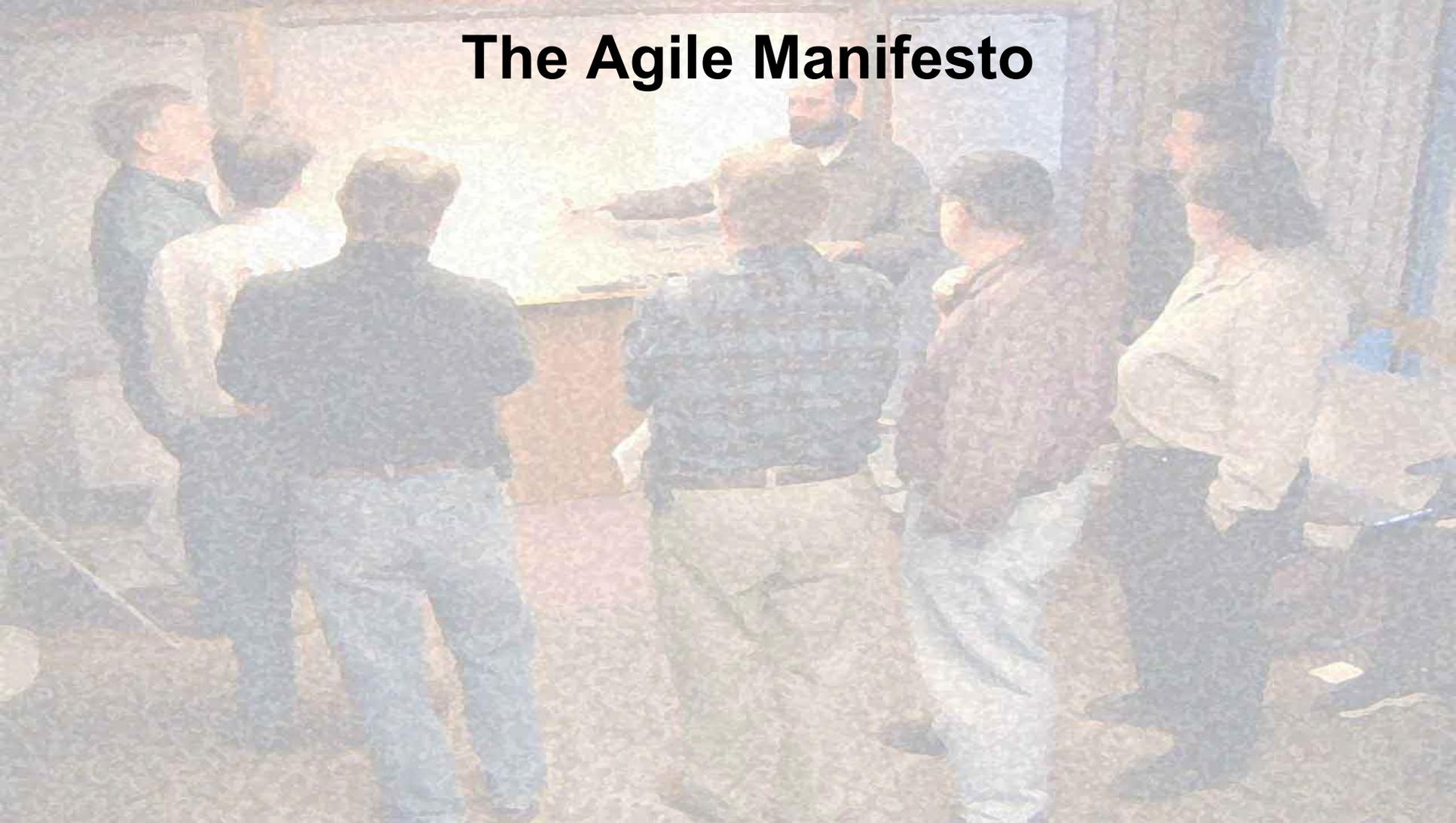
**Inspect**



# Potential Benefits of Agility

- Higher productivity
- Higher quality
- Increased flexibility and customer focus
- Reduced time to market
- Lower risk (both Market and Technical)
- More fun, more satisfying==> better morale

# The Agile Manifesto



# Agile Principles - Delivering

- Satisfy the customer through early and continuous delivery
- Deliver frequently, preferring a shorter timescale
- Working software is the primary measure of progress



# Agile Principles - Working

- **Technical excellence** and good design enhances agility
- **Simplicity**, maximizing the amount of work not done
- **Welcome changing requirements**
- **Sustainable pace**



# Agile Principles - Team

- **Business & technical** people work together daily
- **Build teams with motivated individuals & trust them**
- **Best results emerge from self-organizing teams**
- **The team regularly reflects to become more effective**
- **Face-to-Face** communication

# So what is Agile, then?

- Agile is a culture, a way of thinking, and a way of creating things.
- Agile people try to do things in an agile way.
- Agile is an overall approach to delivering value and pleasing customers.

**“Agile is something you *are*, not something you *do*.”**

***-Alan***

# Agile is not...

- a process
- a software development method(ology)
- a way to cut corners or build crap
- a way to produce low quality products quickly
- any old thing that you think is “a good thing to do”
- the Engineering Liberation Front
- a silver bullet that will fix everything that is wrong at your agency/organization
- always a good solution for your agency/organization

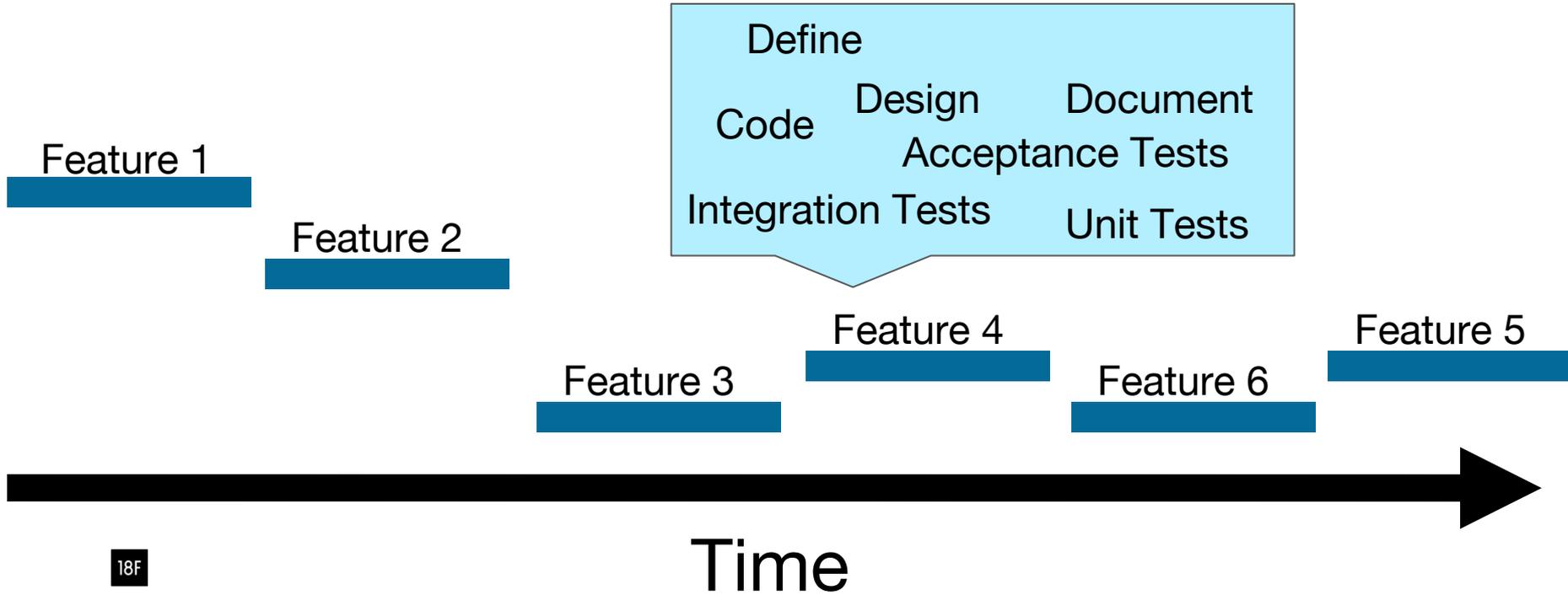
**Agile ≠ agile!**

# Delivering Frequently (Iterative Development)

# Why deliver frequently?

- User feedback
  - Discover value (solutions)
  - Validate design
- Minimize Technical Risk
  - Avoid a large pile of unplanned, unknown work at the end by completing things in small bites
  - Make problems small and solve as you go
- Agility
  - Easy to quickly change direction

# Agile development model



# **Example:**

# **Fed Ramp Dashboard**

**{{FEDRAMP Dashboard goes here}}**

# FedRAMP Dashboard

Total Authorized: 2  
Leveraged ATOs: 0  
Cost Savings: 0

# FedRAMP Dashboard

**Total Authorized:** 0 *(Sum of authorized CSPs)*

**Leveraged ATOs:** 0 *(Sum of leveraged ATOs)*

**Cost Savings:** 0 *(Total reuse \* \$250,000)*

# FedRAMP

**Total Authorized:** 0 *(Sum of authorized CSPs)*

**Leveraged ATOs:** `{{homeController.leveragedAtos()}}` *(Sum of leveraged ATOs)*

**Cost Savings:** `{{homeController.totalCostSavings()}}` *(Total reuse \* \$250,000)*

# FedRAMP



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**0**

Total reuses

**67%**

TBD

**\$0**

Cost Savings

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Total Authorized

**3,297**

TBD

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TBD

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0

Total reuses



0

Total Authorized

 **67%**  
TBD

 **\$0**  
Cost Savings

 **3,297**  
TBD

Filter results by

 **0**  
Total

 **0%**  
Compliant



Name 

Service Models 

Deployment Model 

Impact Level 

Status 



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Total reuses



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Total Authorized

67%  
TBD

\$0  
Cost Savings

3,297  
TBD

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Cloud Service Providers

Agencies

3PAO

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Total

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Compliant



X Clear All

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- Providers +

Name Service Models Impact Level Status

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### Products as a glance



0

Ready



0

In Process



0

Authorized

Filter results by

Products

Agencies

Assessors



[x Clear All](#)    Name    Service Models    Impact Level    Status   

Search by Provider or Product

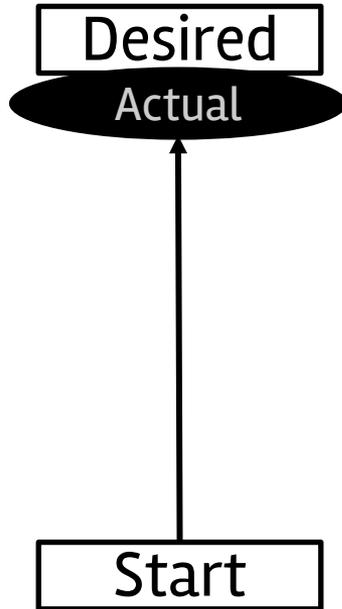
0 results

- Status
- Reuse Range
- Service Models
- Deployment Models
- Agencies
- Impact Level
- Providers

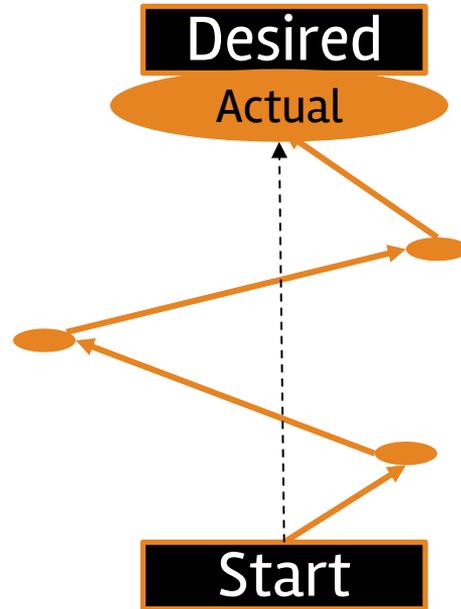
Export to CSV

# Achieving a Vision

Plan-Driven

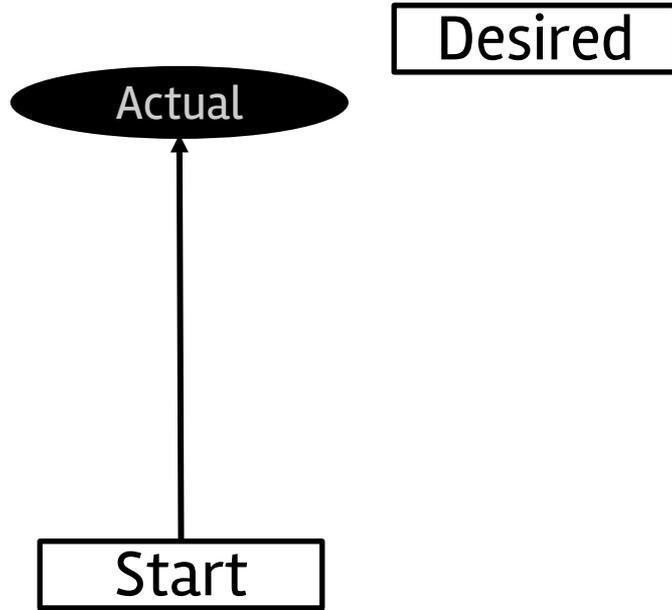


Iterative

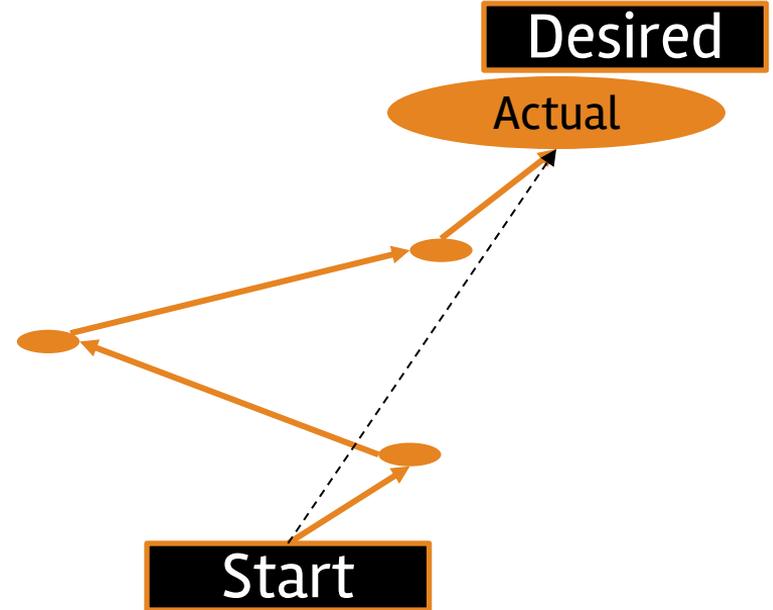


# Achieving a Vision, cont'd.

Plan-Driven



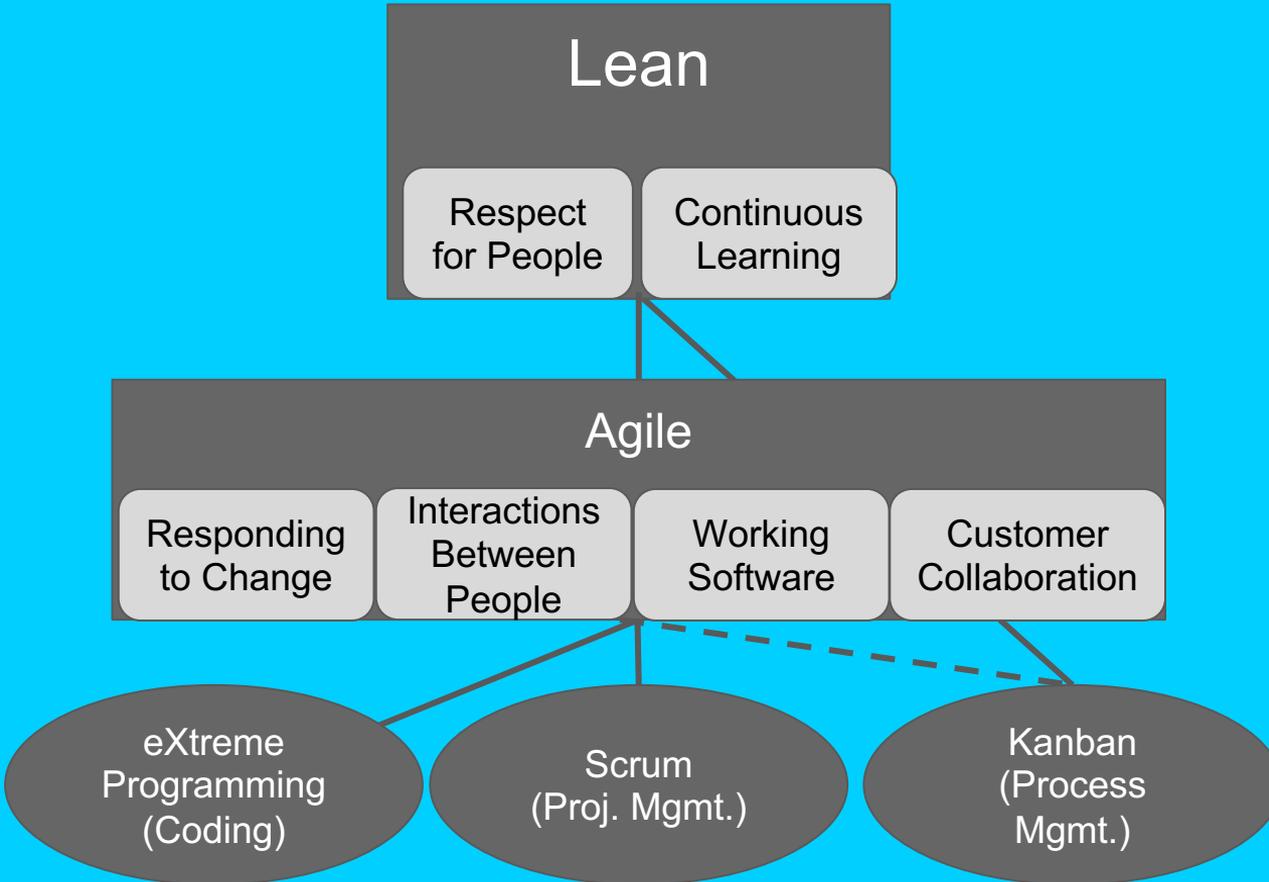
Iterative



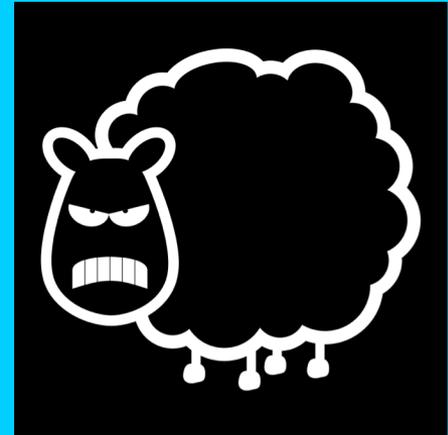
# What about things other than software development?

- **Fit the agile model as closely as you can**
- **Deliver something usable frequently**
- **Build iteratively and do iterations**
- **Small, self-organized teams**
- **Continuous learning**

# The Family Tree



Waterfall



# Thanks!

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# Appendix

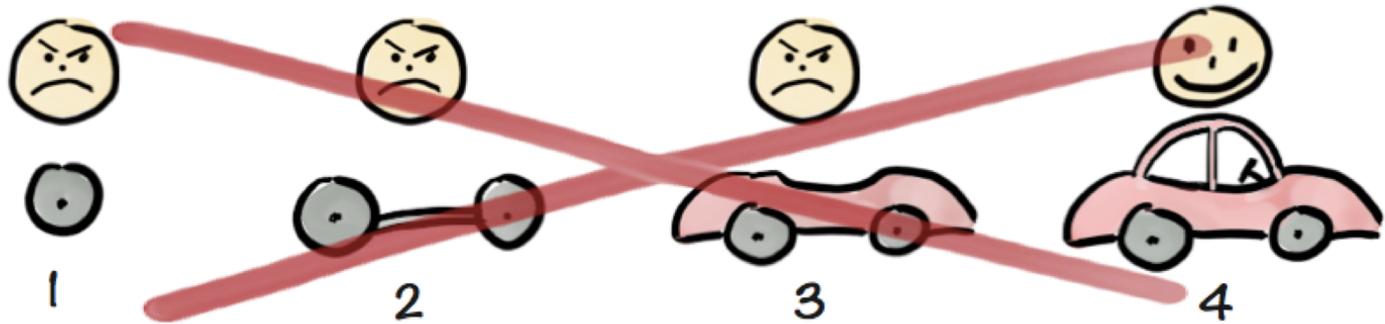
# The Iterative Thought Process

- Focus on the underlying need
- Fulfill some of that need in the simplest way possible
- Produce a Usable Product ASAP
- LEARN
- Lather, rinse, repeat

# What is an Agile organization?

- **An organization that nurtures and supports Agile delivery teams**
- **An organization that incorporates Agile culture and thinking in its daily work**

Not like this....



Like this!

