

# I Already Know Agile, Thank You Very Much

Agile 101

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- 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](http://amazon.com)



# Agenda

**Why Agile**

**Agile Manifesto and Principles**

**Iterative Development**

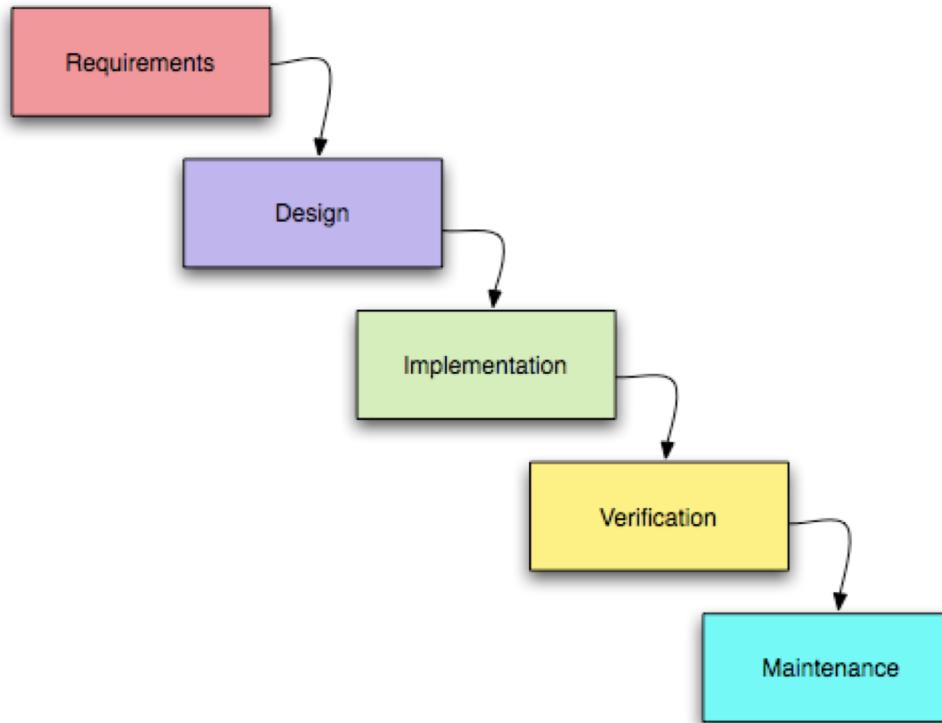
# Why did we need Agile?

- 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**

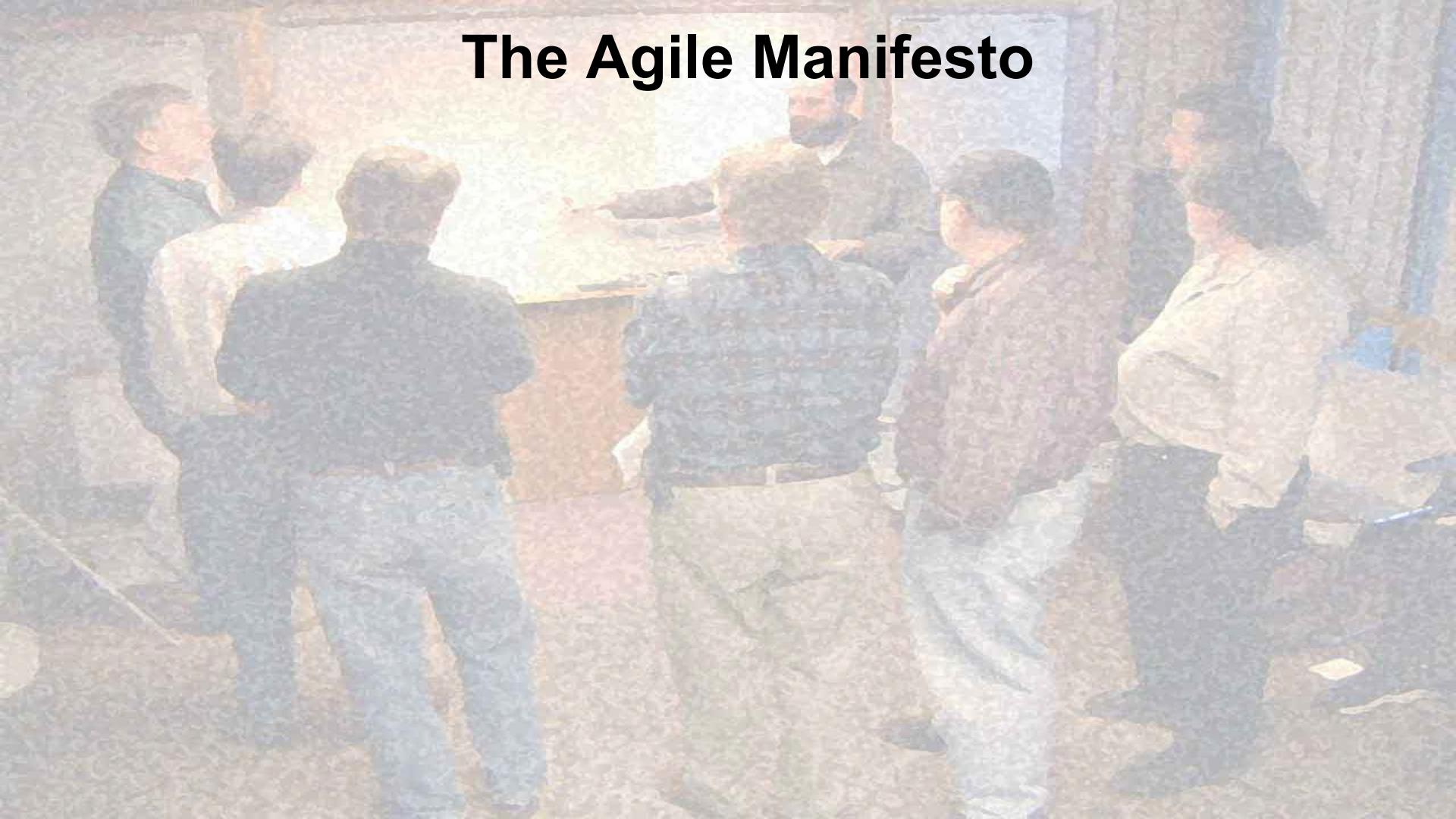


**Design  
Build  
Test**

**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

A photograph of a group of approximately eight people in a workshop or office environment. They are gathered around a large table, looking down at a document or whiteboard on it. The scene is lit from above, creating strong shadows on the floor. The people are dressed in casual to semi-casual attire.

# 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

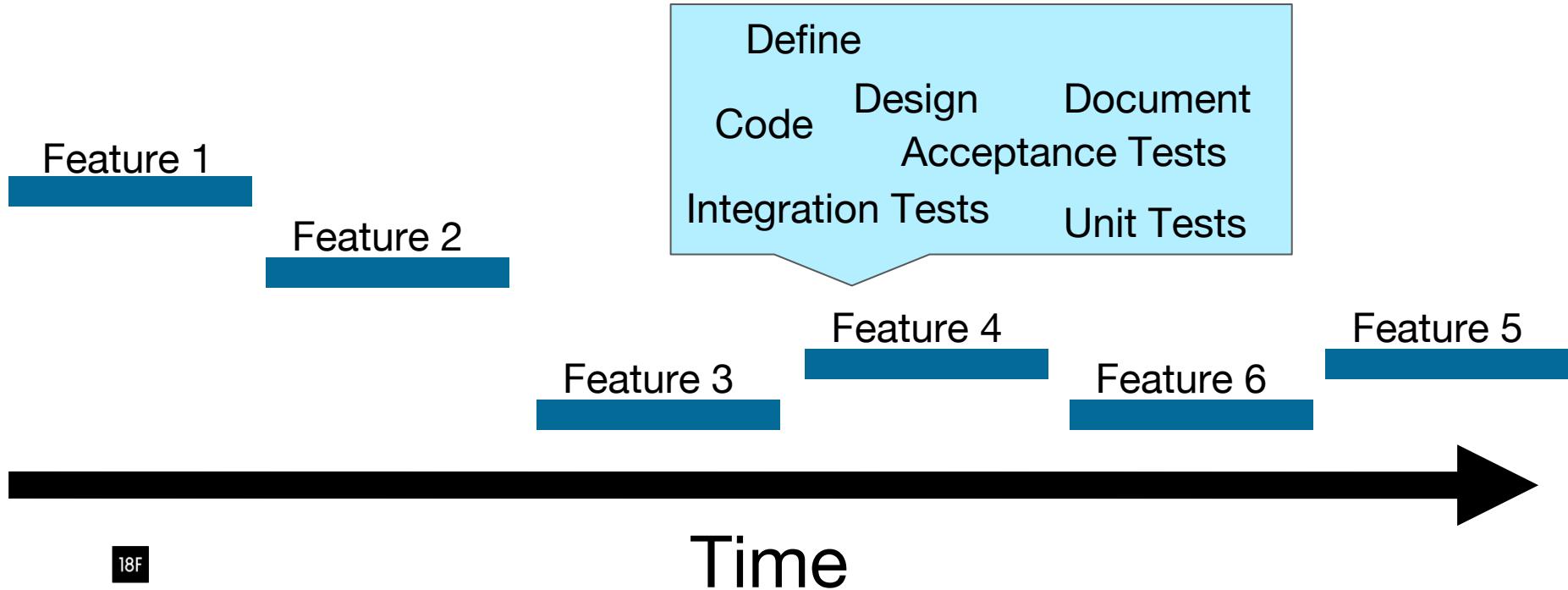
Agile ≠ agile!

# 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*)

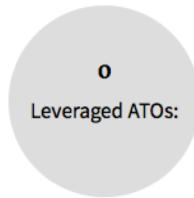
# FedRAMP

**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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Total reuses

**0**

Total Authorized

**67%**

TBD

**\$0**

Cost Savings

**3,297**

TBD

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Total reuses



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Total Authorized



67%  
TBD



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Cost  
Savings



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Total reuses



Total Authorized

67%  
TBD\$0  
Cost  
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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

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**Status**

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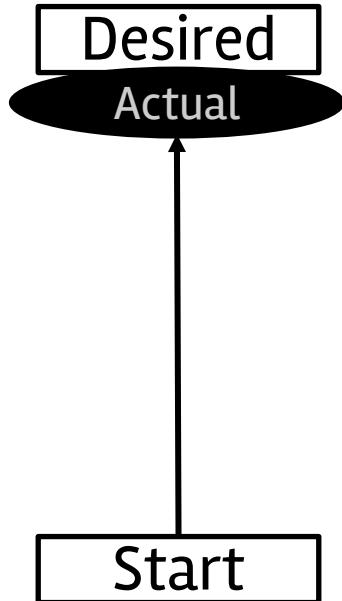
**Providers**

+

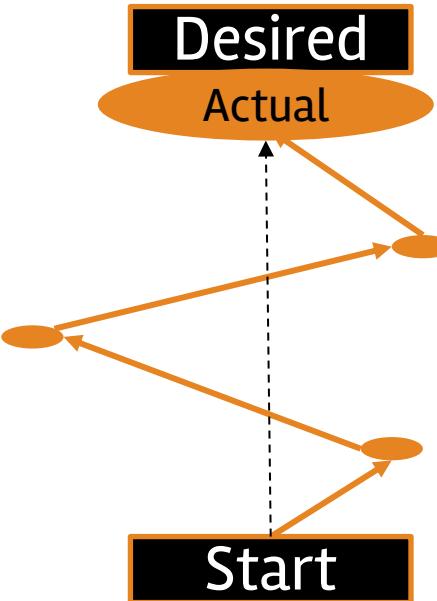
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# Achieving a Vision

Plan-Driven



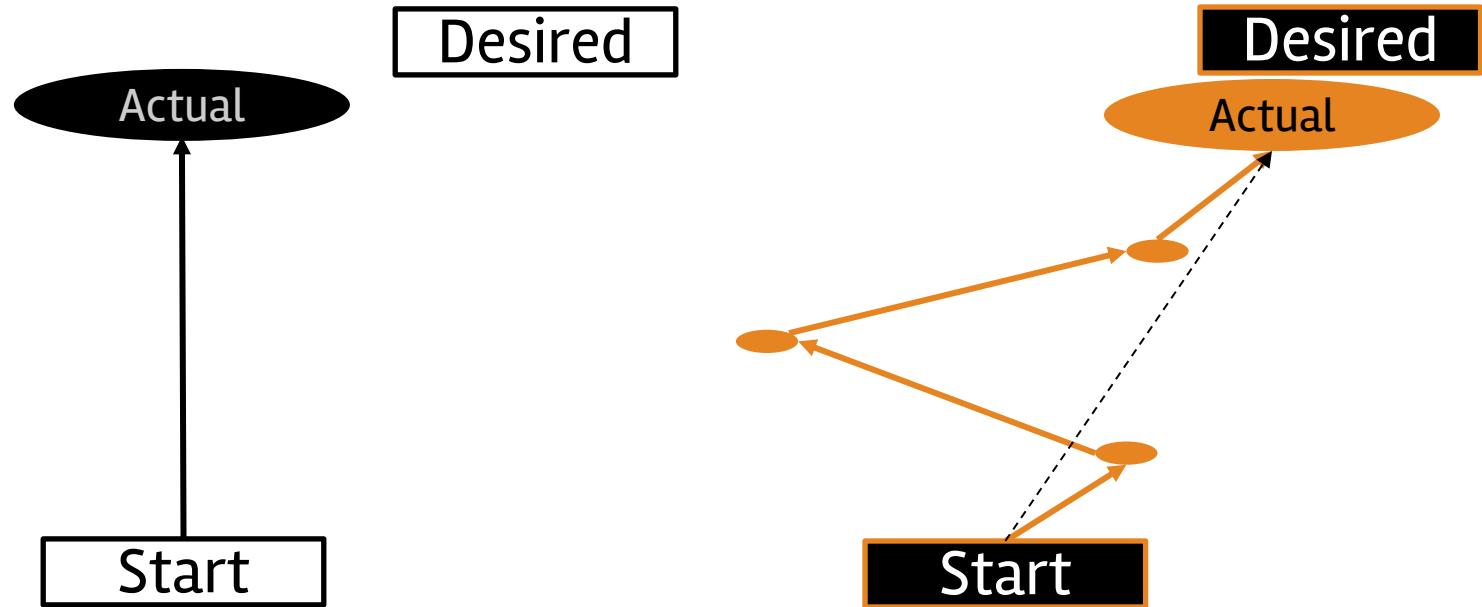
Iterative



# Achieving a Vision, cont'd.

Plan-Driven

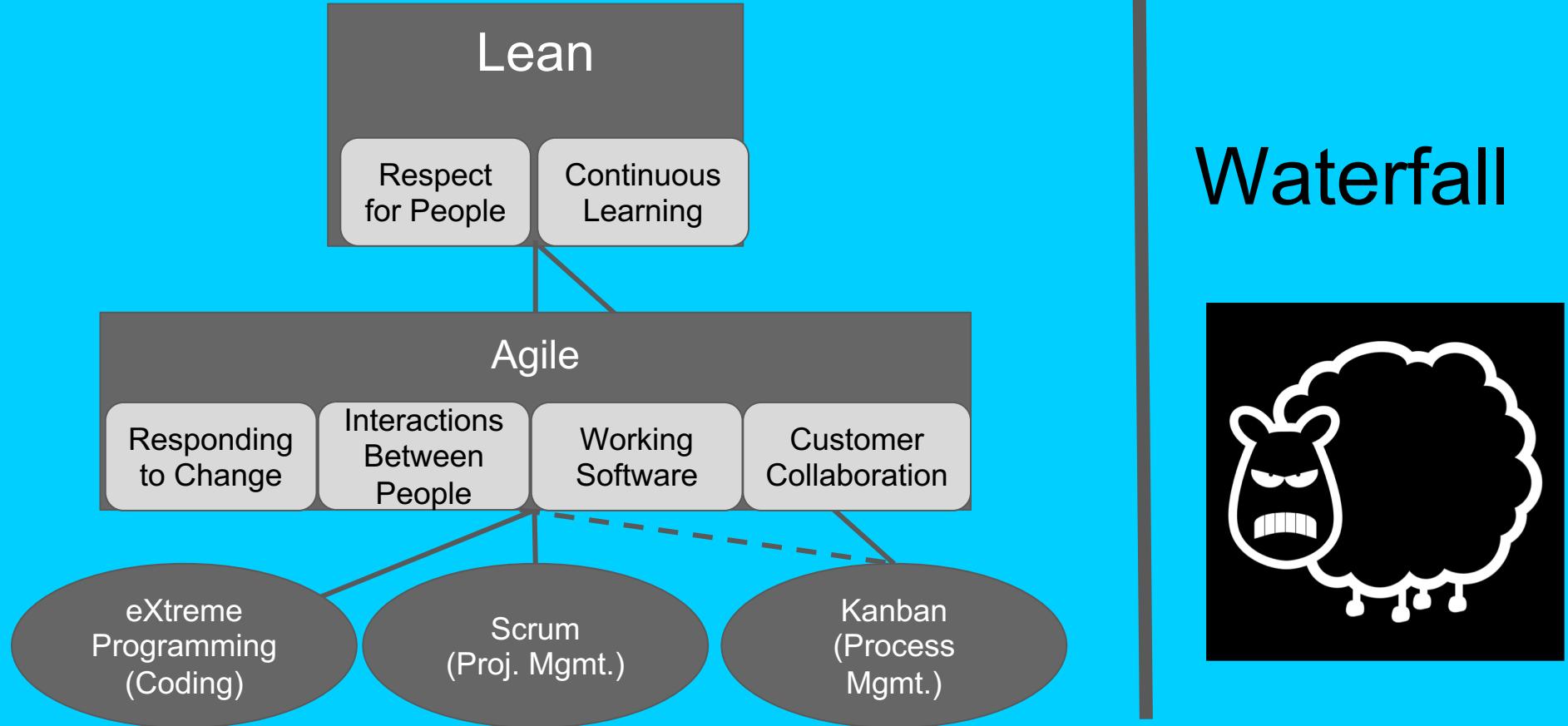
Iterative



# 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



# Thanks!

Contact 18F@gsa.gov

Follow @18F

Work Together [github.com/18F](https://github.com/18F)



# Appendix

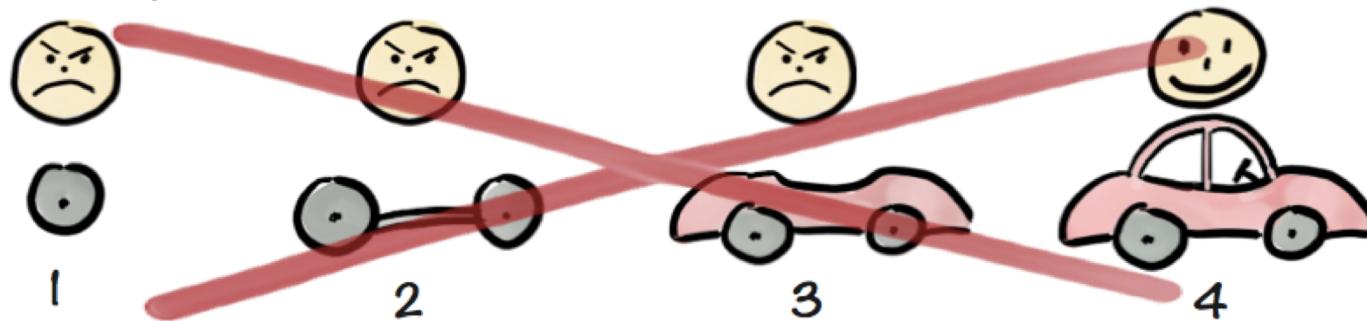
# The Iterative Thought Process

- 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!

