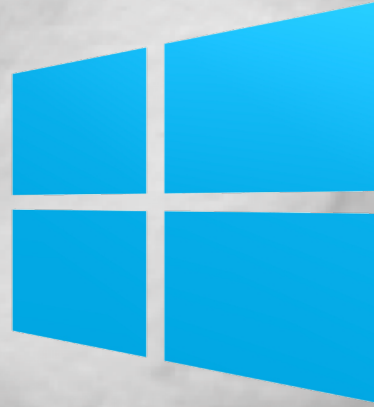# Sisyphus, Windows, Xbox, and Lean
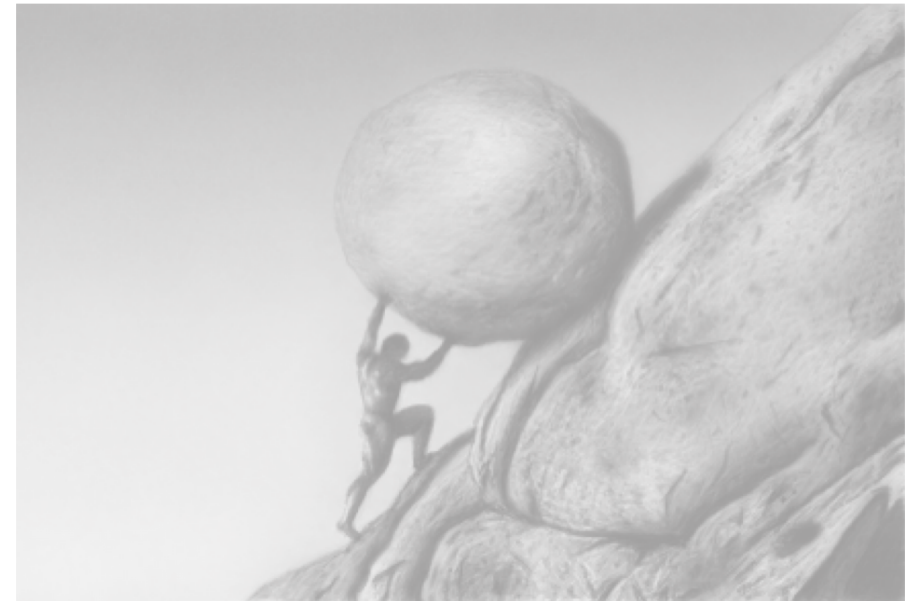
Eric Brechner
Principal Dev Manager
Windows & Xbox

LeanKanban
North America 2018

Our struggle

- Lean at Microsoft
- A short history of Windows and Xbox
- Teaching an old dog new tricks
- Tried it, didn't like it
- Vary the old tricks
- Train the fleas
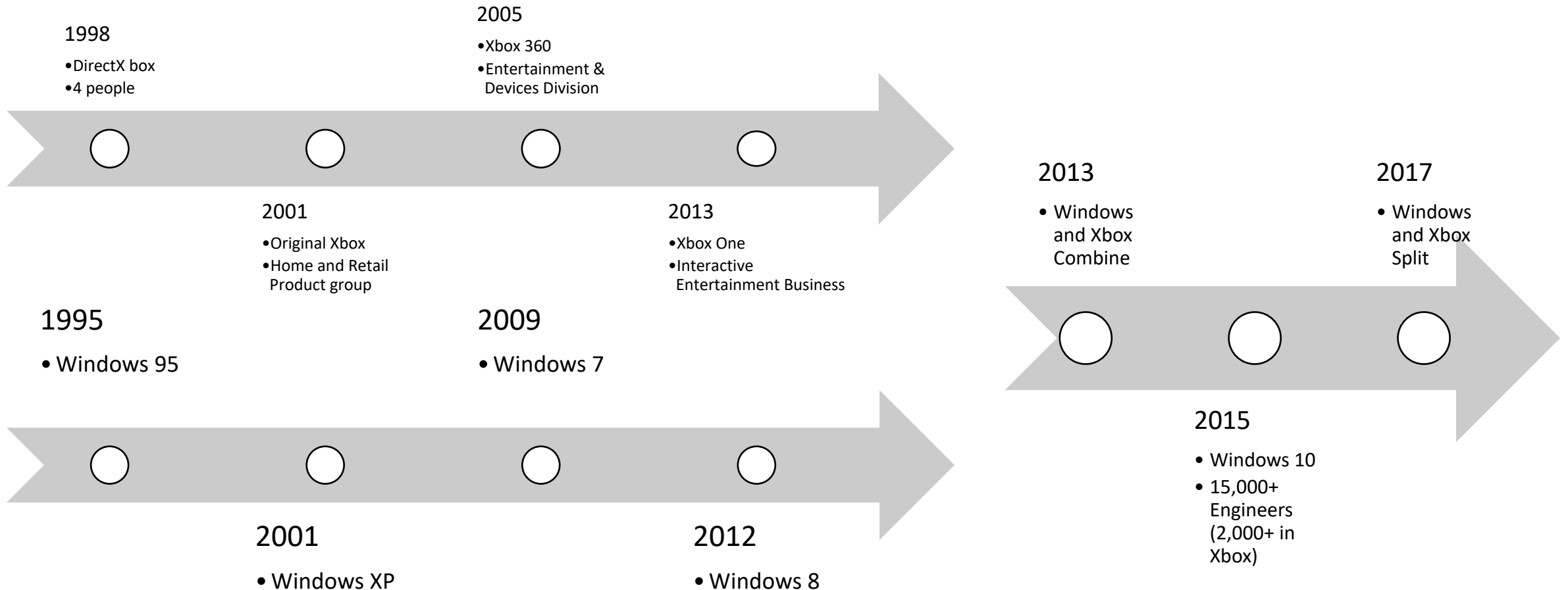- Kanban enables lean continuous delivery

Lean at Microsoft

Foundation

- Feature teams
- Customer focus
- Continuous integration
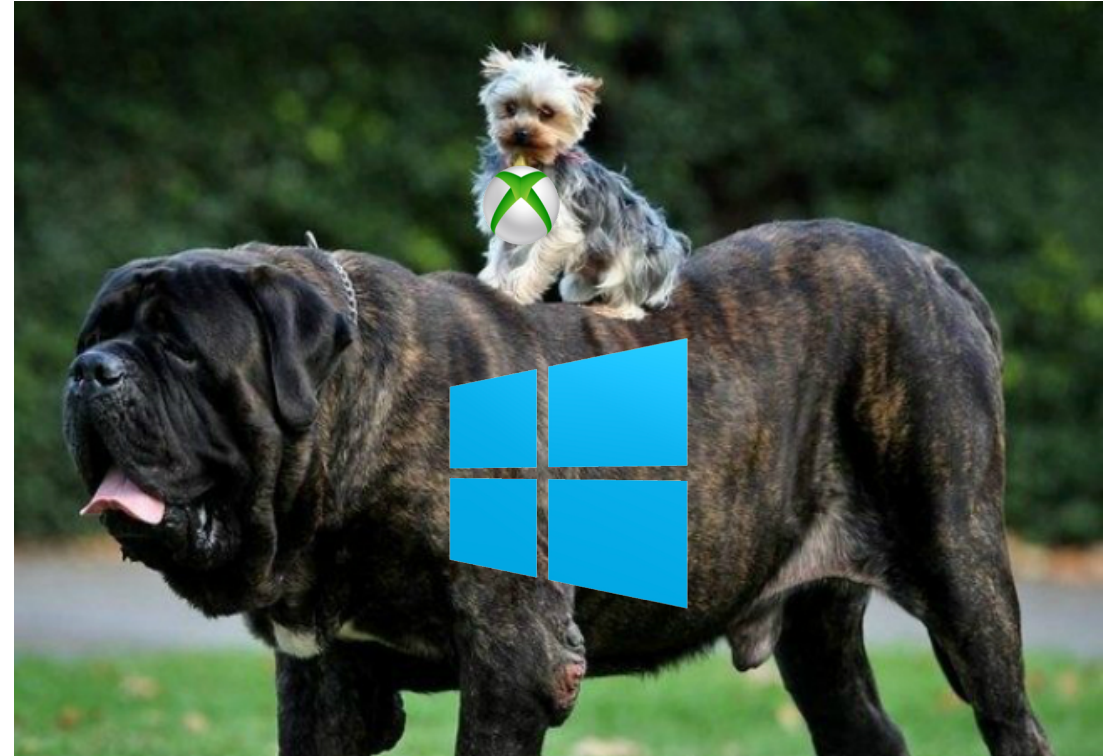- Quality control
- Agility of feature teams

Remodel

- Data-driven decision making
- Customer obsession
- Continuous delivery
- DevOps
- Kanban

A short history of Windows and Xbox

1998
- DirectX box
- 4 people

2005
- Xbox 360
- Entertainment & Devices Division

2001
- Original Xbox
- Home and Retail Product group

2013
- Xbox One
- Interactive Entertainment Business

2013
- Windows and Xbox Combine

2017
- Windows and Xbox Split

1995
- Windows 95

2009
- Windows 7

2015
- Windows 10
- 15,000+ Engineers (2,000+ in Xbox)

2001
- Windows XP

2012
- Windows 8

Teaching an old dog new tricks

- Five years ago, Windows and Xbox both felt the need for speed
- Xbox: progressive, energetic
  - Moved to CI/CD in 2 years
- Windows: conservative, massive
  - Moved portions to CI/CD in 3 years
  - Remaining accelerating toward CI/CD
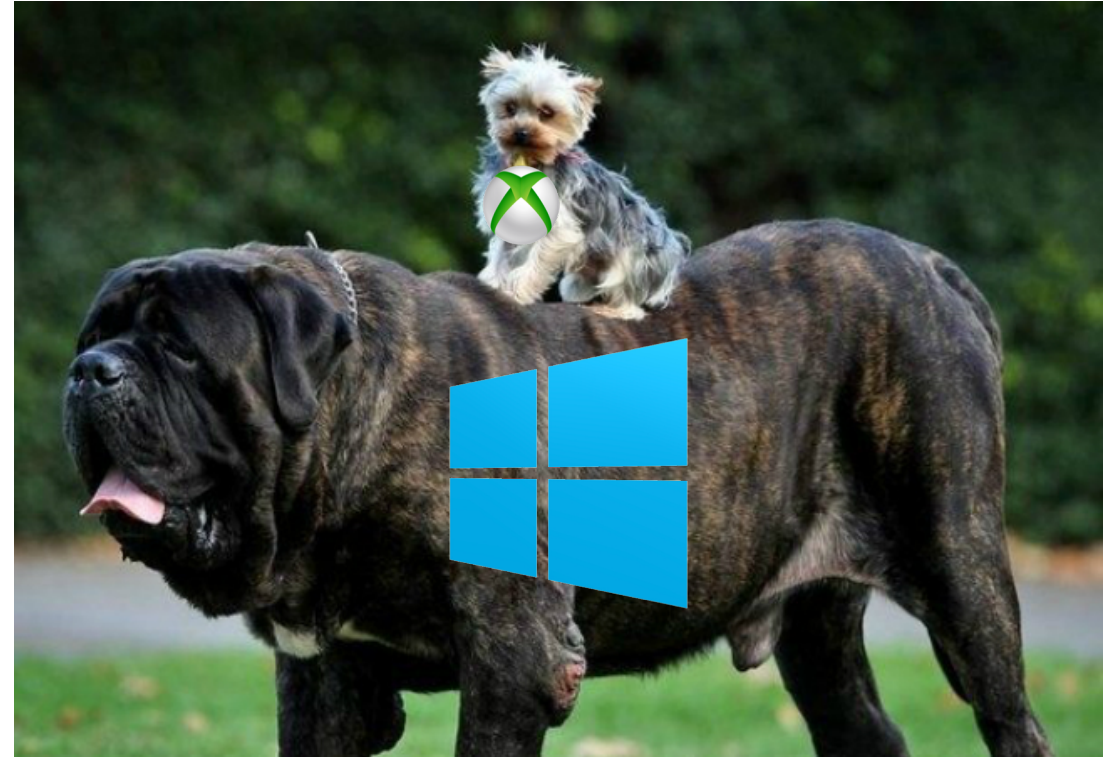- Some things worked, some didn't

Tried it, didn't like it

- Swapped out the build system (fail)
  - ~~Changing everything at once~~
  - A step at a time
- Advocated "continuous delivery" (scary)
  - ~~New terminology~~
  - Familiar ideas with new twists
    - "flighting", "idea to data", "code to customer"
- 3-year cycles → 1 year → ~~1 month~~ (6 months)
  - ~~Moving too fast~~
  - Incremental steps with time to adjust

Old dogs don't really learn new tricks

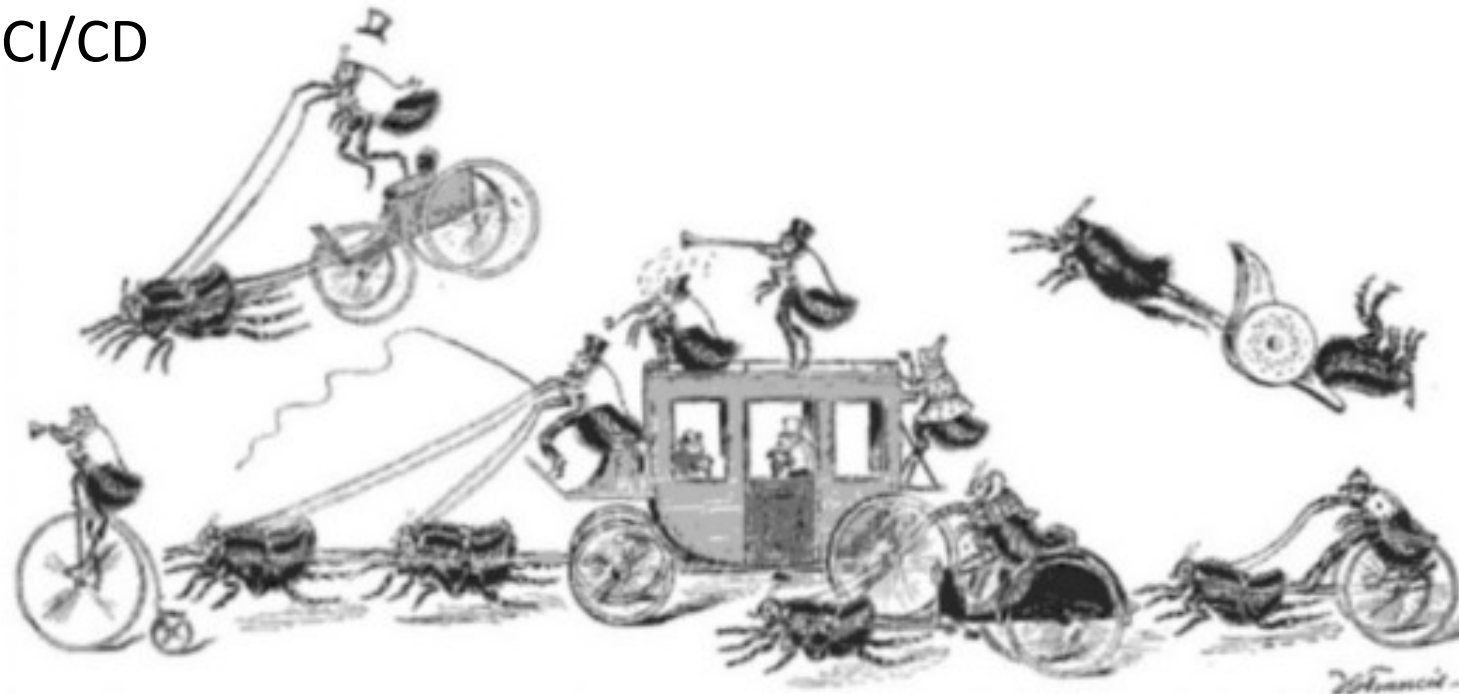- Vary the old tricks
- Train the fleas

Vary the old tricks

- Keep the planning, but shorten the cycles

- Keep the features, but reframe around customer impact

- Keep the telemetry, but use it to make decisions

- Keep the continuous integration, but add continuous delivery

Train the fleas

- Adopt Kanban at feature team level
    - Make it hip, easy, and practical
    - Avoid being preachy and inflexible
    - Tie back to planning and release systems
- Refactor components to enable CI/CD
- Reduce technical debt
- Switch feature teams to DevOps
- Drive to sub-day cycle time

Kanban enables lean continuous delivery

"I understand Kanban and continuous delivery are not necessarily one and the same – but I think that continuous delivery workflow will help work move more smoothly using the Kanban model"

– Windows Dev Lead

Questions?

Kanban enables lean continuous delivery