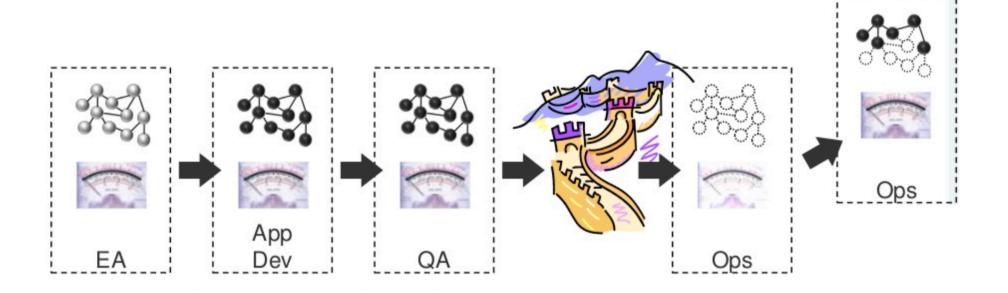
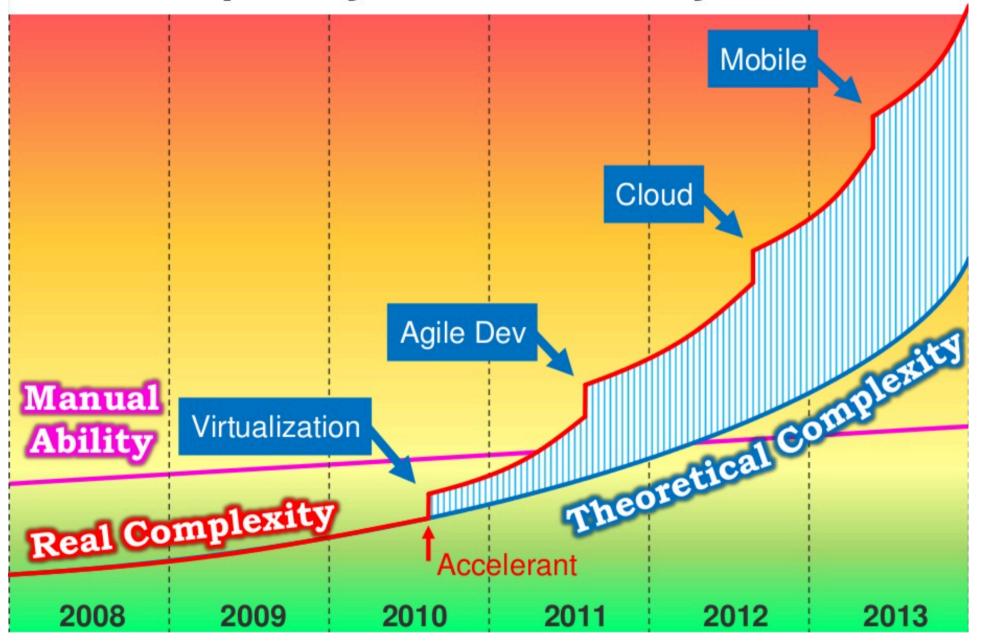
Dev Ops

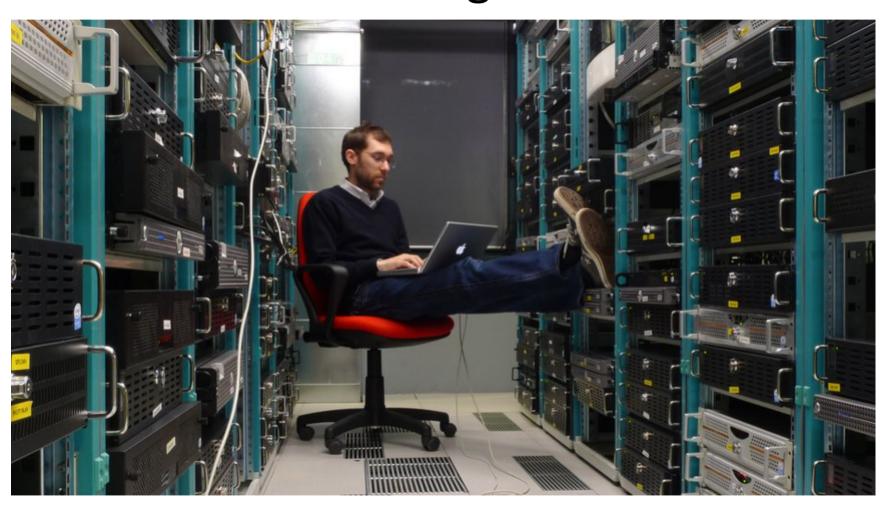
IT life-cycle



Kill complexity before it kills you!



How many computers can you manage?



Conflict

- DEV stereotype
 - Impatient
 - Temperamental
 - Careless about changes
 - Prima donna artists
 - Ignorant about the "real world"
- "It works on my machine"

- Ops Stereotype
 - Slow to act
 - Temperamental
 - Too rigid about changes
 - Always says "No!"
 - Too dumb to understand apps
- "Its not the server, it's your code"

What are the roles of Devs and Ops?

- Dev
 - Create change
 - Add or modify features
- Ops
 - Create stability
 - Create or enhance services

The Problem

- Devs don't deploy consistent software
- Ops are motivated to resist change

- Development process is Agile
- Operations process is Static

What is DevOps?

- "DevOps is an approach to bridge the gap between agile software development and operations" – agileweboperations.com
- Collaborative Mindset of Devs and Ops
- It's what Agile is to software development
- C.A.M.S.

What is automation?

Tools that perform functions otherwise done by humans

- Task Execution
 - Individual tasks
 - Repetitive tasks are candidates
- Process Flow
 - Connects tasks and decisions
 - Workload automation and RBA (RunBook Automation)
- Decision Trigger
 - Analytics (not just monitoring)
 - When and why to take action
- Machines are really good at doing the same task over and over
- Consistent and Known State
- Fast and Efficient
- 5 mins/day = 2.6 days/year

Task Execution

Automation

Process Flow Decision Trigger

What can be automated

- Builds (e.g. Jenkins)
- Deployments (e.g. Jenkins)
- Testings (e.g. Jenkins)
- Monitoring (e.g. Nagios)
- Self-healing (e.g. Facebook FBAR)
- System rollouts (Chef, Puppet, Ansible)
- System configuration (Chef, Puppet)