Continuous Integration

Reliable, Fast, Painless Changes

What

Why

How

- **What:** A proven[1] set of tools and practices geared for robust-ifying change management & integration
- **Why:** Increased Velocity, Stability, Security, and Revenue, all while *decreasing* overall cost of production
- **How:** Automate the Boring Parts
  - Produce deployment artifacts
  - Unit and regression tests
  - Code analysis
  - Security audits

[1] https://cloud.google.com/devops

Continuous Delivery

Increased Uptime, Faster Recovery, Higher Velocity

What

Why

How

- **What:** A framework and toolset that enables seamless deployments, and rollbacks, of new code
- **Why:** Uptime, Velocity, Stability, and Employee Retention, Reduced Cost, Increased Revenue
- **How:** Automate the Hard Parts
  - Database migrations
  - Smoke testing and validation
  - Application deployment
  - Rollbacks and disaster recovery

The Upshot

- Throughput and reliability in manufacturing is driven by automation
- Artisanal software is slow, more fragile, less secure, and harder to maintain
- There **is** a meaningful upfront cost to building our “factory,” but the ROI is nearly certain to outweigh it