DevOps:
Challenges & Mitigations

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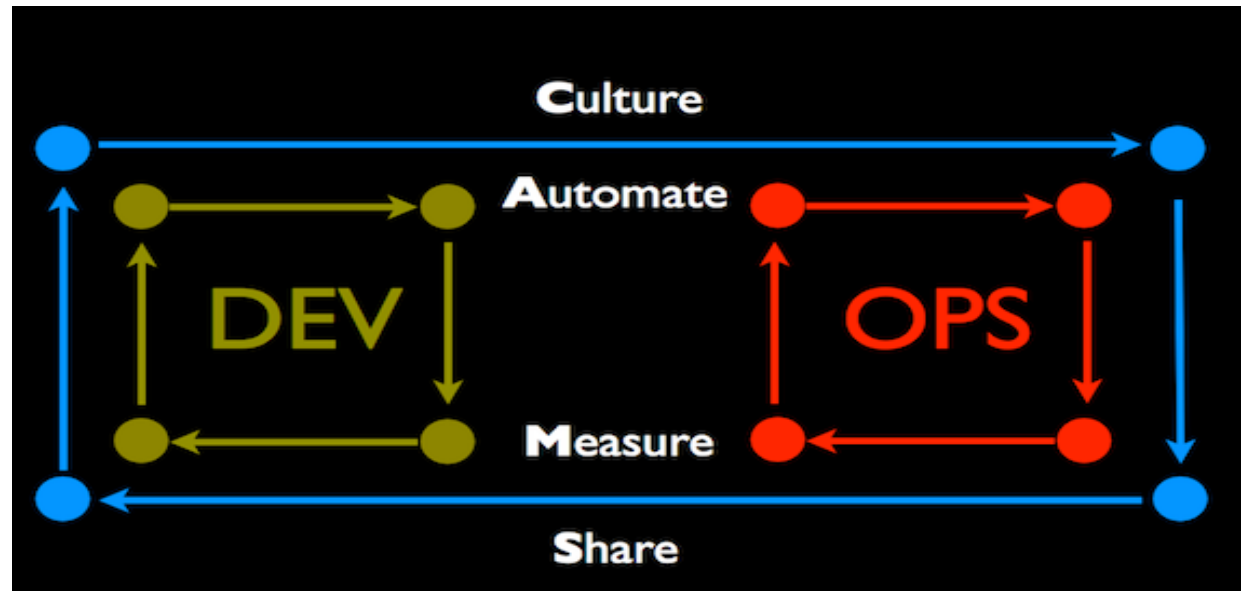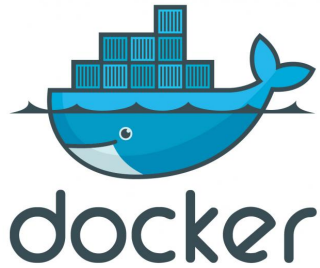
DevOps 101
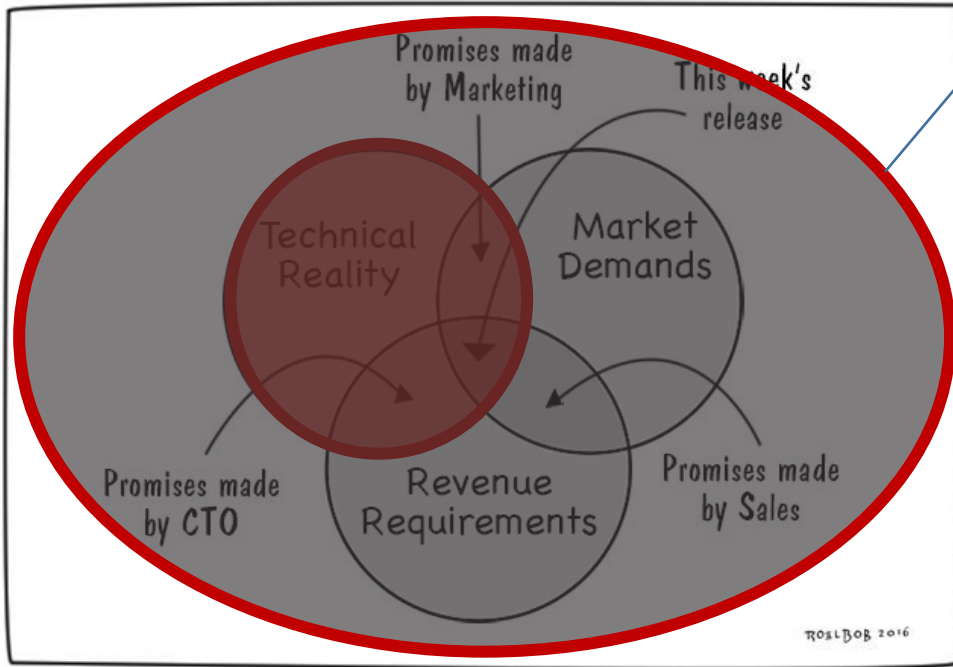
Real world deployments

DevOps Here I Come

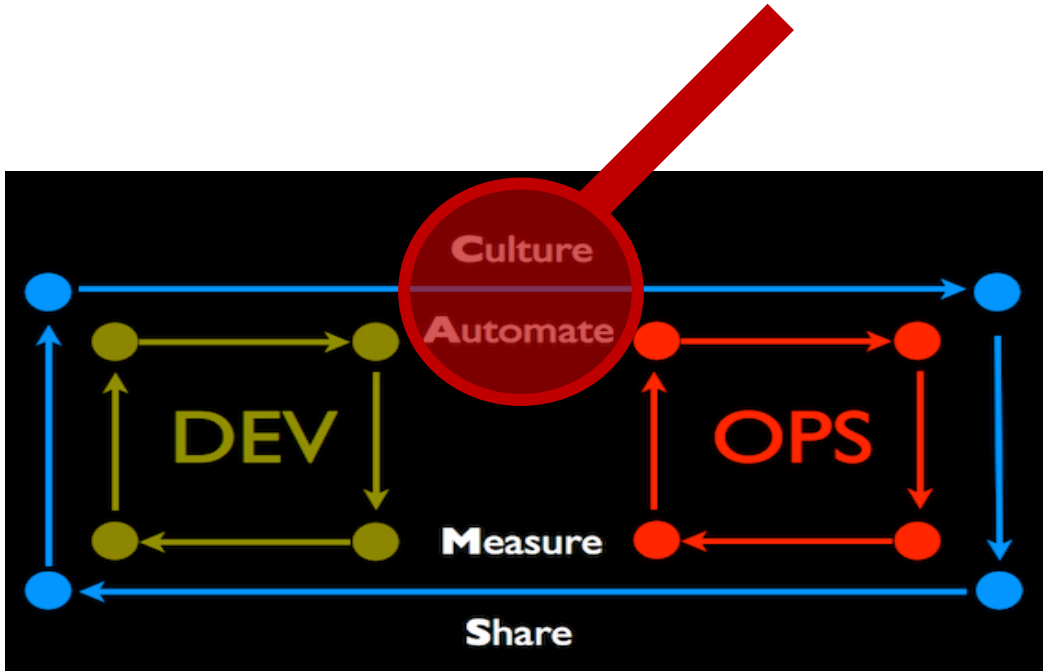I have all the open-source tools I need. I am good to go ! Is this enough ????

Challenge #1: I have a DevOps Team and a SRE team


- ✓ **There is NO separate DevOps Team**
  - o Rotate Dev and Ops/SRE members. Helps to narrow and fix gaps in automation across the toolchain, CI/CD, validation and support processes

- ✓ **SRE – Convert FICTION to REALITY**
  - o Empower SRE to enforce SLAs and provide them with data to verify
  - o Empower SRE to automate at solution/system level using sustainable custom Glue code

Challenge #2: DevOps Backlog ?? Feature Backlog is Priority!
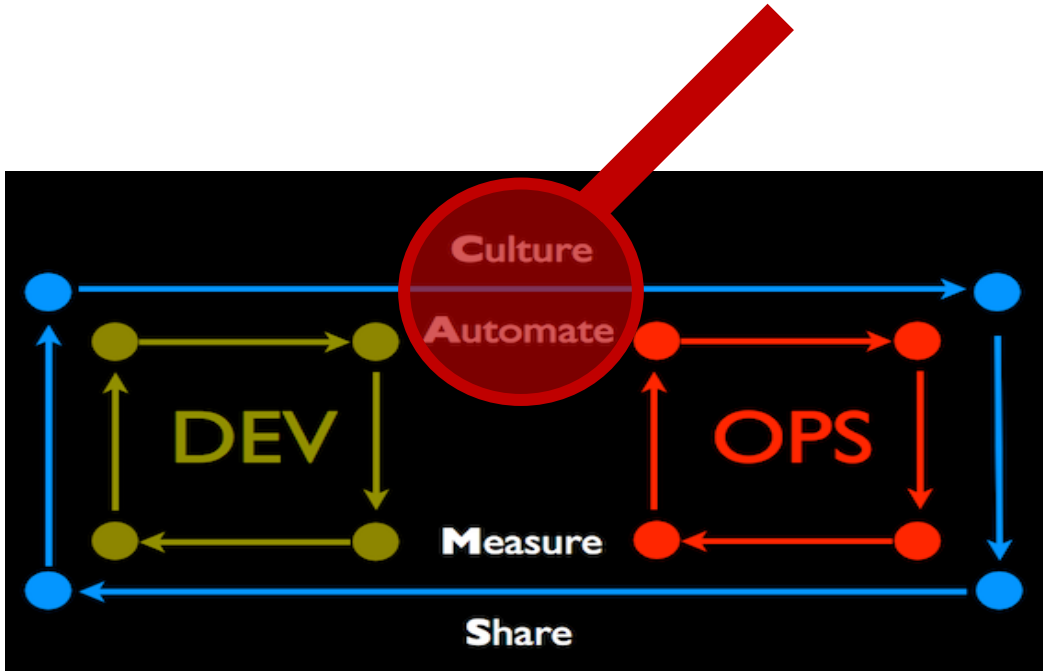
- ✓ **Features without responsiveness to quality and market is a waste of time.**
  - o Maintain a DevOps Backlog on par with the Feature Backlog
  - o Empower Ops/SRE to be peers to Feature Product Managers

- ✓ **Evaluate Metrics, Performance, Security, Automation per Feature**
  - o Make Agile Demos potent with show-and-tell of the above
  - o Empower Ops/SRE to block feature promotion to production

Challenge #3: Metrics Flood, All Data is Game Anywhere
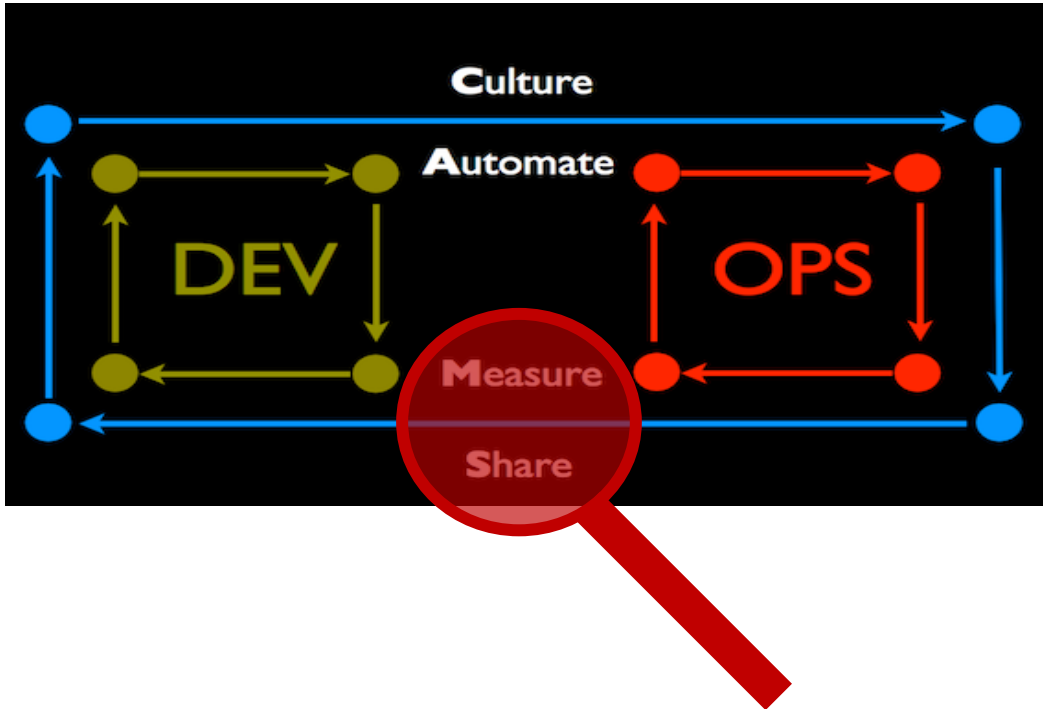
✓ **Junk Logs, Meaningless Metrics cost ₹**
  - Use Case/Problem definition
  - Design Metrics for End-2-End Flows, Orchestration. This is Non-Trivial
  - Leverage CI/CD and Toggles for Metrics lifecycle updates as well

✓ **Privacy, Audit & Retention Needs**
  - Design for PII, Audit considerations and Data Retention from the start
  - Covers Troubleshooting, Diagnostics and DS/ML/Analytics opportunities
  - Beware of GDPR: May 2018

Isn't this how Software Development should be ???

YES. DevOps is forcing us to do our job with quality, and real customer context, but only if we want to ☺

✓ Focus on the Principles & Engineering Rigor, Tools are incidental
✓ SME/Architects, Product Management remain key stakeholders
✓ DevOps Principles applicable beyond Cloud based products

THANK YOU !