



DevOps

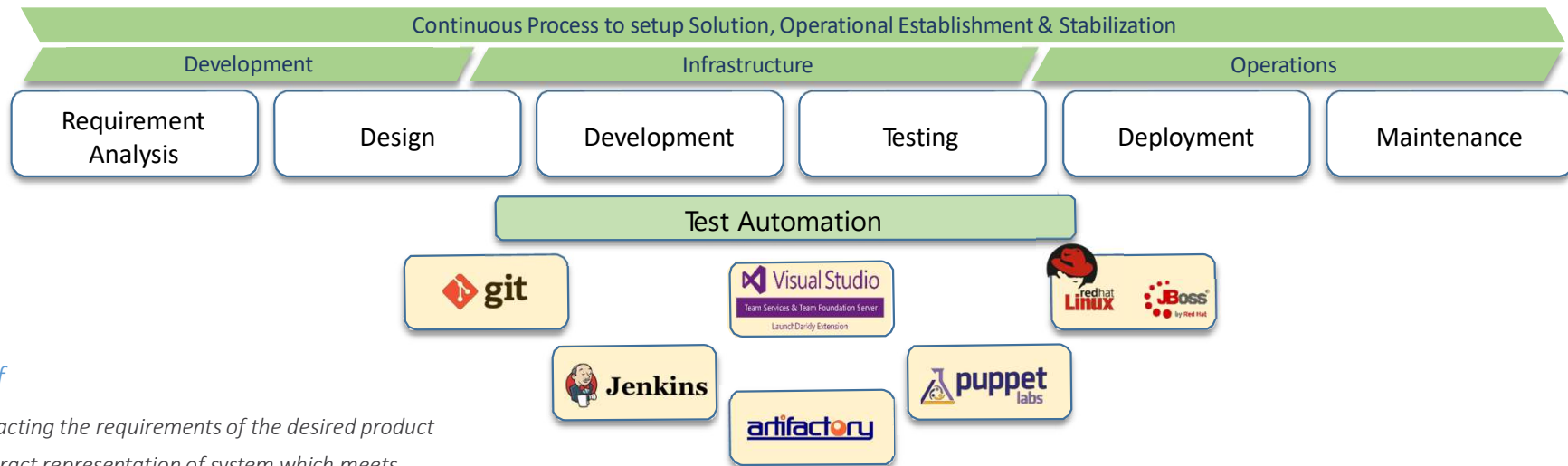
Pre Session



WHAT IS DEVELOPMENT PROCESS?

Development Process

Software Development Process in nutshell

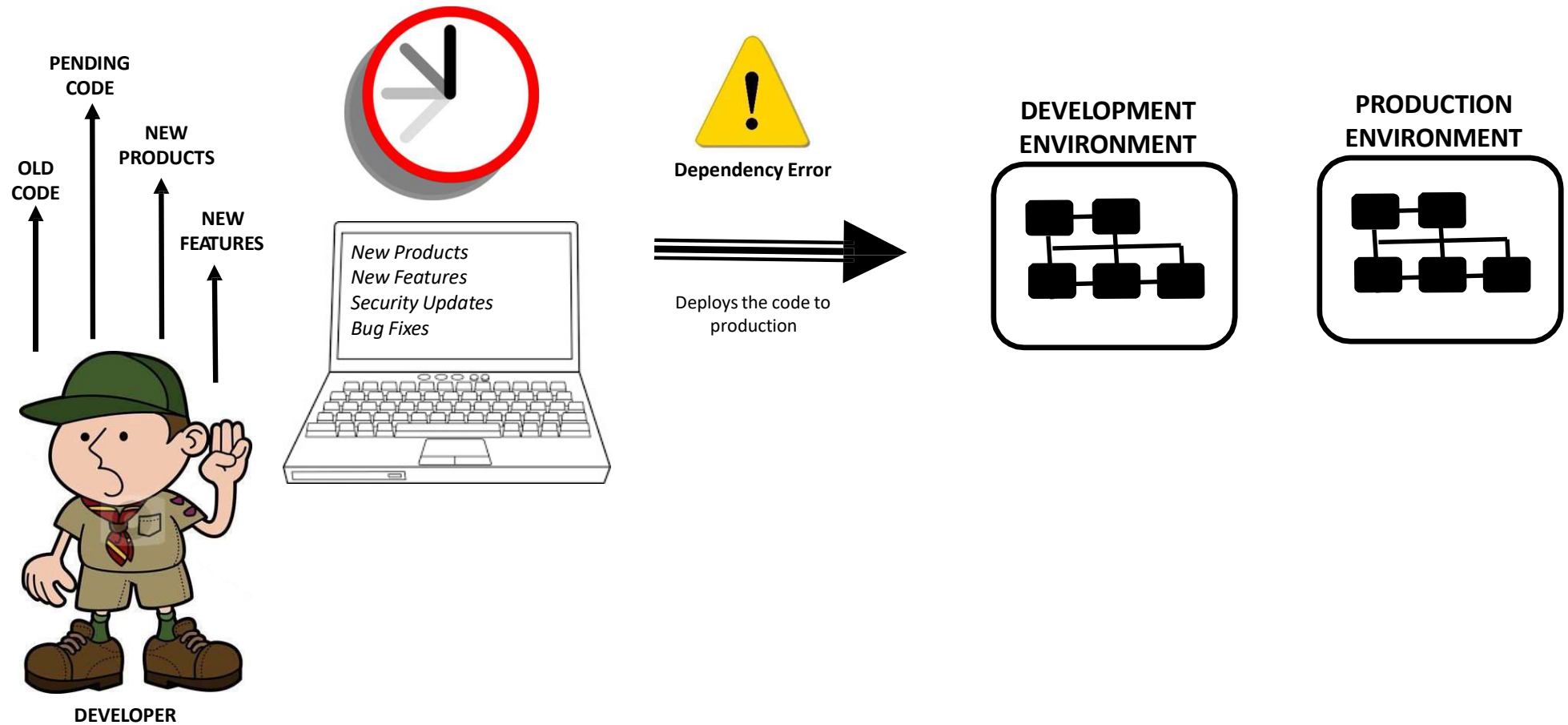


In brief

- Extracting the requirements of the desired product
- Abstract representation of system which meets requirements
- Development as a part of software engineering
- Testing of code
- Deployment of code
- Maintenance or support

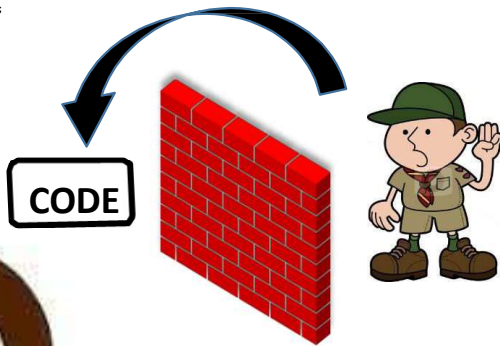
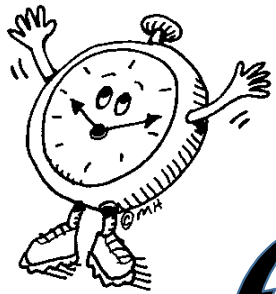
LET'S TALK ABOUT REAL PROBLEMS
NOW..

Time to Market



99.9% UPTIME

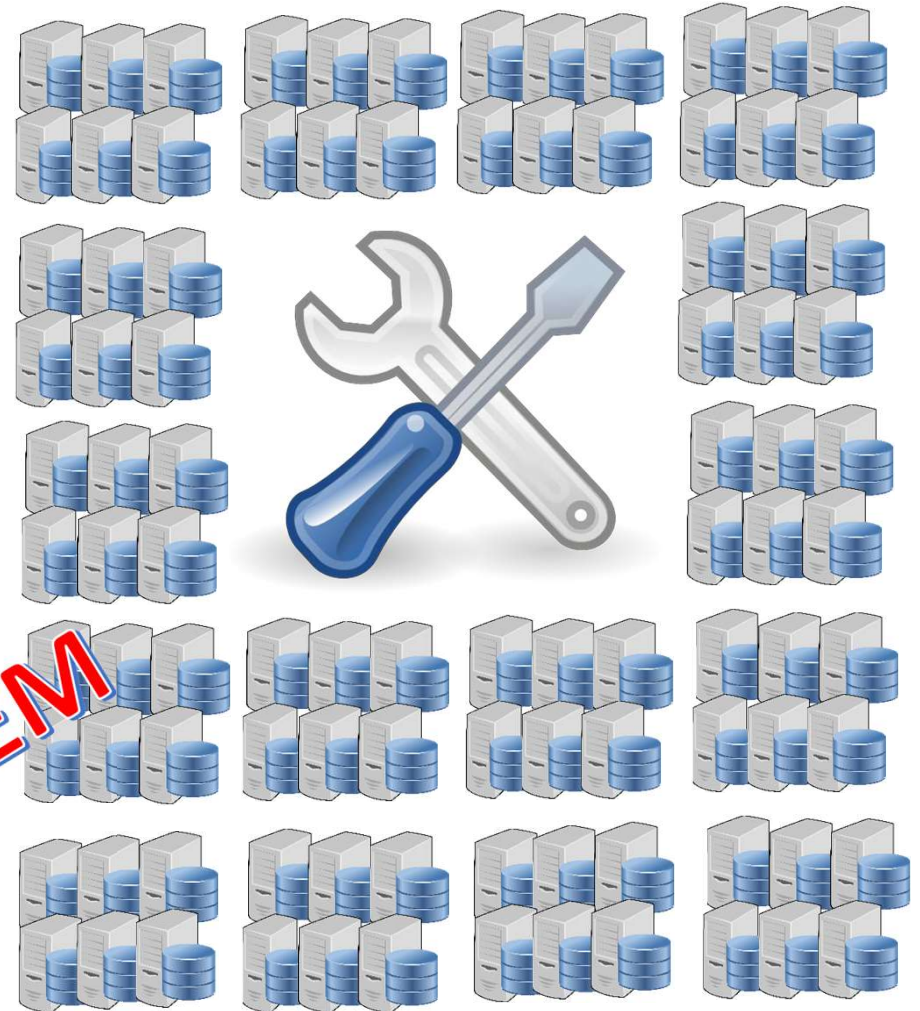
DEPLOYMENT SCHEDULE											



SYSTEM ADMINISTRATOR

NEW CODE

PROBLEM

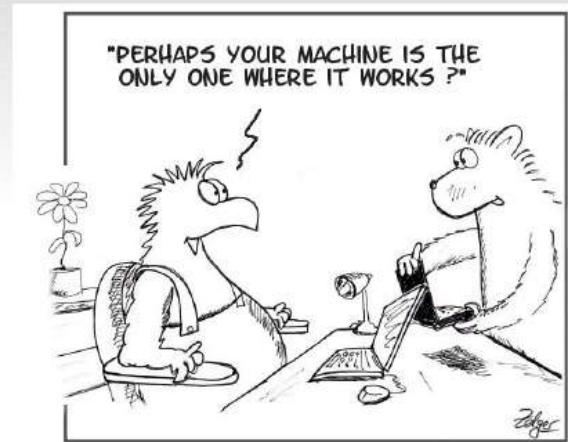




Have you ever been in a situation like this before?

Have you said this before to anyone?

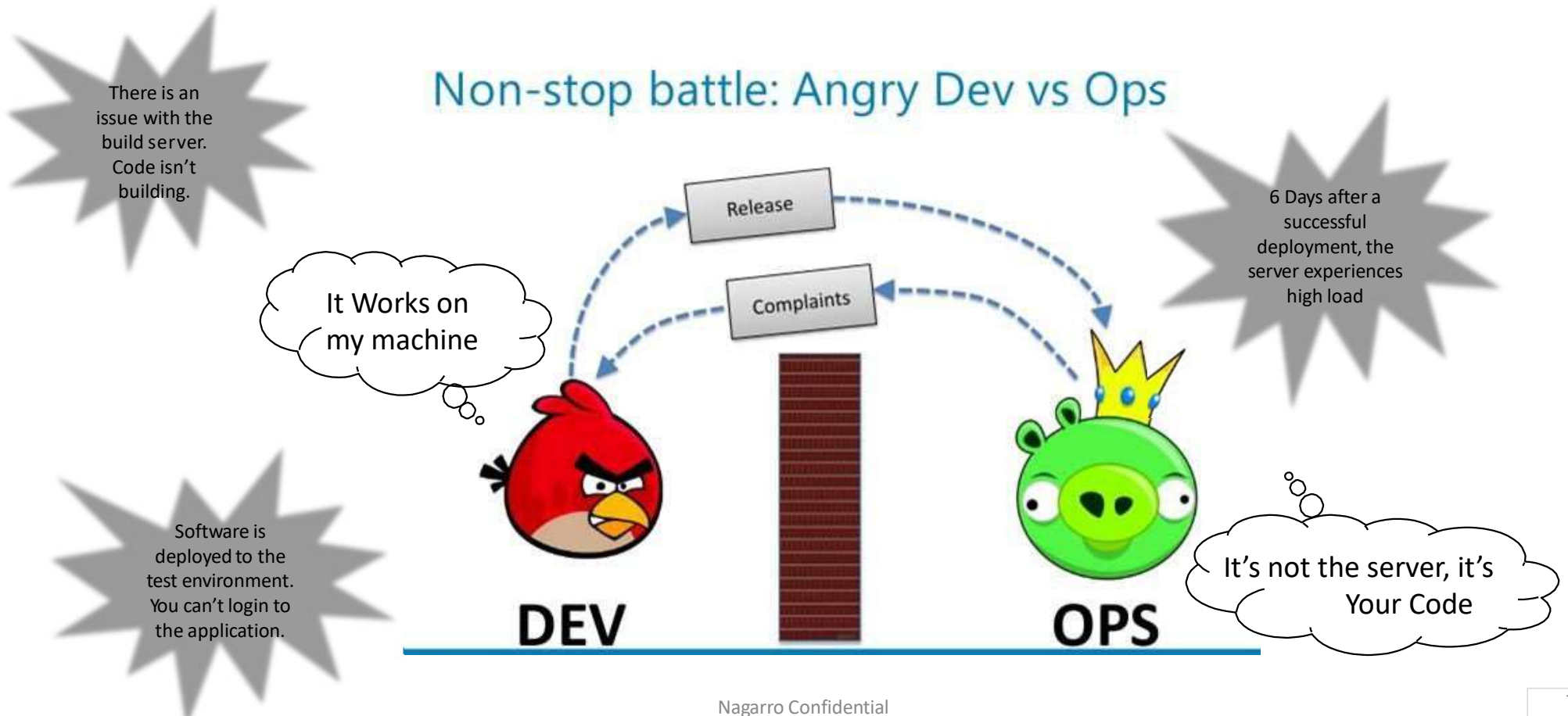
Dev says ...



It works on my machine

Development vs. Operations

Battle between what you have developed on your machine and what is running in production?



SO HOW TO WORK WITH EACH OTHER..?

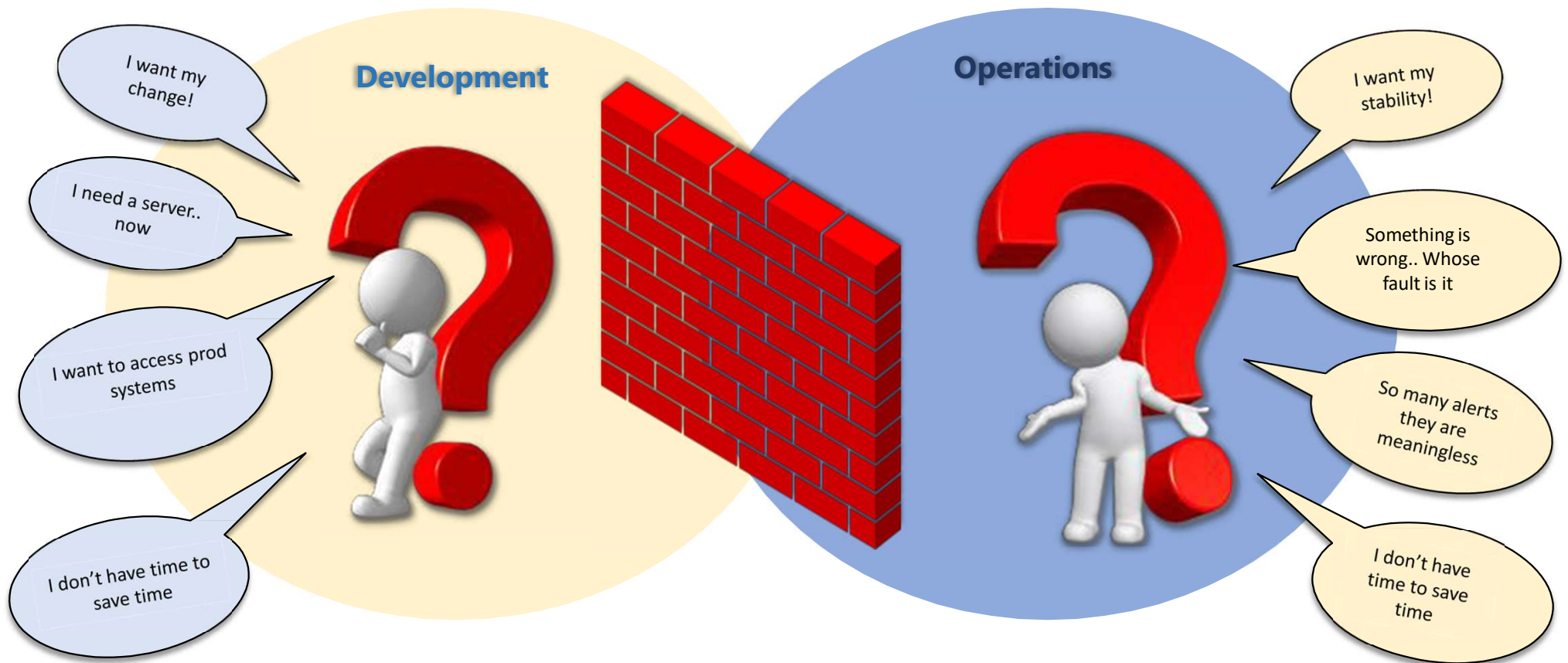
Defining roles...



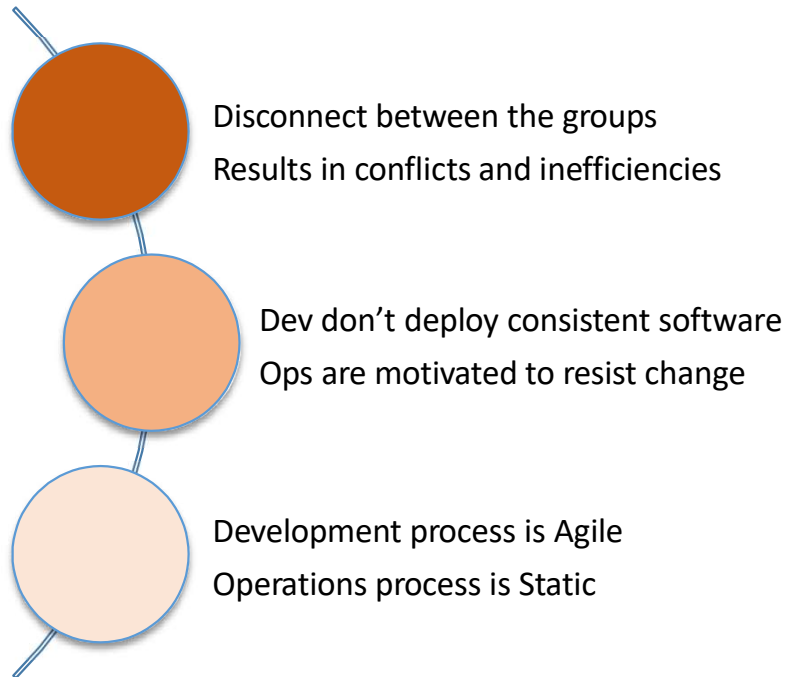
What is the role of Dev and Ops?

Wall of Confusion

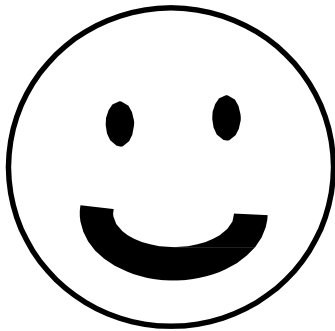
Who will solve our problem then?



And the Problems..



What can be done to help Mark and Ellie work better?



Dev Ops

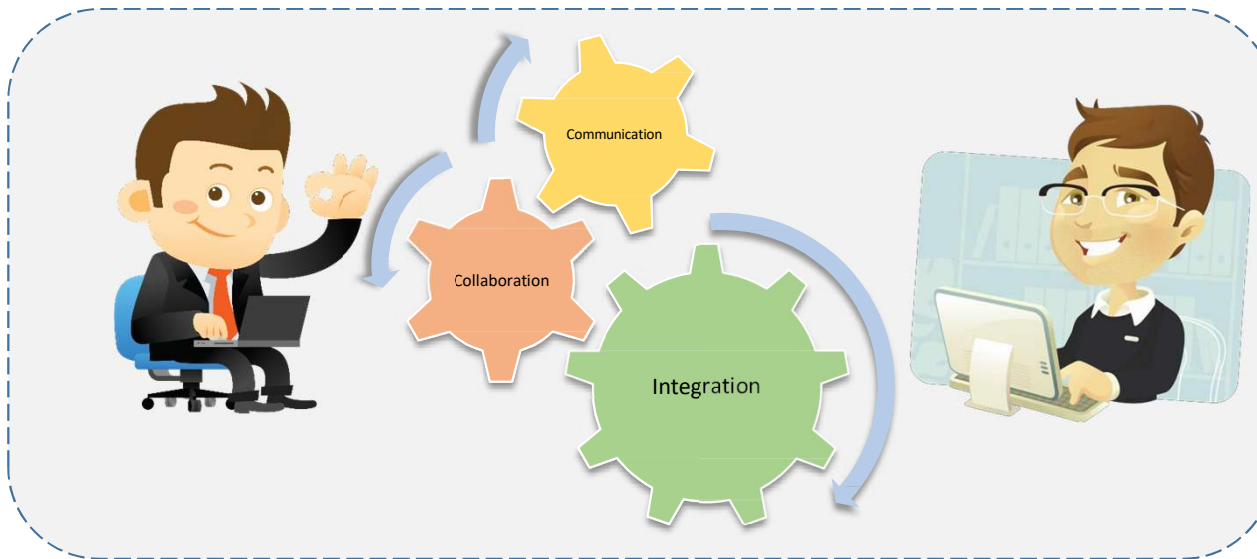


- Worked better together?
- Thought more alike?
- Broke down silos?
- Shared responsibilities?

What is DevOps

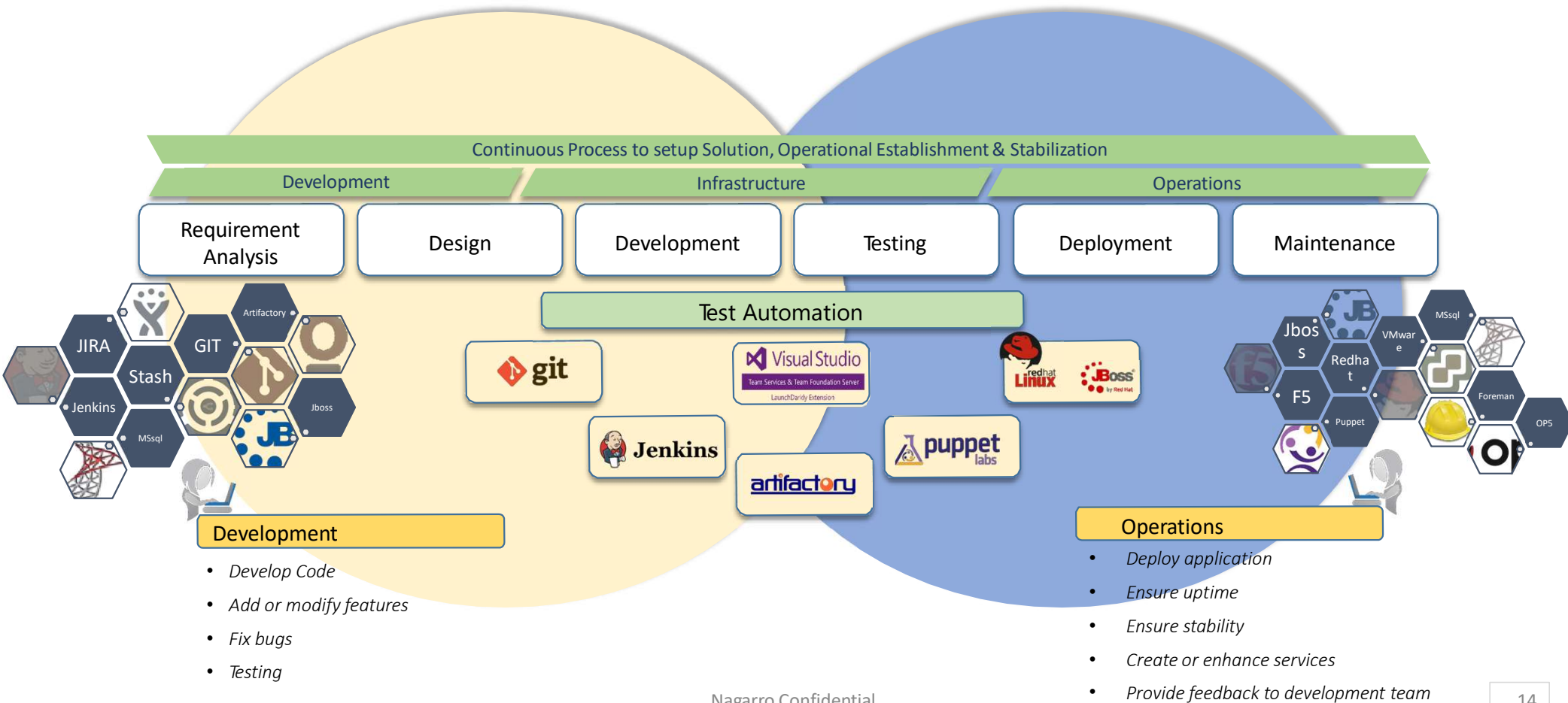
By Definition

DevOps is a **culture and set of practices** that emphasize **close collaboration between software Development and IT Operations staff** through all phases of software delivery process to **enhance productivity and quality of the overall system**.



DevOps

Bridging the gap between development and operations



IS IT A TOOL?



Well !!

It's not just about the tools, it's about the **CULTURE!**



DevOps Principles



Accelerate collaboration
And communication



Take manual steps out of
your value chain



SHARING

Share experiences, successful or
not, to enable others to learn



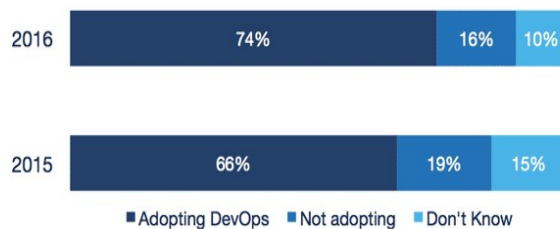
Measure everything and
use data to refine cycles

IS THIS A NEW TERM?

DevOps Trends -

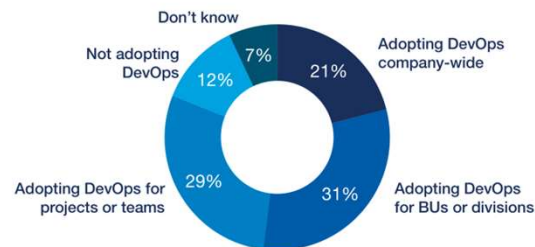
DevOps Adoption and Tools usage

DevOps Adoption Up in 2016



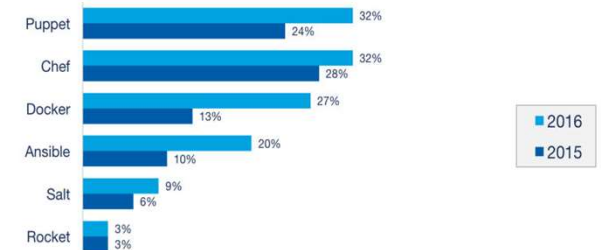
Source: RightScale 2016 State of the Cloud Report

Enterprise Adoption of DevOps



Source: RightScale 2016 State of the Cloud Report

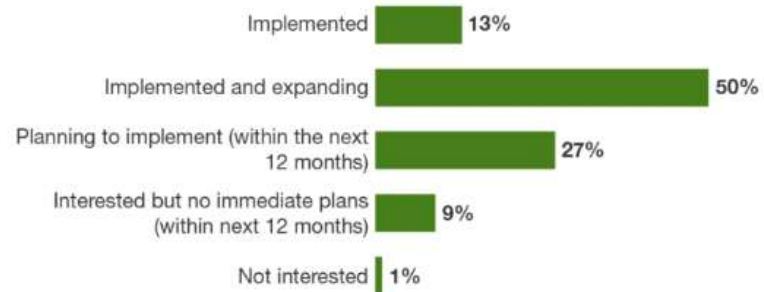
Respondents Using DevOps Tools



Source: RightScale 2016 State of the Cloud Report

Source: [Rightscale](#) 2016

"Has your organization implemented DevOps? Where does it stand in relation to DevOps?"



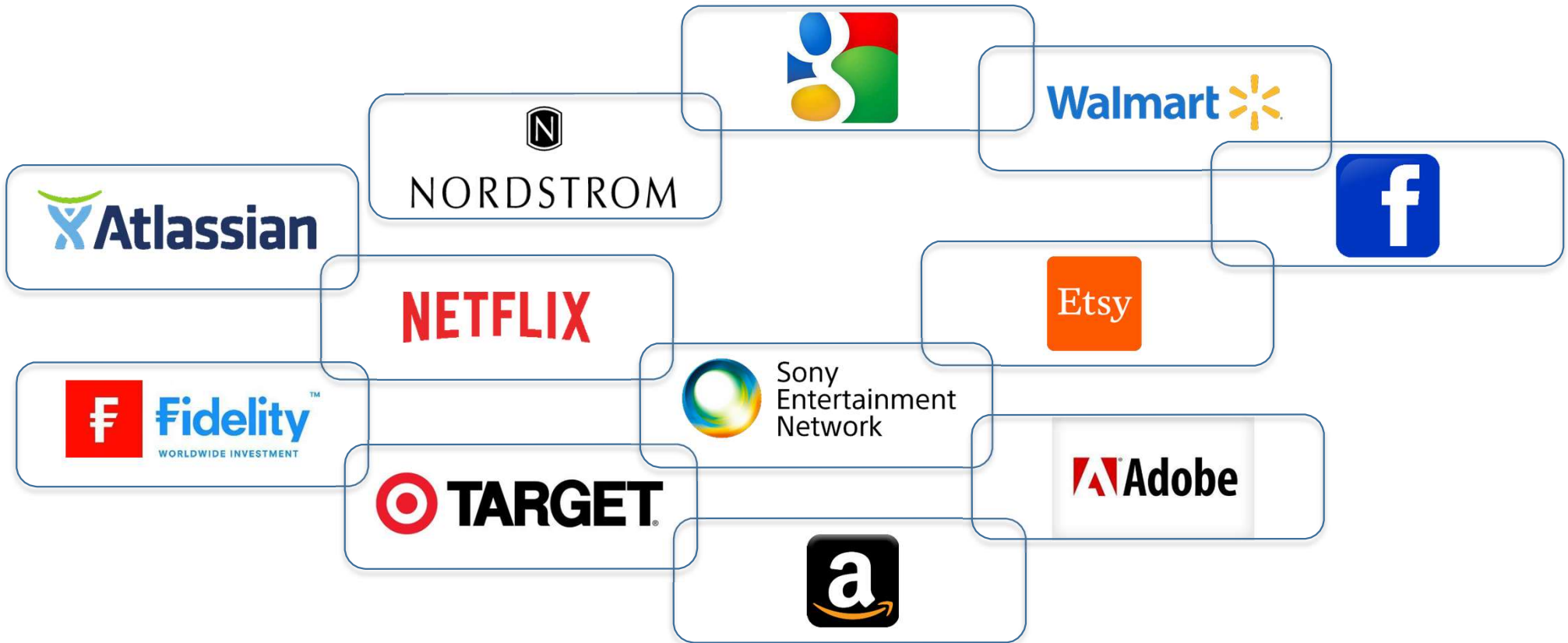
Base: 237 DevOps pros

Source: Forrester's Q1 2017 Global DevOps Benchmark Online Survey

Source: [Forrester Research](#) 2017

Who all are using DevOps?

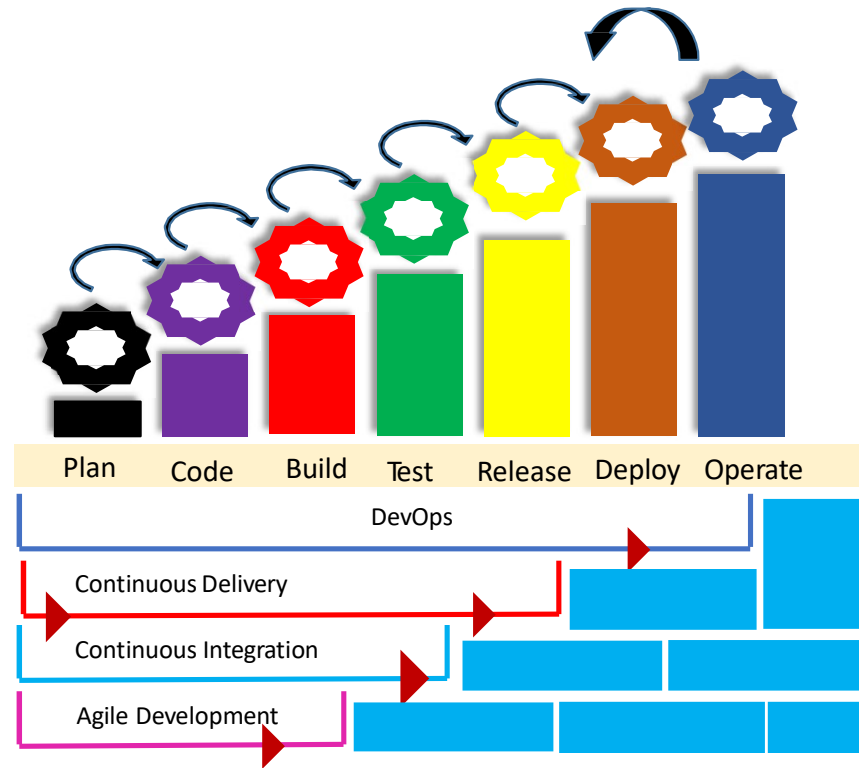
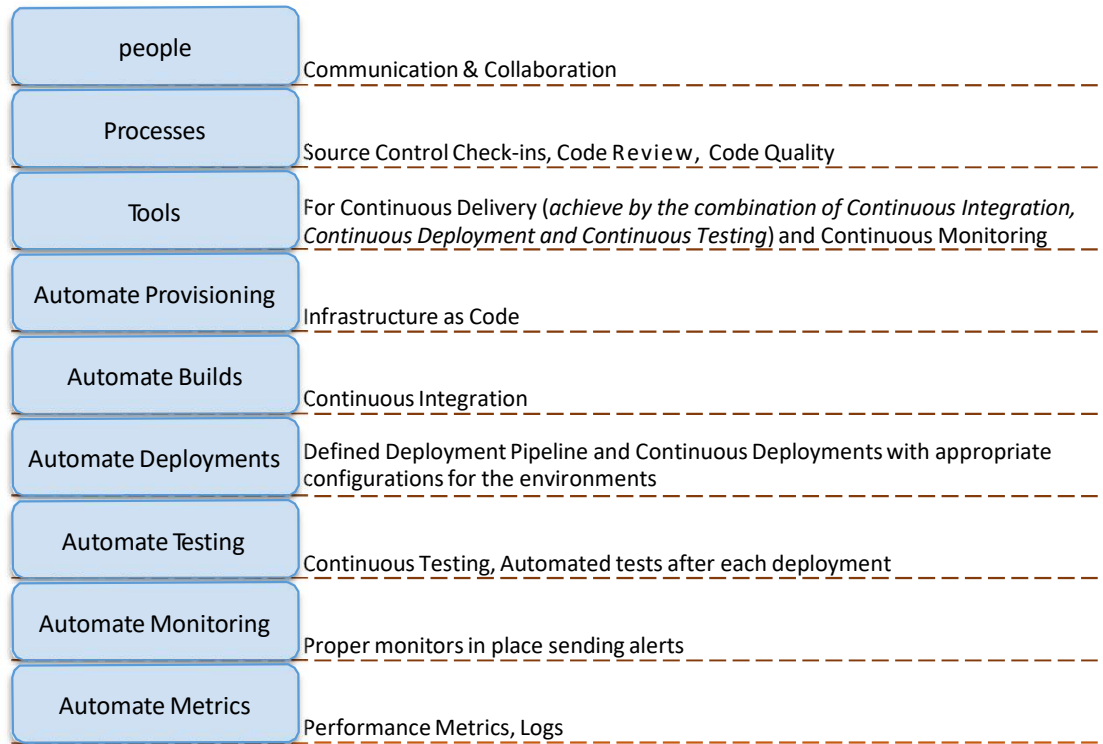
Few market leaders..



HOW IT WORKS?

DevOps Approach

DevOps Implementation means believing in agile mantra "People over Process over Tools". With the right people, establish the right process and choose the right tools to deliver the end results.



How does DevOps work anyways?

... is a way of thinking.



• Communication

- Talk is cheap
- Involve each other in core processes and decisions
- Ask questions
- Invite everyone to stand-ups and retrospectives



• What can be automated?

- Builds
- Deployments
- Testing
- Monitoring
- Self-healing
- System rollouts
- System configuration

• Metrics

- Capture, learn, improve
- Assists in:
 - Capacity Planning
 - Trend Analysis
 - Fault Finding
- Simple as saving Tomcat access info
- Plotted on a graph overtime

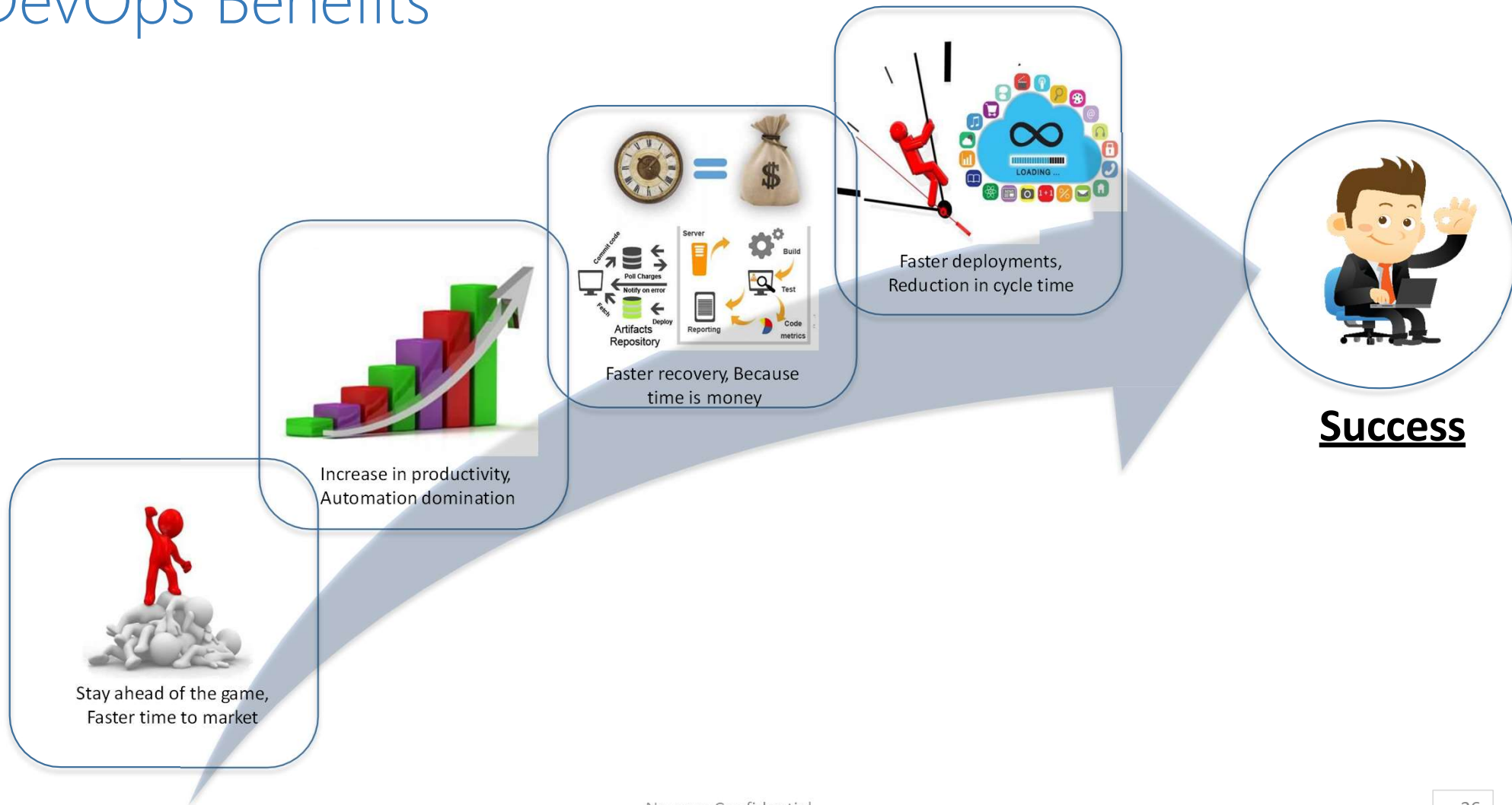


• Sharing

- Share Ideas
- Share Metrics
- Ops: Give devs shell access
- Devs: see what technology can be leveraged

BENEFITS?

DevOps Benefits

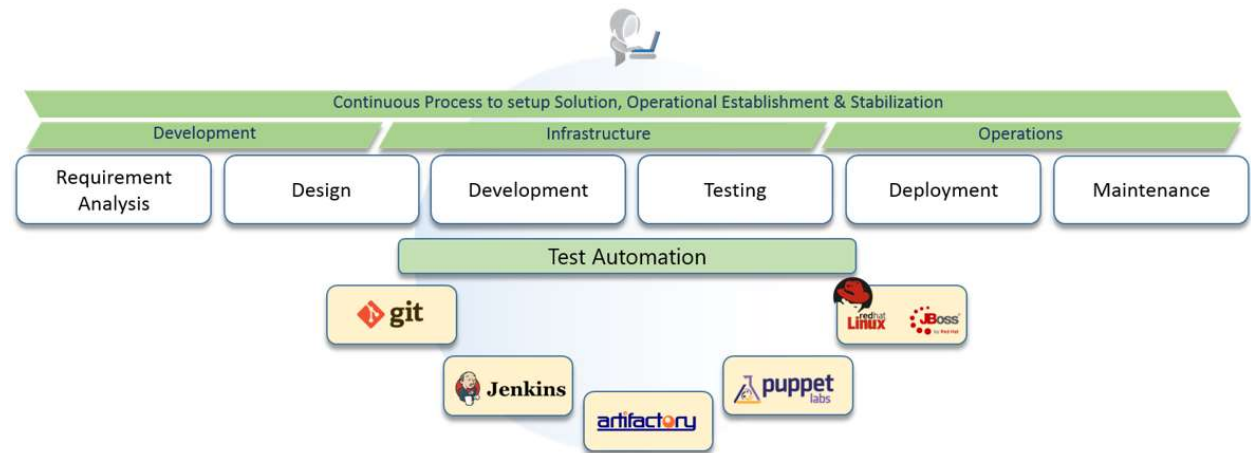


Achieving DevOps...

How to achieve DevOps

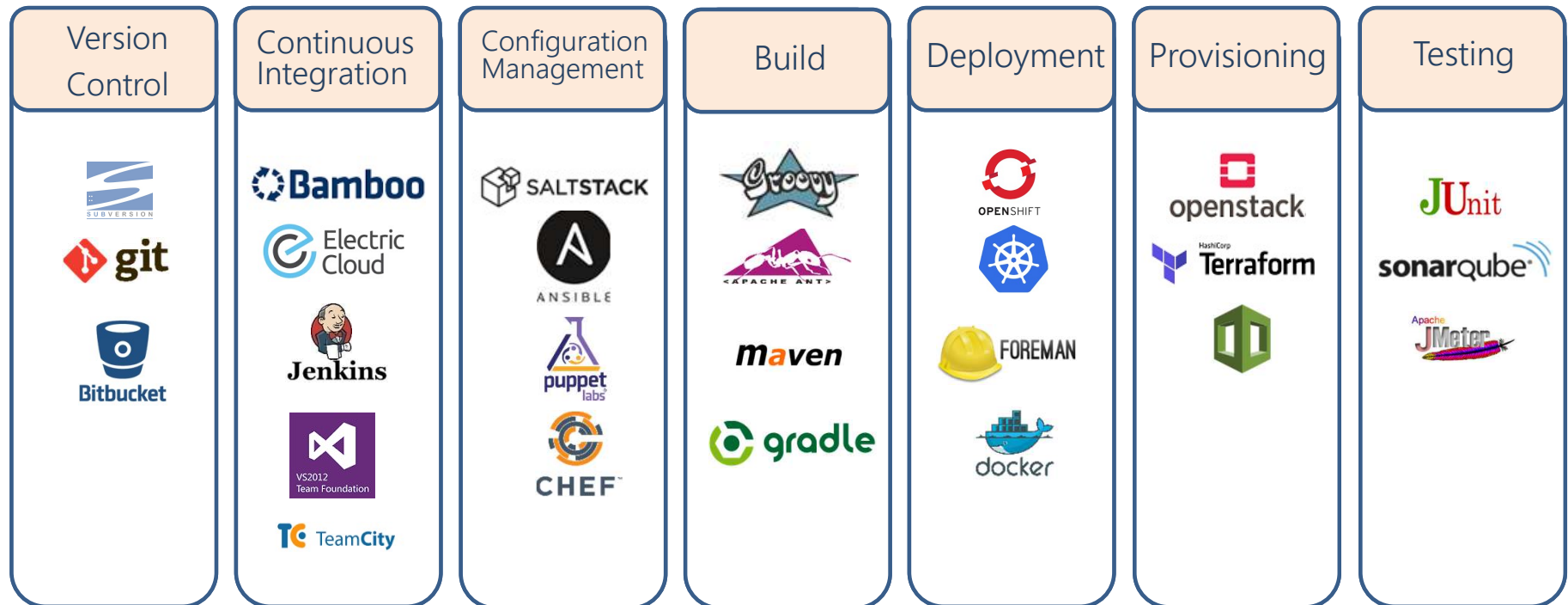
DevOps as Process

1. Version control management
2. Continuous build
3. Continuous integration
4. Continuous delivery
5. Continuous deployment
6. Automating entire chain – tool chain



Technology spectrum

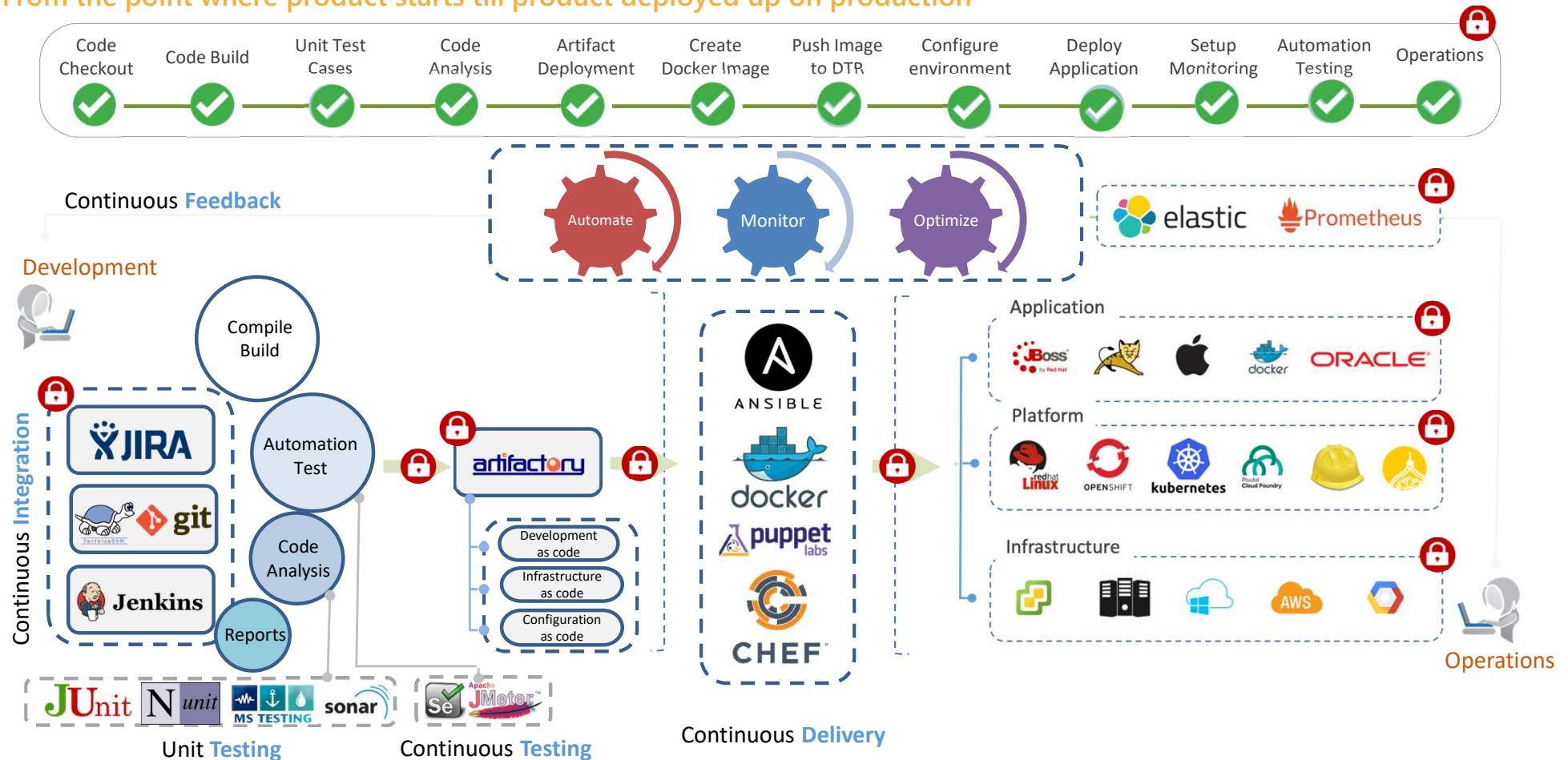
What all Tools and technology used here to achieve DevOps



Nagarro Confidential

Product Build and Release Lifecycle

From the point where product starts till product deployed up on production



Thank You!



DevOps CoE

