

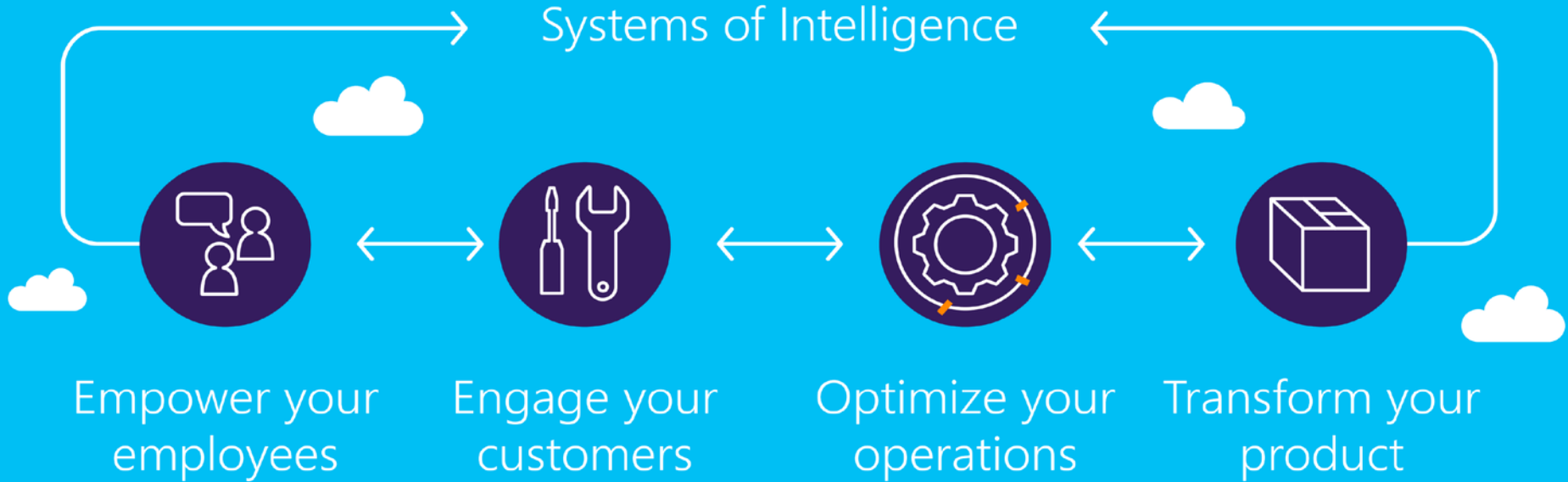


Platform Modernization

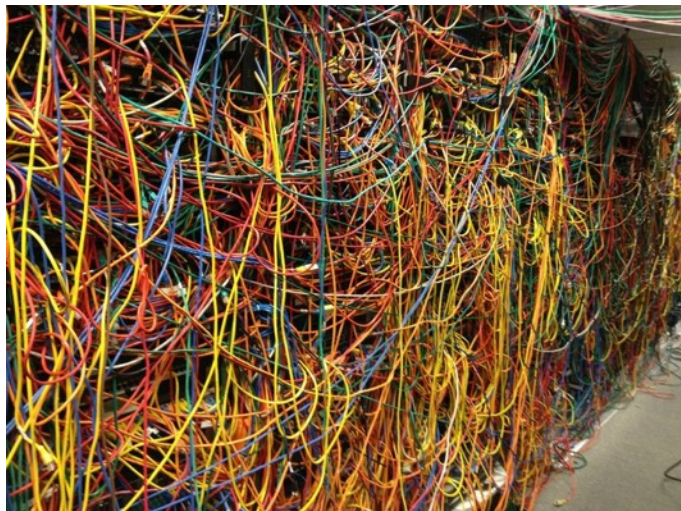
How to Choose the Right Technologies for Your Environments

Nebraska IT Leadership Forum
April 30, 2019

Digital Transformation



The Problem

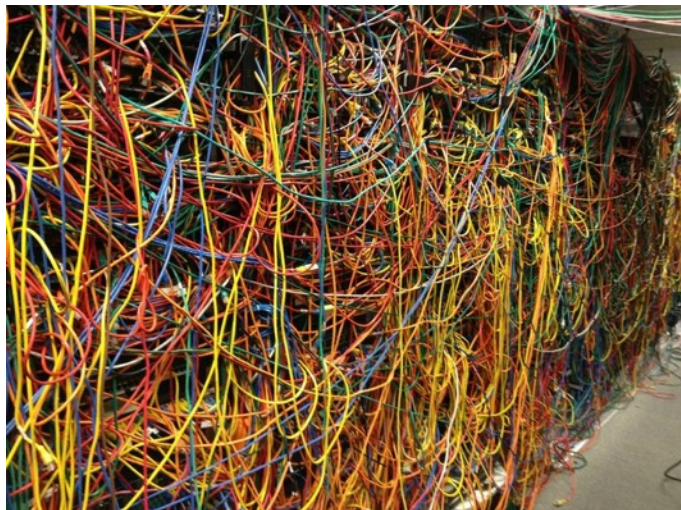


Legacy Systems

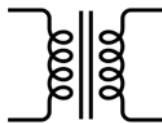


Transformation

$$F(s) = \mathcal{L}\{f(t)\} = \int_{-\infty}^{+\infty} e^{-st} f(t) dt$$

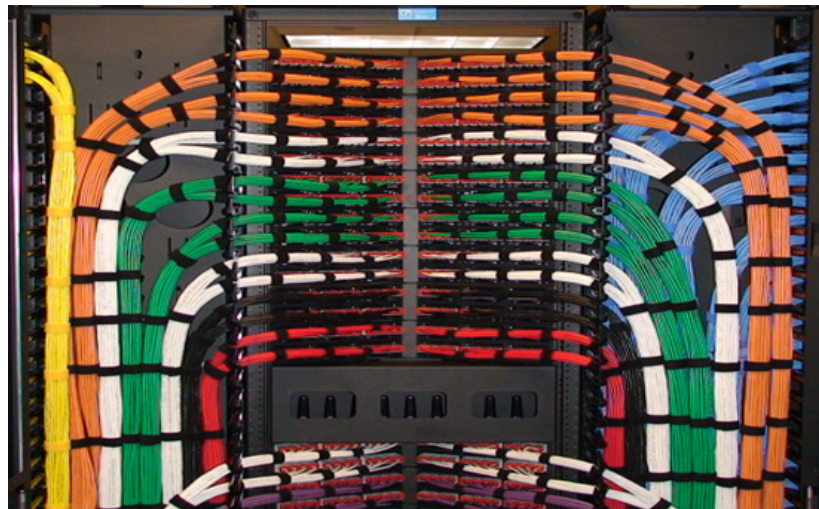


Legacy Systems



$$F(\omega) = \int_{-\infty}^{\infty} f(t) e^{-i\omega t} dt$$

$$f(t) = \frac{1}{2\pi} \int_{-\infty}^{\infty} F(\omega) e^{i\omega t} d\omega$$

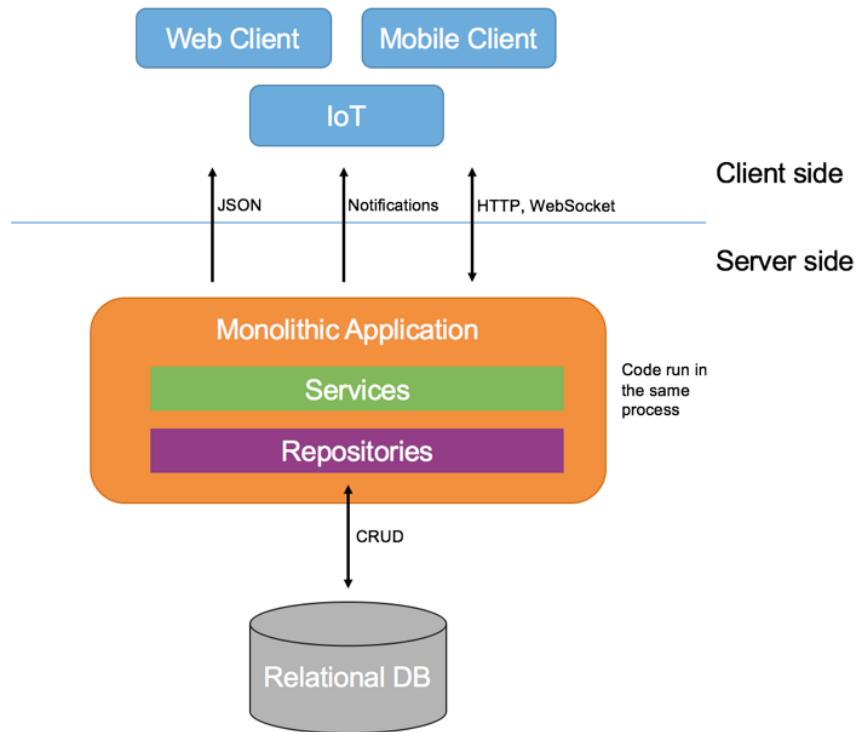


**Encapsulated Systems
(Abstracted complexity)**

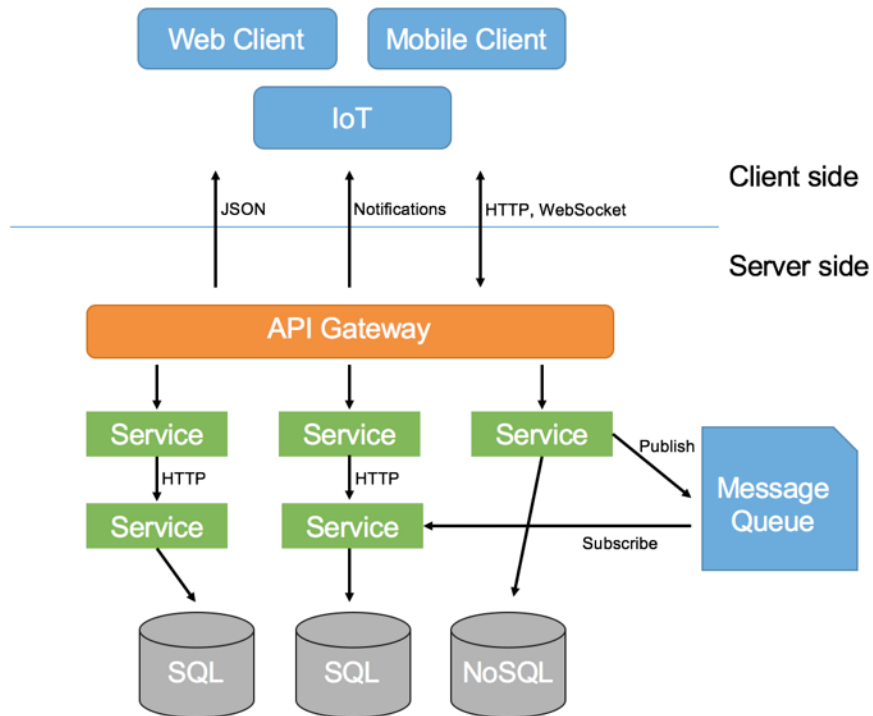


Transform

From a Monolithic Architecture



To a Cloud Native Architecture



**NEW PLATFORM TO REPLACE AGING
CODEBASE**

PROGRESSING AS EXPECTED

The Future Technology Stack

Application Framework

Runtime Platform

Infrastructure Automation

Infrastructure

Tools



Spring Cloud



Spring Boot



steeltoe[®]
by Pivotal

apigee



New Relic[®]



Prometheus



Pivotal
Cloud Foundry[®]



Pivotal
**Container
Service[™]**

BOSH

The outer shell for cloud software



GitHub



JFrog Artifactory



vmware[®]



Google Cloud Platform



amazon
web services

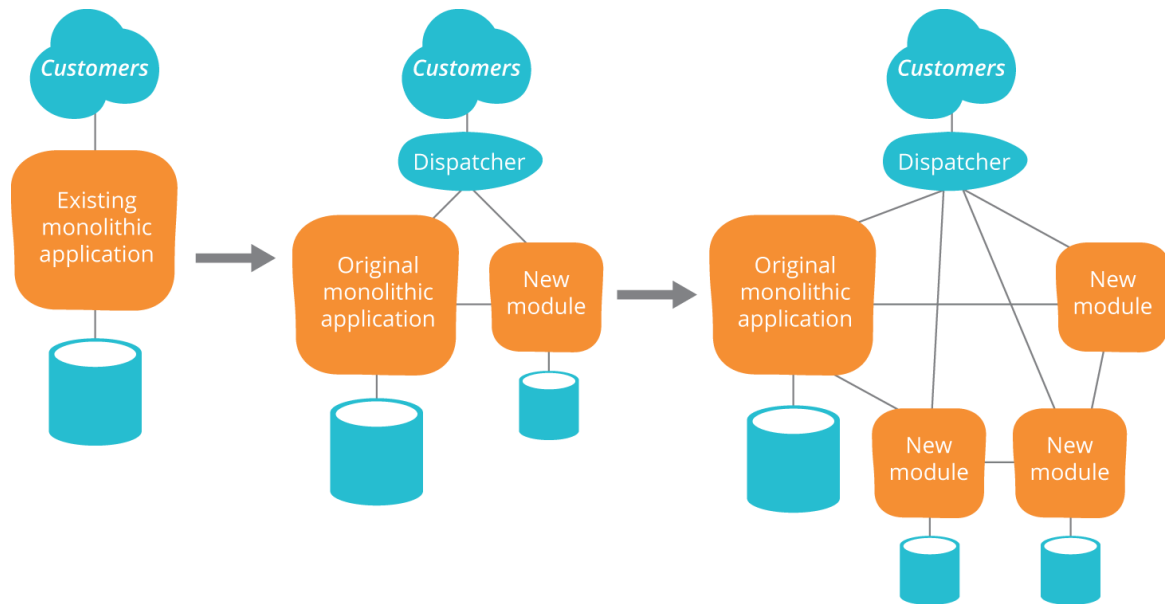


Azure



ZABBIX

Strangler Pattern



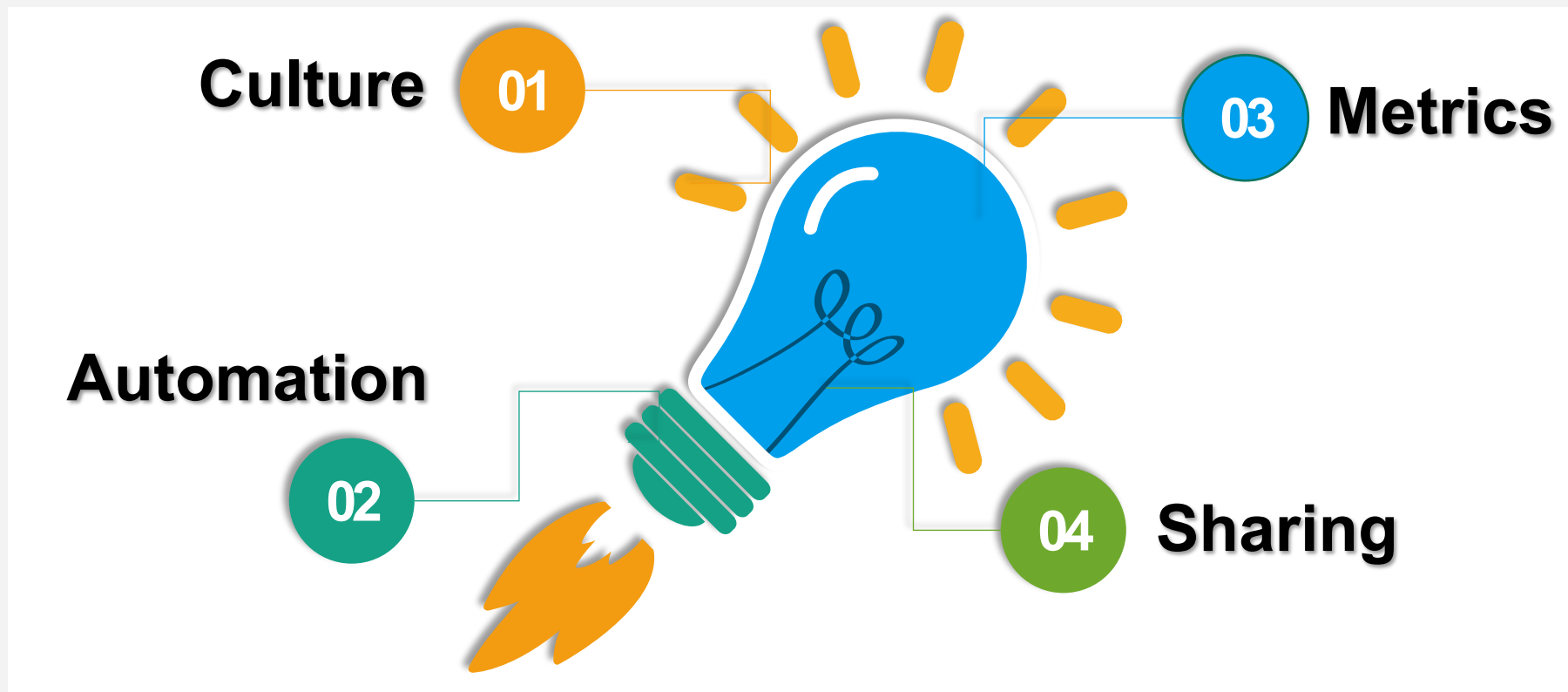
Tools

Maven  **Gradle**

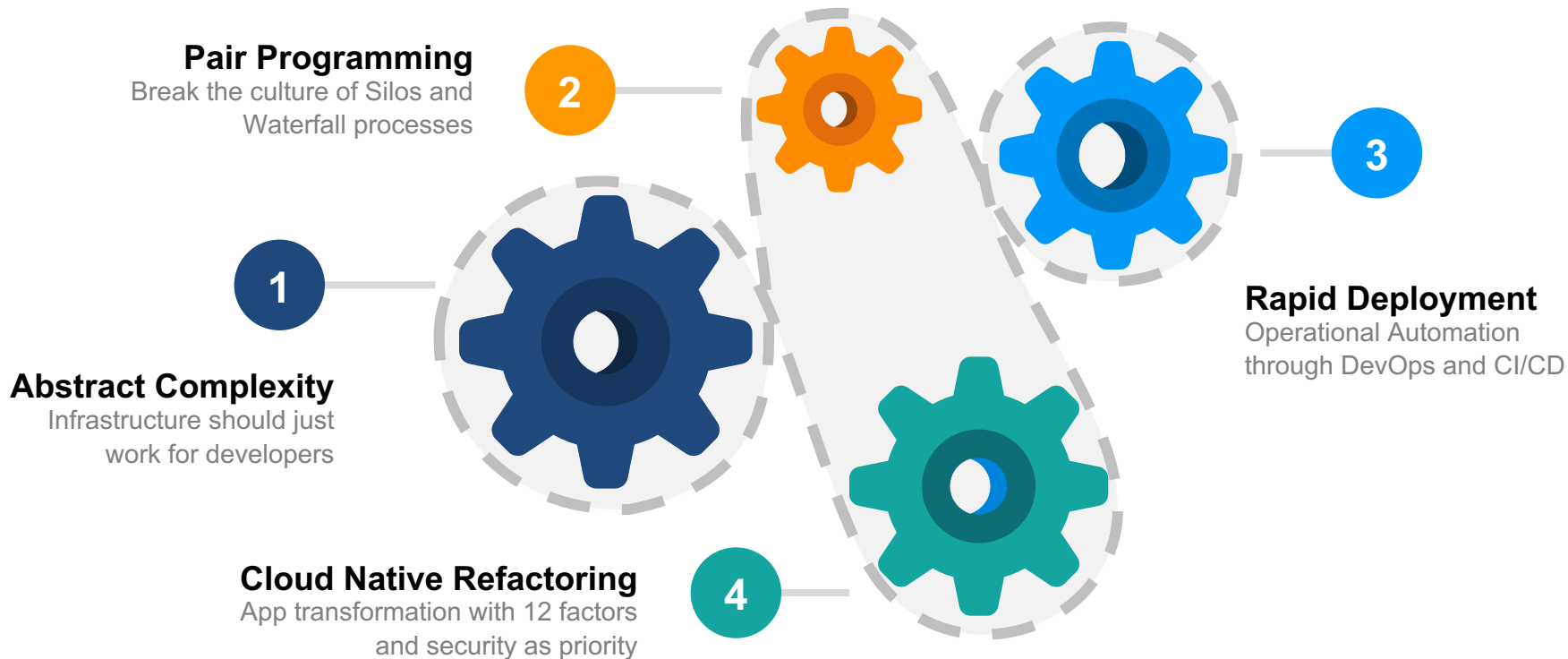
 **kubernetes**  **docker**



Four Themes



The Approach





Pivotal®

Transforming How The World Builds Software