

The background of the slide features a complex, abstract network diagram. It consists of numerous circular nodes of varying sizes, some of which are highlighted with a blue outline. These nodes are interconnected by a web of thin, light gray lines, creating a sense of connectivity and data flow. The overall aesthetic is clean and modern, typical of a professional presentation on technology.

Cloud Infrastructure Management

Hello!

I am Amila Kumaranayaka

Senior Tech Lead DevOps, Cambio
Software Engineering

twitter:

@ami_8703



What to expect

Why cloud?

Cloud Services

DevOps

Infrastructure as Code

Automation

Terraform/Cloudformation

A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. The nodes are represented by small circles, some of which are larger and have concentric circles inside, suggesting a hierarchical or multi-layered structure. The lines are thin and gray, connecting the nodes in a non-linear fashion.

Why Cloud?

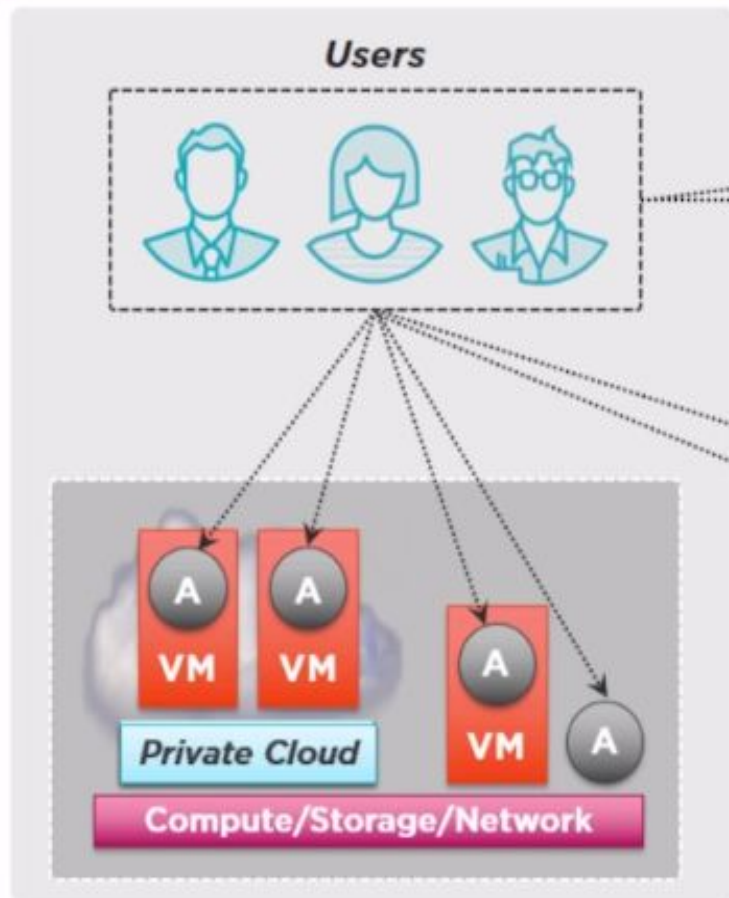


“

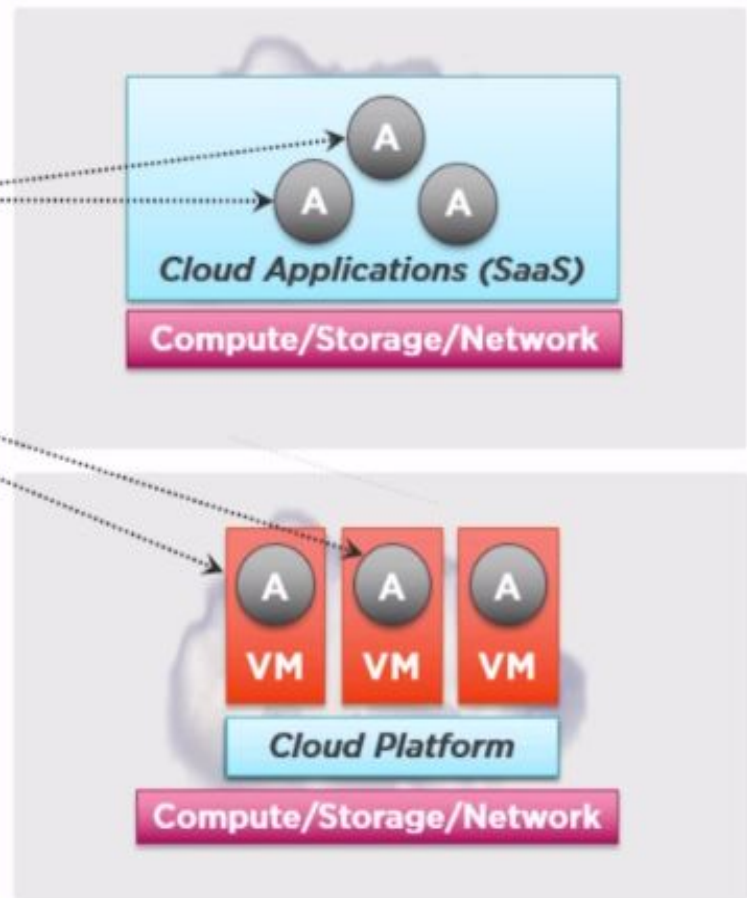
“If someone asks me what cloud computing is, I try not to get bogged down with definitions. I tell them that, simply put, cloud computing is a better way to run your business.” ~ Marc Benioff, Founder, CEO and Chairman of Salesforce



On-Premises



Service Provider



What it offers

- Increase speed and agility
- Not maintaining data centers
- Architecture of Innovation
- World Class Computing at the Lowest Possible Cost
- Scalability
- High Availability
- Platform for Automation



A decorative network diagram in the top-left corner, featuring a complex web of interconnected nodes and lines. The nodes are represented by small circles, some of which are highlighted with a double-circle effect. The lines are thin and gray, creating a mesh-like structure.

Cloud

Let's start with Cloud Providers



OPENSIFT



AWS Services

Deployment & Management

Application Services



Amazon
SQS



Amazon
ElasticTranscoder



Amazon
SES



Amazon
AppStream



Amazon
CloudSearch

Mobile Services



Amazon
Cognito



Amazon
Mobile Analytics



Amazon
SNS

Enterprise Applications



Amazon
WorkDocs



Amazon
WorkSpaces



Amazon
WorkMail

Application Services

Administration & Security



AWS
DirectoryService



AWS
IAM



AWS
Trusted Advisor



AWS
Config



AWS
CloudTrail



Amazon
CloudWatch

Deployment & Management



Amazon
CloudFormation



AWS
OpsWorks



AWS
CodeDeploy

Analytics



Amazon
Kinesis



AWS
Data Pipeline



Amazon
EMR

Foundation Services

Compute



Amazon
EC2



AWS
Lambda

Storage & Content Delivery



Amazon
CloudFront



Amazon
Glacier



AWS
Storage Gateway



Amazon
Content Delivery

Database



Amazon
Dynamo DB



Amazon
RDS



Amazon
Redshift



Amazon
Elastic Cache

Networking



Amazon
Route 53



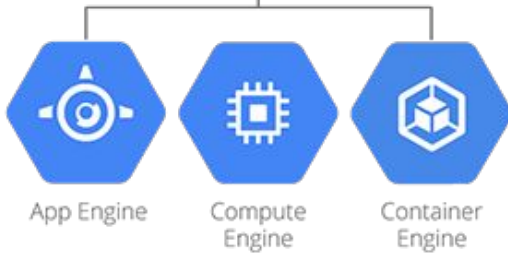
Amazon
VPC



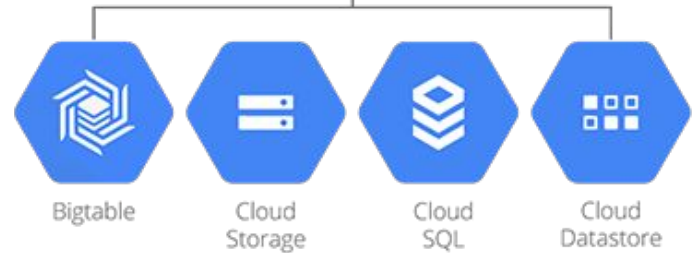
AWS
Direct Connect

Google Cloud Platform

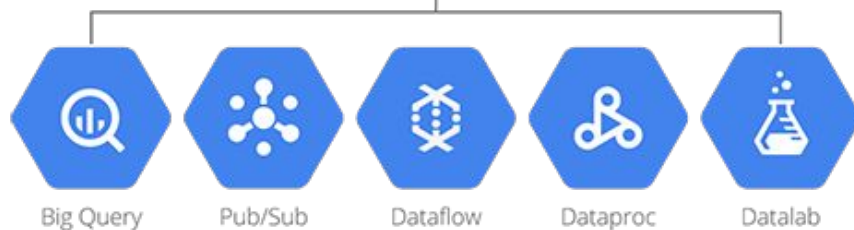
Compute



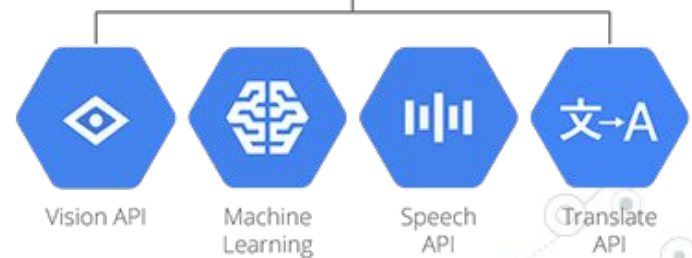
Storage



Big Data



Machine Learning




THERE MUST BE
A BETTER WAY OF
CHOOSING CLOUD
PROVIDERS!





Factors to consider

- ◎ Business health and processes
 - ◎ Administration support
 - ◎ Technical capabilities and processes
 - ◎ Security practices
 - ◎ Compliance
 - ◎ Cost Structure
 - ◎ Manageability
 - ◎ Performance Uptime
- 

Managing Cloud

Can we get the most out of cloud with traditional infrastructure management?



WHAT ARE YOU WORKING ON?

TRYING TO FIX THE PROBLEMS I
CREATED WHEN I TRIED TO FIX
THE PROBLEMS I CREATED WHEN
I TRIED TO FIX THE PROBLEMS
I CREATED WHEN...

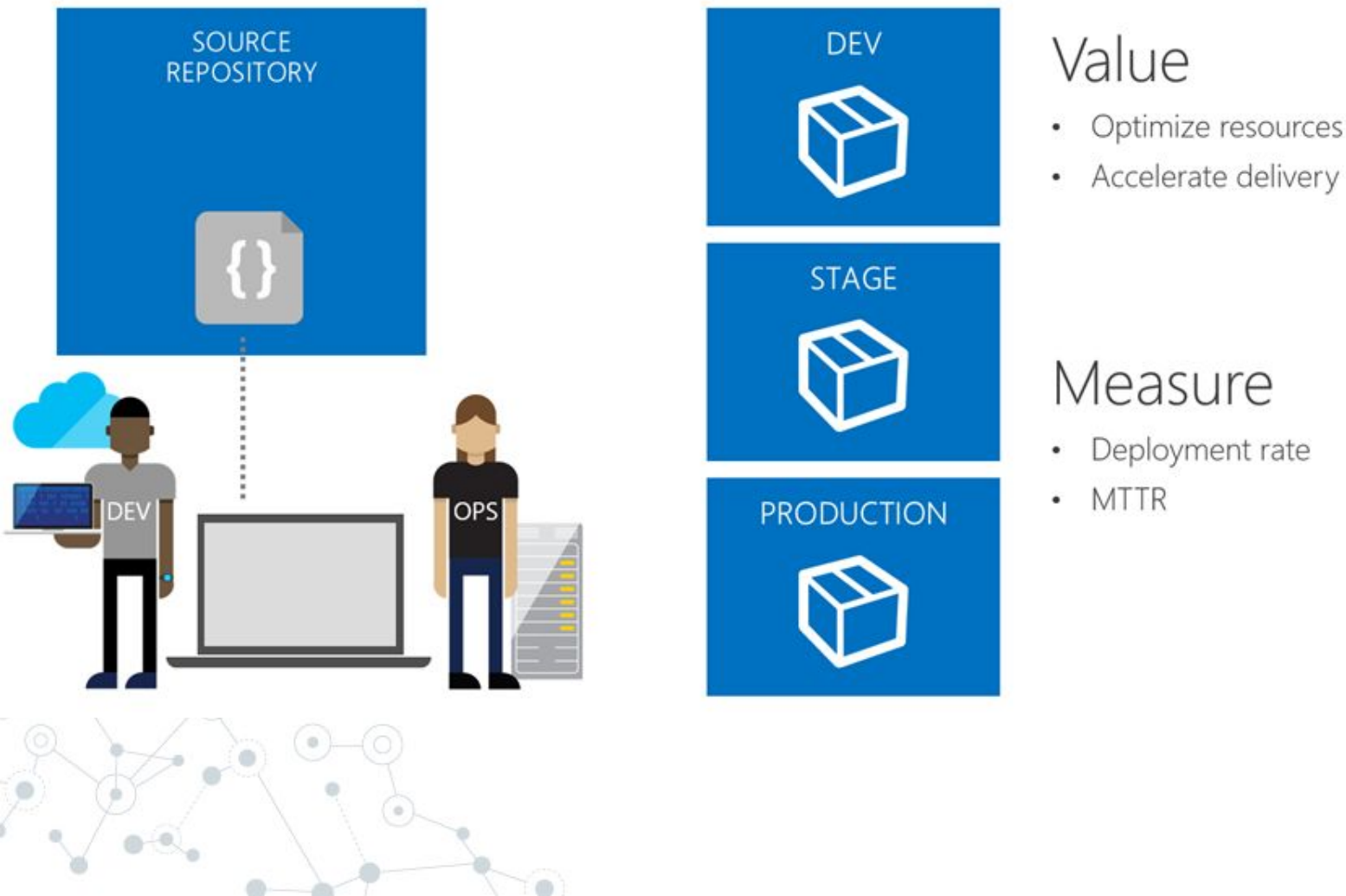




DevOps Practises

- ◎ Automation
- ◎ Continuous Integration
- ◎ Continuous Deployment
- ◎ Version Control Integration
- ◎ Fast Feedback loops
- ◎ Application & Infrastructure version management.

Infrastructure as code (IAC) – a DevOps practice





Infrastructure as Code

Configuration

Ansible

Chef

Puppet

Saltstack

Provision/Orchestrate

Cloudformation

Terraform

Docker

Kubernetes

Terraform is an infrastructure as code software by HashiCorp. It allows users to define a datacenter infrastructure in a high-level configuration language.





Terraform

Write

Infra in git

Plan

Preview
changes

Create

Reusable
Infrastructure

.



No Clicks



Thanks!

Any questions?

References

<https://www.thoughtworks.com/insights/blog/infrastructure-code-reason-smile>

<https://registry.terraform.io/>

