Cloud Computing Essentials

© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Cloud Computing

NIST

Cloud computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.

Gartner

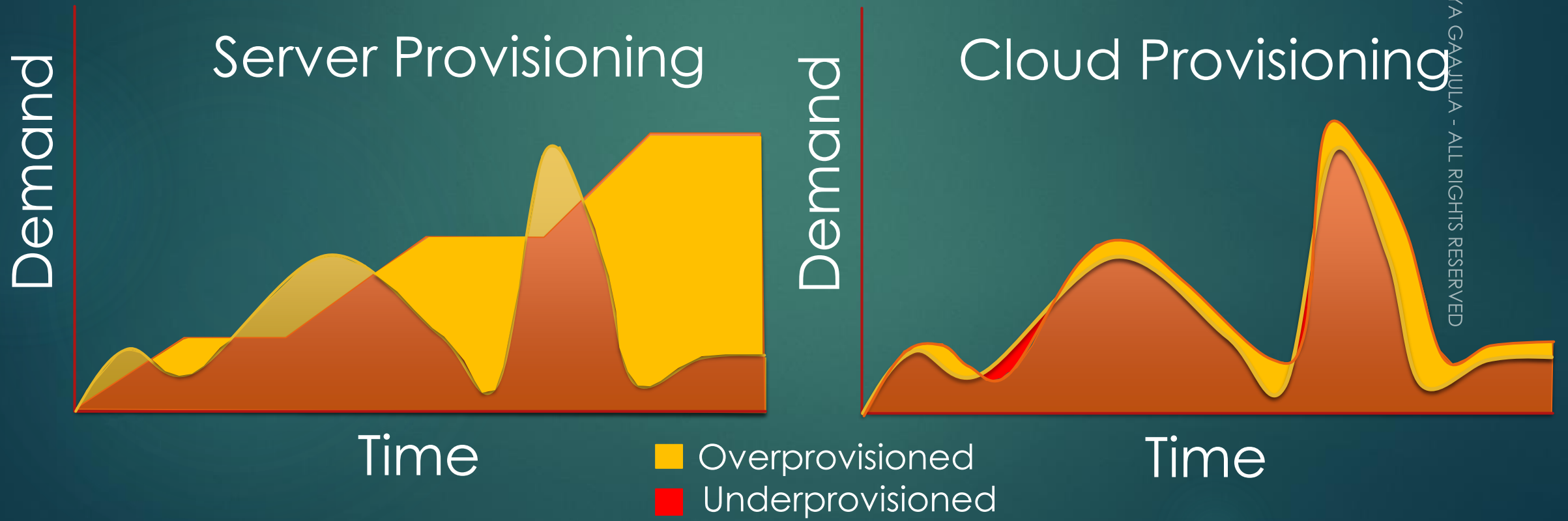
"Cloud computing is a style of computing where massively scalable IT-related capabilities are provided as a service across the Internet to multiple external customers"

"Cloud computing is Web-based processing, whereby shared resources, software, and information are provided to computers and other devices (such as smart phones) on demand over the Internet."

© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

What is a "Cloud"?

- Cloud: on-demand, scalable, multi-tenant, self-service compute and storage resources

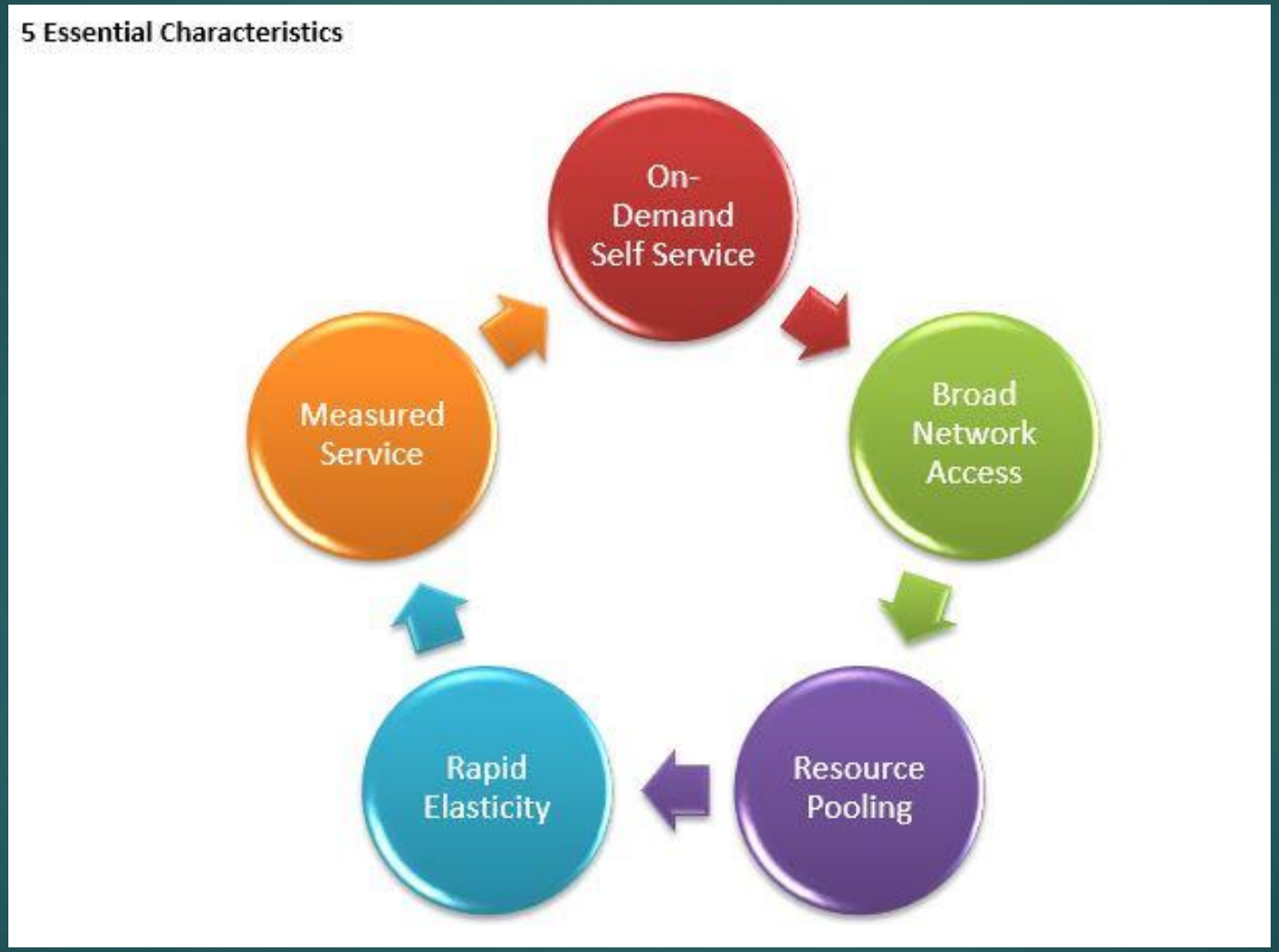


© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Cloud Vendors

© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Cloud Computing Characteristics



© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Service Models

Infrastructure as a Service (IaaS):
basic compute and storage resources

- On-demand servers
- Amazon EC2, VMWare vCloud

Platform as a Service (PaaS): Cloud application infrastructure

- On-demand application-hosting environment
- E.g. Google AppEngine, Salesforce.com, Windows Azure

Software as a Service (SaaS): Cloud applications

- On-demand applications
- E.g. Office 365, GMail, Microsoft Office Web Companions

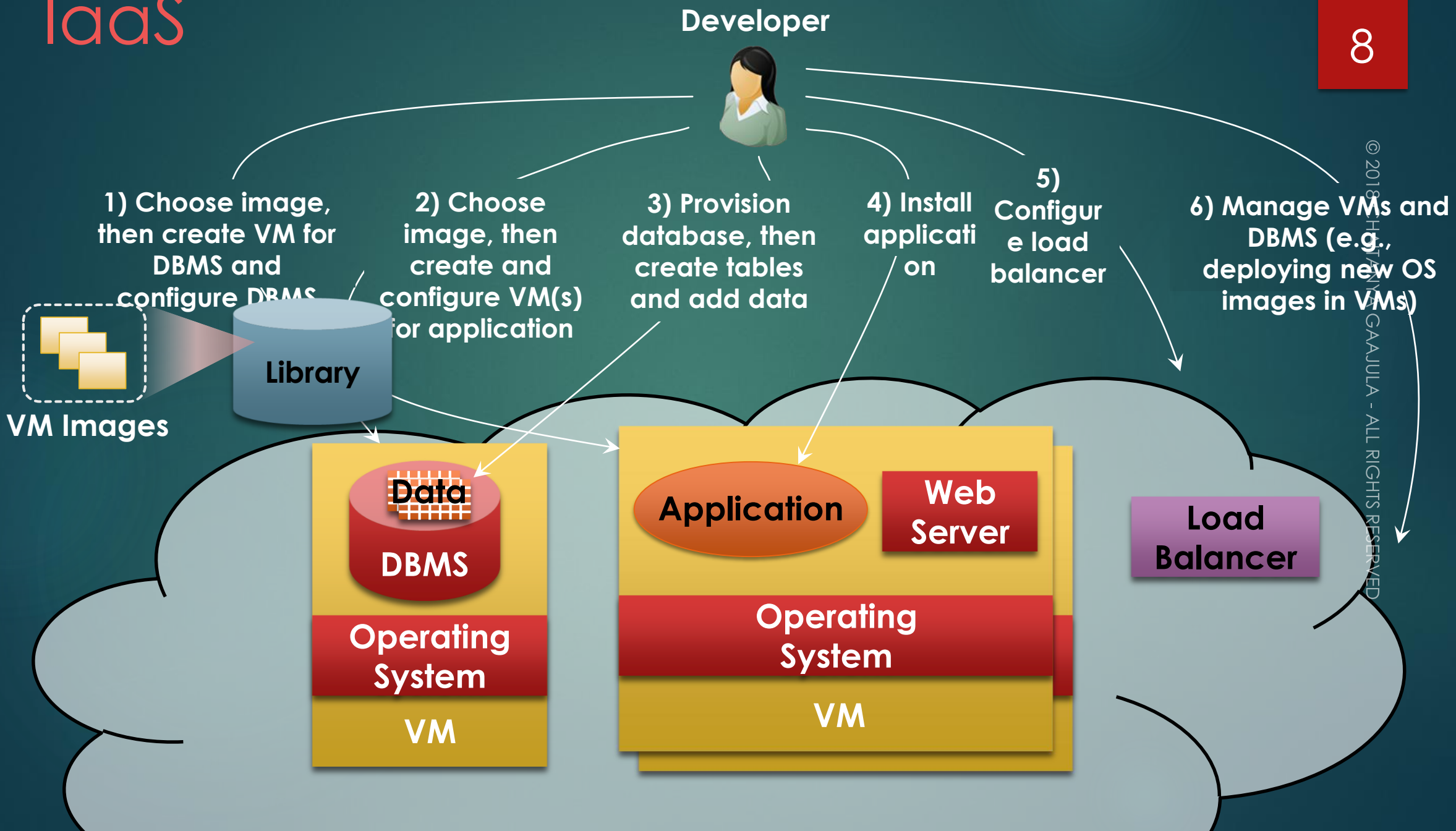
© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Cloud: Efficiency Versus Control

= Managed for You	Standalone Servers	IaaS	PaaS	SaaS
Applications				
Runtimes				
Database				
Operating System				
Virtualization				
Server				
Storage				
Networking				

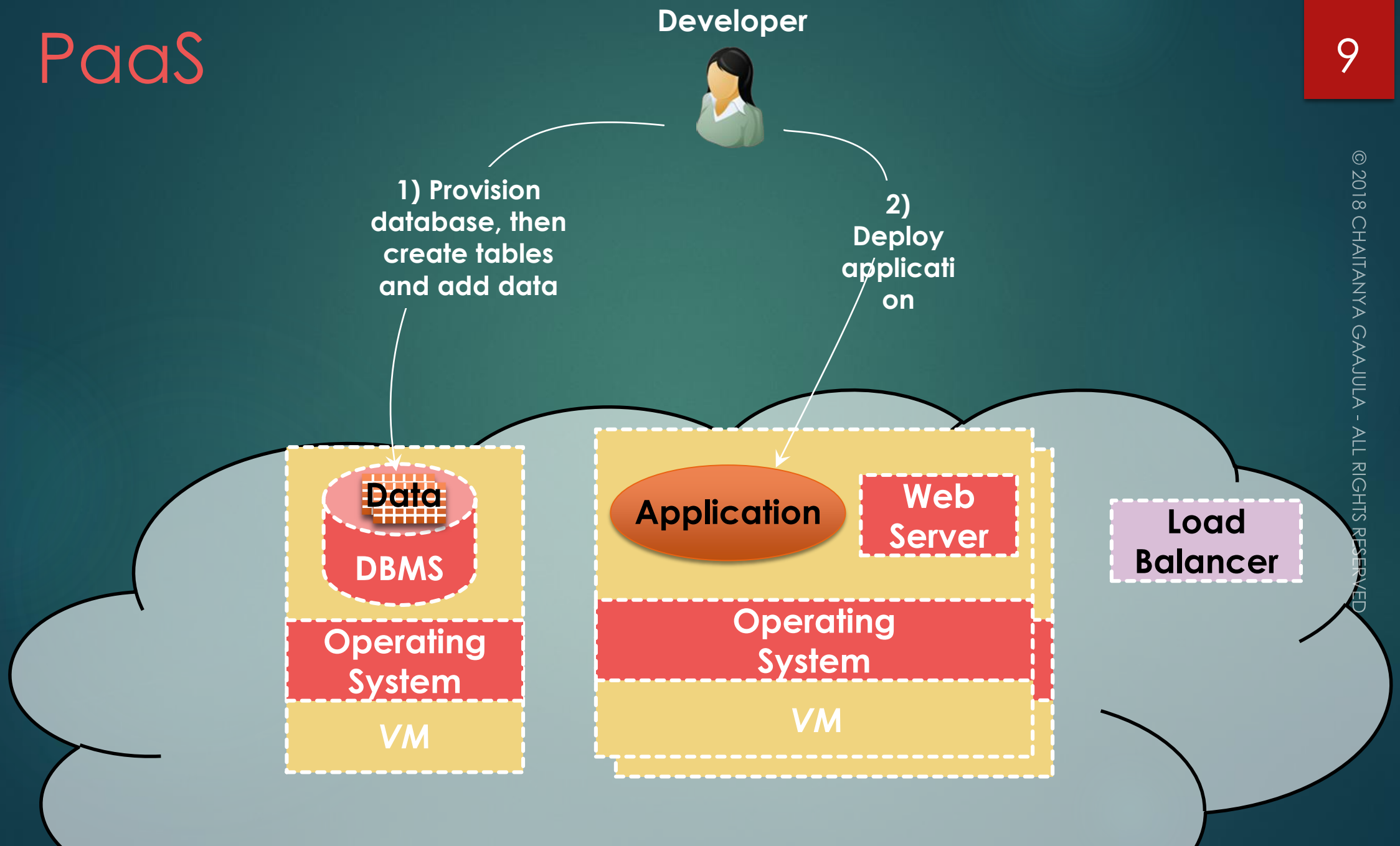
© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

IaaS



© 2018 HANNU GAAJULA - ALL RIGHTS RESERVED

PaaS



© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

SaaS

SaaS Examples, General Market

SaaS For Enterprises

ebay stores

amazon web services™

Google Apps

salesforce.com
Success On Demand.

SAP
SAP CRM ON-DEMAND SOLUTION

ORACLE
Oracle On Demand

YAHOO! SMALL BUSINESS

SaaS For Consumers

myspace.com a place for friends

Zorpia.com

hi5

facebook

vimeo

bebo

YouTube

friendster

metacafe

BREAK

dailymotion

vidiLife

blip.tv

webshots

Photobucket.com

Tickle Friends!

myphotoalbum

smugmug

FOTKI

dotphoto

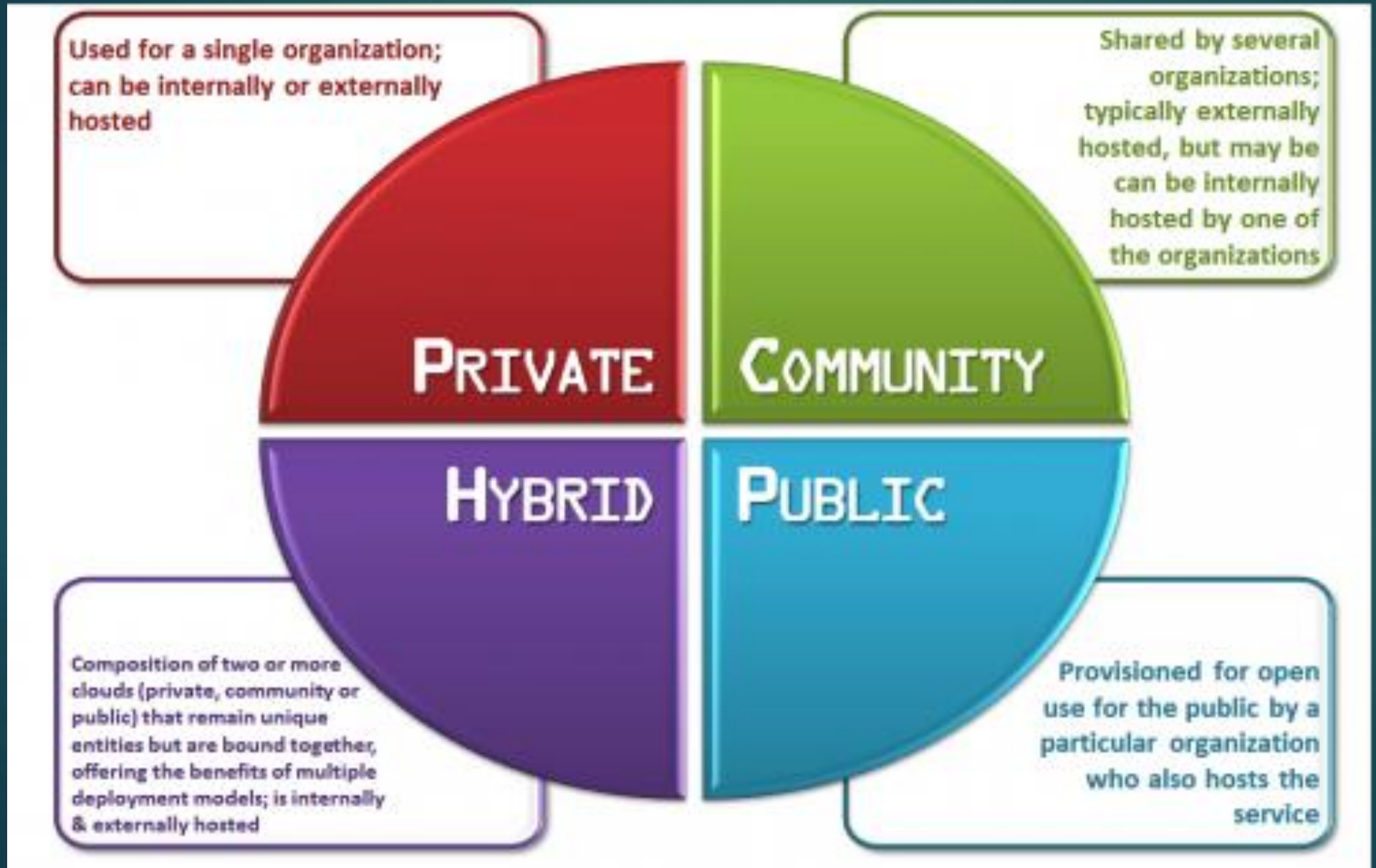
flickr

eyespot

Eyespot Corporation Confidential 2008 ©

© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Deployment Models



© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED

Thank You

© 2018 CHAITANYA GAAJULA - ALL RIGHTS RESERVED