



# Vodafone Cloud Computing

**Ateen Kumar**

Manager IT & Corporate Security, Vodafone Fiji Limited

2<sup>nd</sup> July 2012

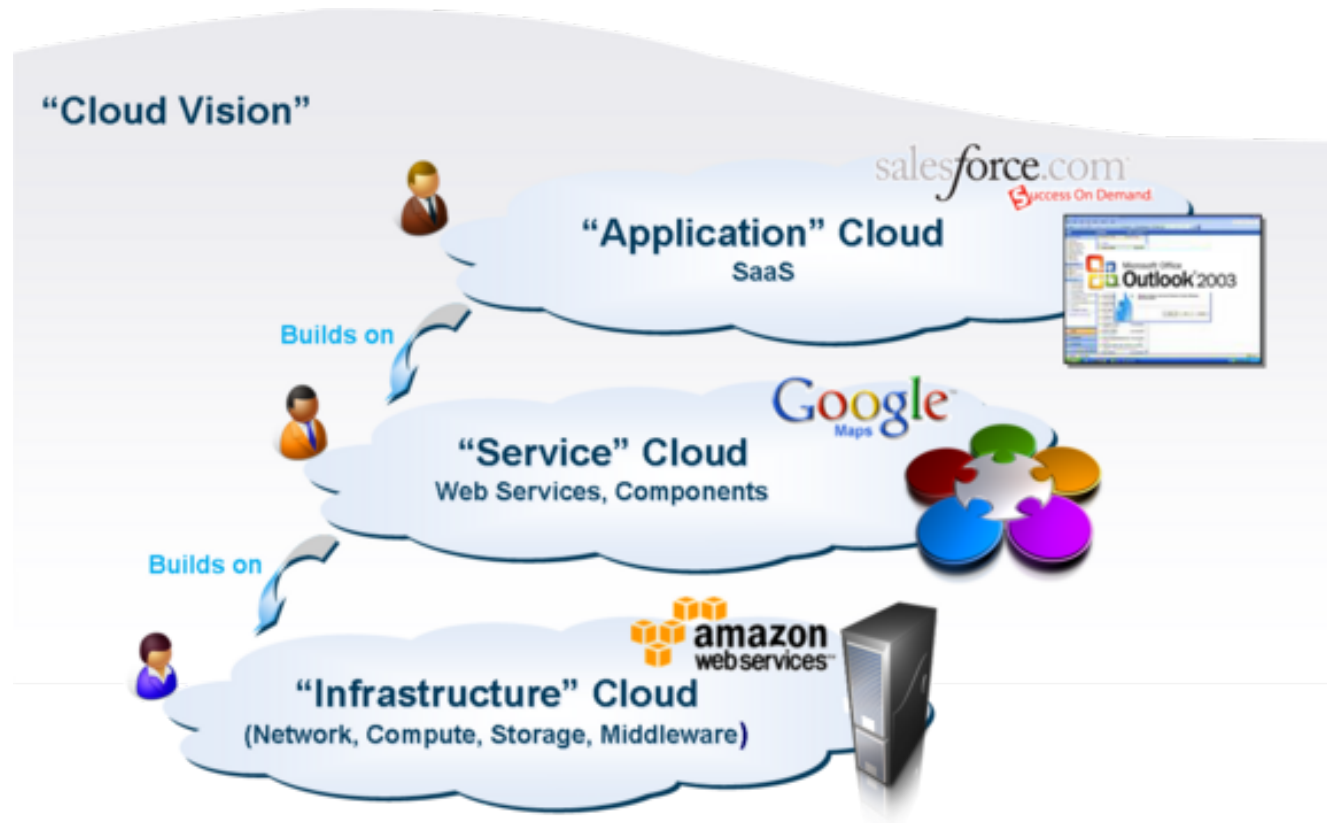
# Agenda

- What is Cloud Computing ?
- Vodafone Cloud Computing
- Virtualization
- Benefits
- Future



# What is Cloud Computing?

- Cloud computing is becoming one of the next IT industry buzz words: users move out their data and applications to the remote “Cloud” and then access them in a simple and pervasive way.
- Google Docs, Google Mail, Linked-In ....



# Cloud Computing Model

- **Software as a Service** - Capability to use the provider's applications running on cloud Infrastructure
- **Platform as a Service** - Capability to deploy onto the cloud infrastructure customer-created or customer-acquired applications developed using programming languages and tools supported by the provider
- **Infrastructure as a Service** - Capability to provision storage, networks and other fundamental computing resources, offering the customer the ability to deploy and run software, which can include OSs and applications



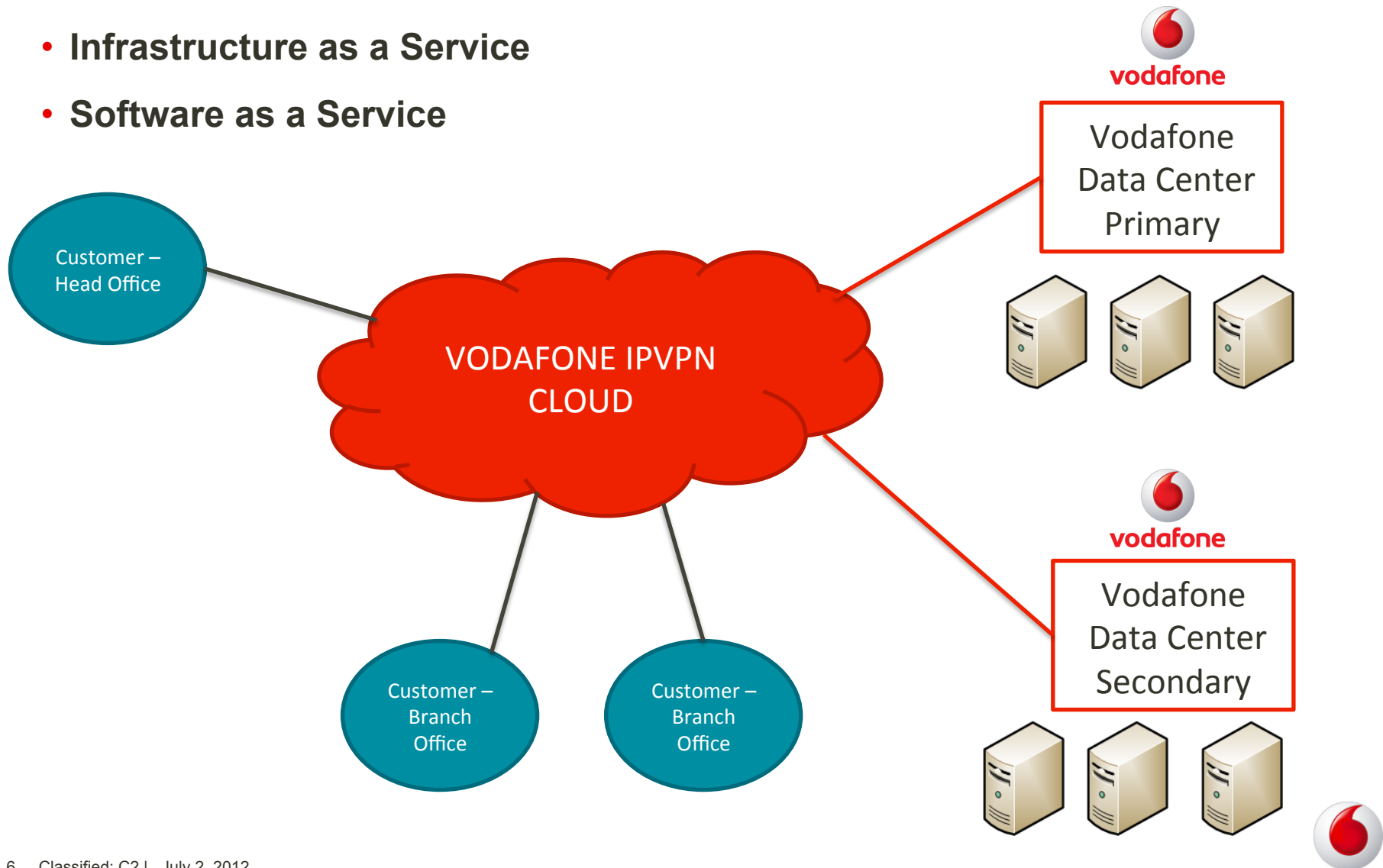
# Virtualization

- Technique used in Cloud computing. By consolidating many instances of (virtualized) servers on a single physical server, service providers lower their hardware expenditures



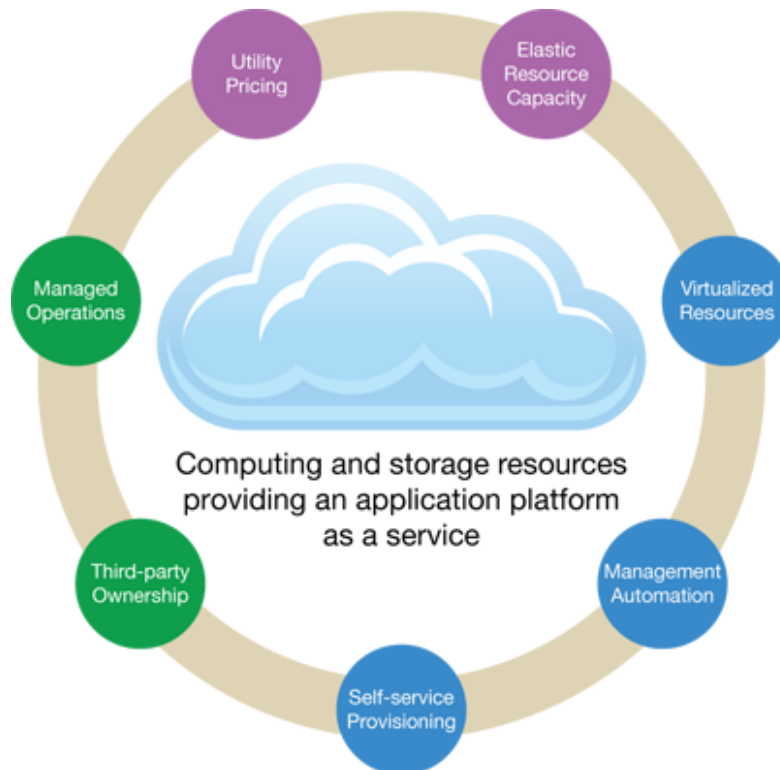
# Vodafone Cloud Computing

- Infrastructure as a Service
- Software as a Service



# Benefits

- Up to date with Technology
- Strong Security Controls
- Reduced Downtime
- Redundancy & BCP
- Optimized server utilization
- Cost Saving
- Dynamic scalability
- Reduced time for implementation



- **Economic Elements:**  
Pay-as-you-go, pay-as-you-grow, no CAPEX.
- **Architectural Elements:**  
Simple, abstract environment for development.
- **Strategic Elements:**  
Focus on your core business, leave the rest to someone else.



# Future ..



- Cloud Email Spam
- Cloud Internet Proxy
- All IT Services Hosted on the Cloud
- Cloud Storage Services
- Telecommunication Service Providers well positioned
- So are there any THREATS ??
  - Social networking website LinkedIn has said some of its members' passwords have been "compromised" after reports that more than six million passwords had been leaked onto the internet.
  - Trust is a major component in the cloud computing business model.





# Thank You

- Any Questions or Comments ?

	Colocation	Managed	Cloud
Time	Weeks to Months	Days to Weeks	Minutes
Scalability	Slowest, Rigid & Costly	Slower, somewhat flexible, Costly	Instant, Flexible, Pay-per-usage
Cost	High CapEx	Costly, sometimes month/year contracts, no CapEx	No contracts, usage based, no upfront costs
"Green"	Low	Low	High - virtualized
Pricing model	<u>Buy</u> Servers & Colo costs whether used or not	<u>Rent</u> Servers & Hosting costs whether used or not	<u>Rent</u> based on usage only

Catalyst - Hosting Industry Ripe for Change

- Technology has evolved
- People demand more control
- Instant gratification
- In-house too costly from CapEx and Human Capital
- Colocation for those who want to be physically there
- Managed is not dynamic enough

