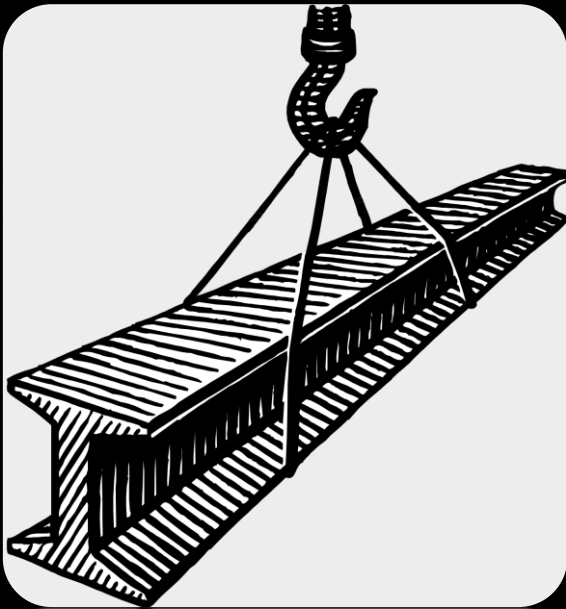# AWS Summit Milan
31 Ottobre 2013

Amazon Web Services
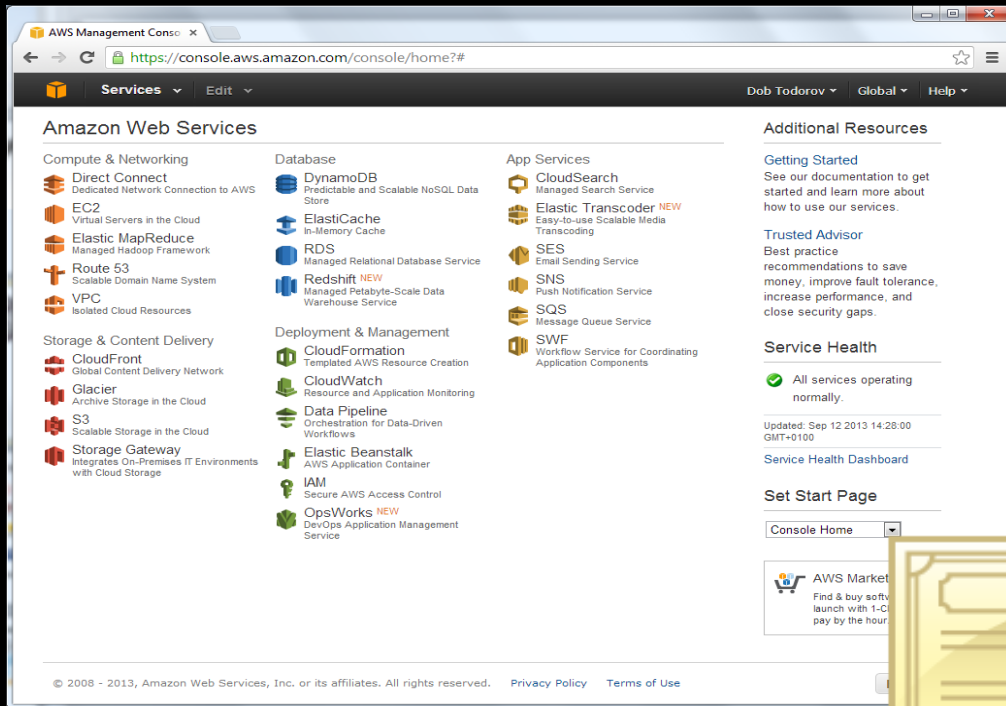# Security & Compliance Overview

Dob Todorov

Principal Security & Compliance Architect EMEA

undifferentiated heavy lifting

utility computing
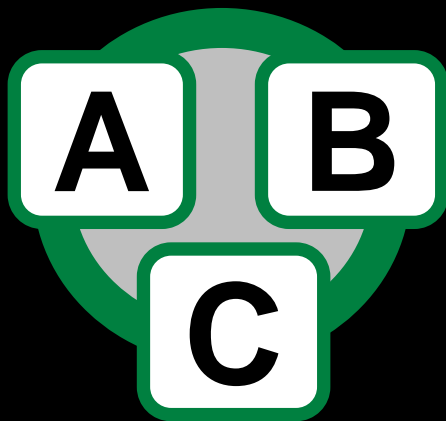
Hundreds of Thousands of Customers in 190 Countries…

GovCloud
(US ITAR Region)

US West
(Northern California)

US West
(Oregon)

US East
(Northern Virginia)

South America
(Sao Paulo)

EU
(Ireland)

Asia Pacific
(Singapore)

Asia Pacific
(Tokyo)

Asia Pacific
(Sydney)

AWS Regions

AWS Edge Locations

EU West
(Dublin)

A B C

US East
(Virginia)

A B C

Asia Pacific
(Tokyo)

A B C
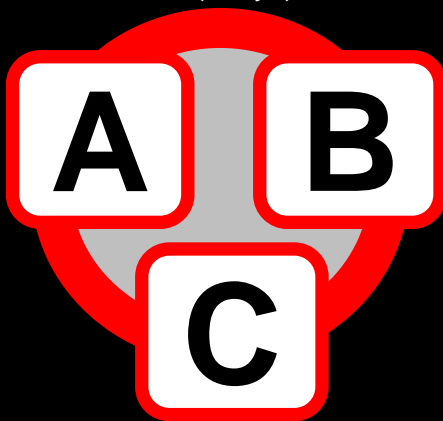
Asia Pacific
(Australia)

A B

US West
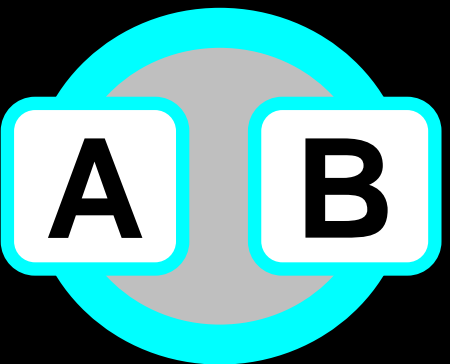(Northern California)

A B

US West
(Oregon)

A B

South America
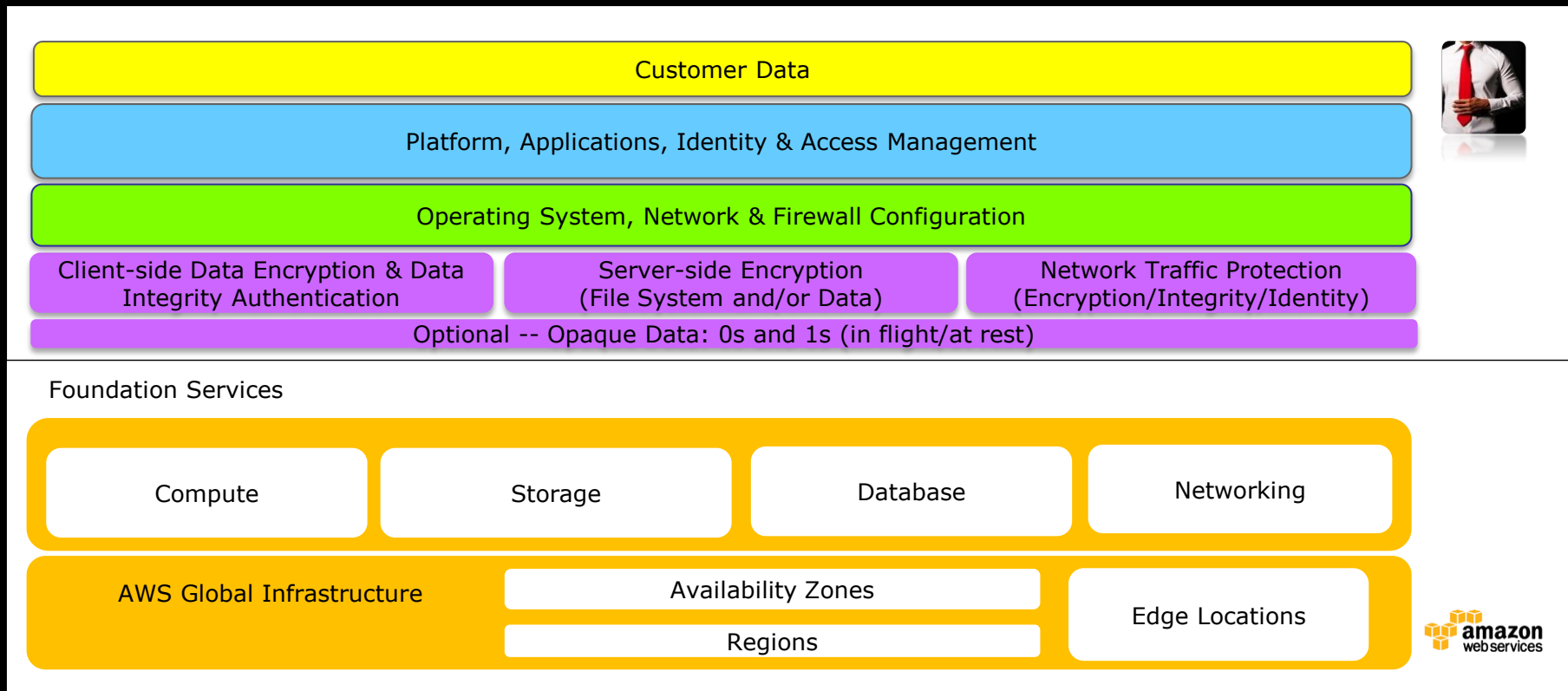(Sao Paolo)

A B

Asia Pacific
(Singapore)

A B
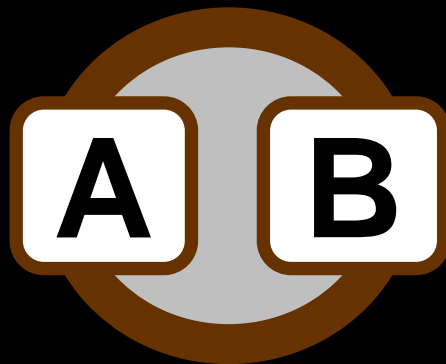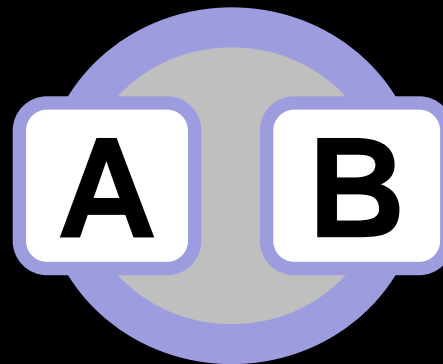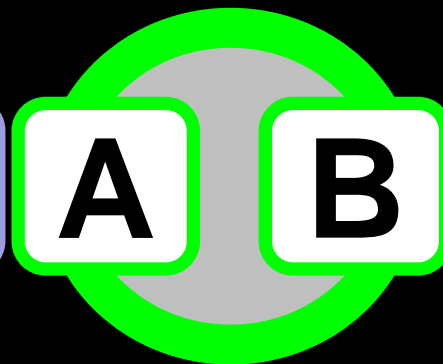
Personal Data Protection in Europe

- EC Directive 95/46/EC: Personal Data Protection
- Use Amazon Web Services Dublin Region

- Safe Harbour EU Compliant

- Safe Harbour Switzerland Compliant

The Shared Responsibility Model in the Cloud

Customer Data

Platform, Applications, Identity & Access Management

Operating System, Network & Firewall Configuration

Client-side Data Encryption & Data Integrity Authentication	Server-side Encryption (File System and/or Data)	Network Traffic Protection (Encryption/Integrity/Identity)

Optional -- Opaque Data: 0s and 1s (in flight/at rest)

Foundation Services

Compute	Storage	Database	Networking

AWS Global Infrastructure

Availability Zones	Edge Locations
Regions	

amazon
web services

The Shared Responsibility Model in the Cloud

Security IN the Cloud

Security OF the Cloud

User Identification, Authentication and Authorisation in the Cloud

Active Directory/ LDAP

AD/LDAP Users

Enterprise Applications

Corporate Systems

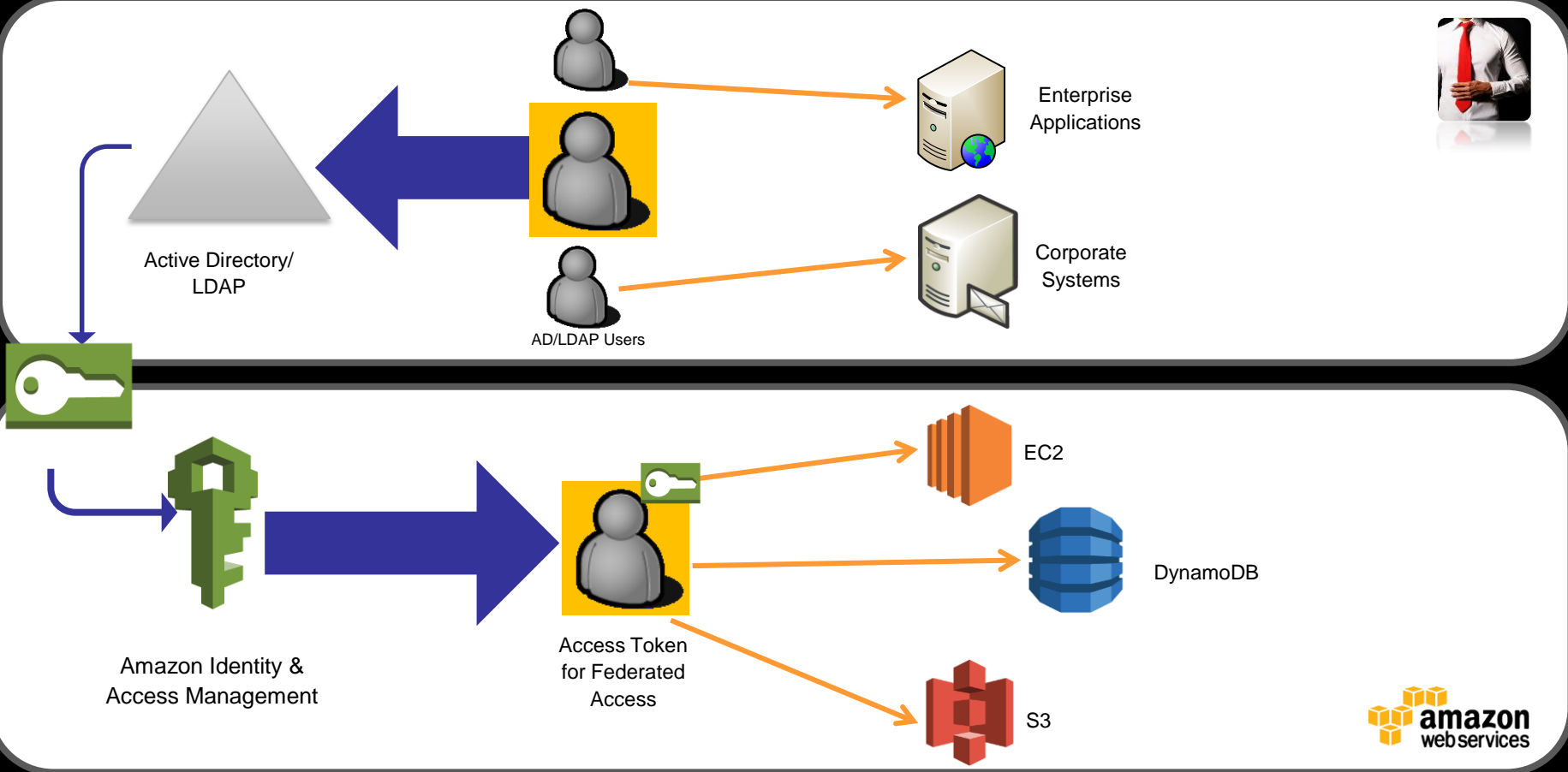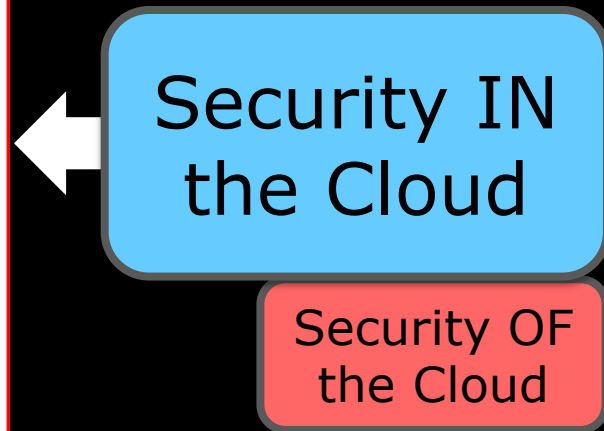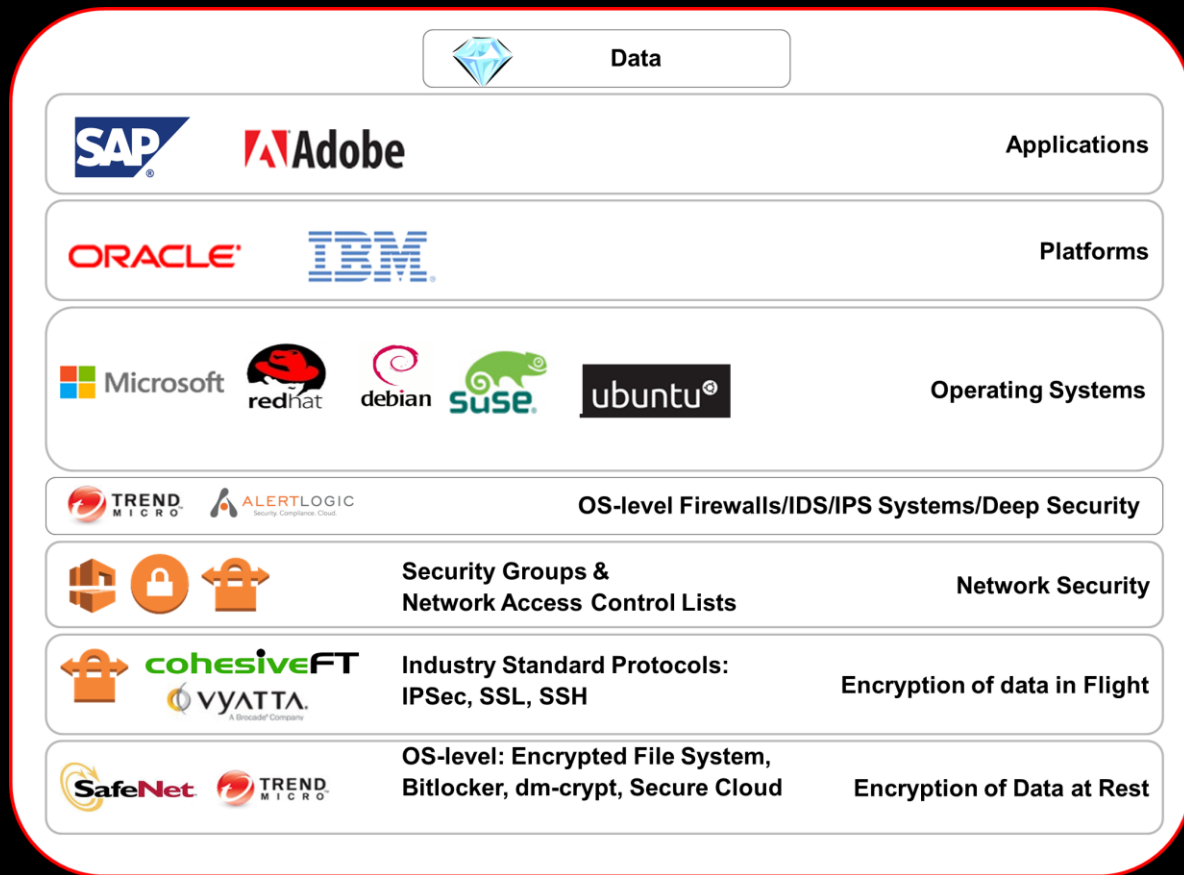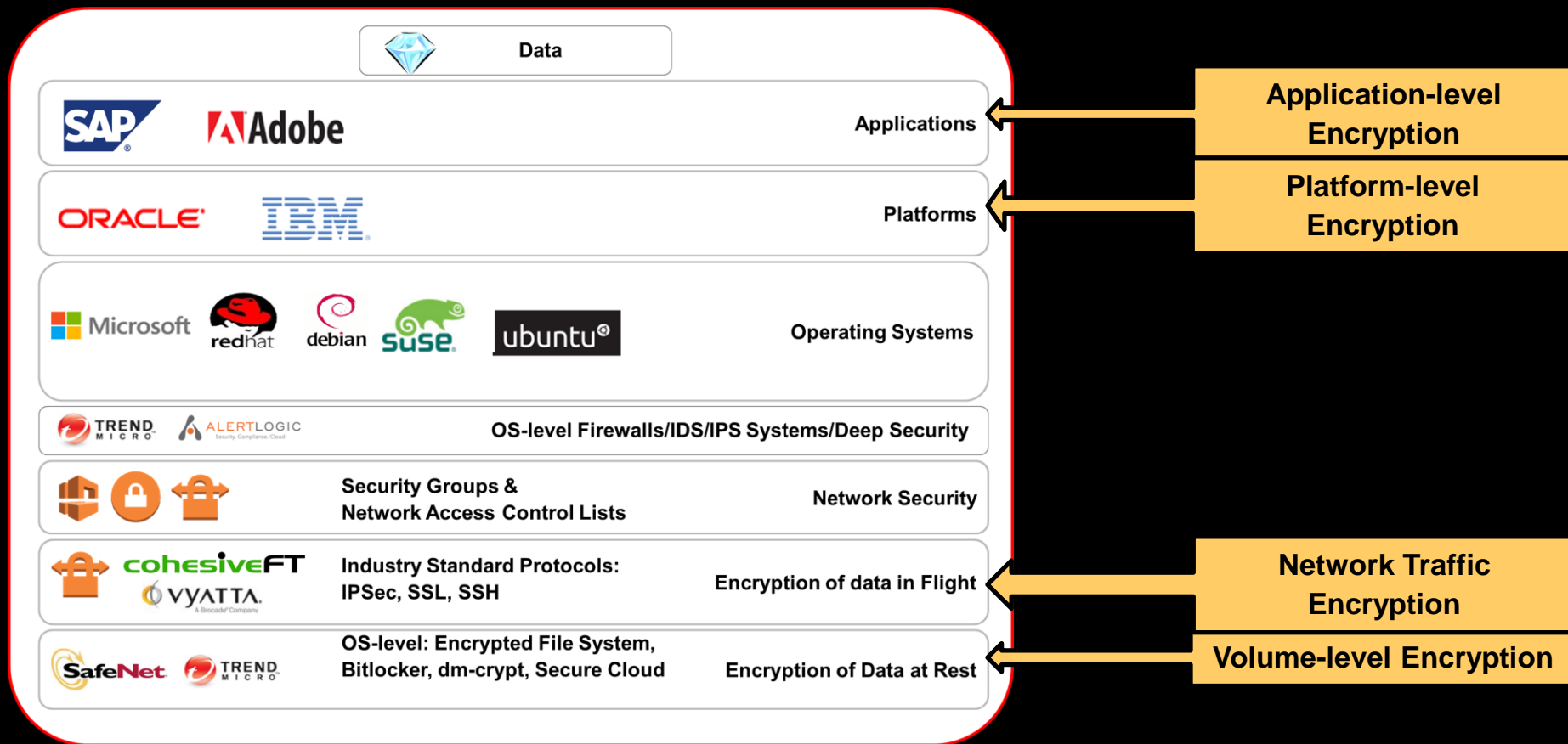Amazon Identity & Access Management

IAM Users

EC2

DynamoDB

S3

User Identification, Authentication and Authorisation in the Cloud

Customer-managed Controls on Amazon EC2

💎 **Data**	

SAP **Adobe**	**Applications**

ORACLE **IBM**	**Platforms**

Microsoft **redhat** **debian** **SuSE** **ubuntu**	**Operating Systems**

TREND MICRO **ALERTLOGIC** Security. Compliance. Cloud.	**OS-level Firewalls/IDS/IPS Systems/Deep Security**

Security Groups & Network Access Control Lists	**Network Security**

cohesiveFT **VYATTA** A Brocade Company	Industry Standard Protocols: IPSec, SSL, SSH — **Encryption of data in Flight**

SafeNet **TREND MICRO**	OS-level: Encrypted File System, Bitlocker, dm-crypt, Secure Cloud — **Encryption of Data at Rest**

← **Security IN the Cloud**

Security OF the Cloud

Data Protection at Rest and in Flight

AWS Certifications & Accreditations

ISO 27001

SOC 1 (SSAE 16 & ISAE 3402) Type II Audit
SOC 2
SOC 3 Audit (*new in 2013*)

Payment Card Industry Data Security Standard (PCI DSS) Level 1 Service Provider

Security IN the Cloud

Security OF the Cloud

Online Top Up service

Giuseppe Vironda – Head of Online Sales & Services

Simone Bruschi – Head of Online Technology

Top Up

Italy Top Up total turnover > **9 Billion €***

Vodafone > **market leader**

Online > **channel share increase**

* VAT Included – source: internal research

Previous Online Top Up CEX (1/3)

Previous Online Top Up CEX (2/3)

Personal information required

Previous Online Top Up CEX (3/3)

6 Steps

31 fields required

7 click required

Turnaround needed!

Pillars of the new Top Up service

- **Flexibility**

- **Multichannel approach**

- **Scalability**

- **Business continuity**

- **Security & PCI/DSS**

- **Time To Market**

New Customer Experience

CONVERSION RATE

x 4

NPS

+10 points

- **2 Steps**
- **2 Click**
- **5 fields required**

Some example of flexibility

Top Up Receipt

Promotion Tool

PayPal /Amex

On/Off 3D Secure

Content Management System

... and many others coming...

Multichannel approach

Desktop and

Smartphone and

Easy to integrate on new platforms

Social Network

New Technical Solution

Volume Scalability

Volume of Top Up

+80%

+90%

15-Sep-13 · 16-Sep-13 · 17-Sep-13 · 18-Sep-13 · 19-Sep-13 · 20-Sep-13 · 21-Sep-13 · 22-Sep-13 · 23-Sep-13 · 24-Sep-13 · 25-Sep-13 · 26-Sep-13 · 27-Sep-13 · 28-Sep-13 · 29-Sep-13 · 30-Sep-13
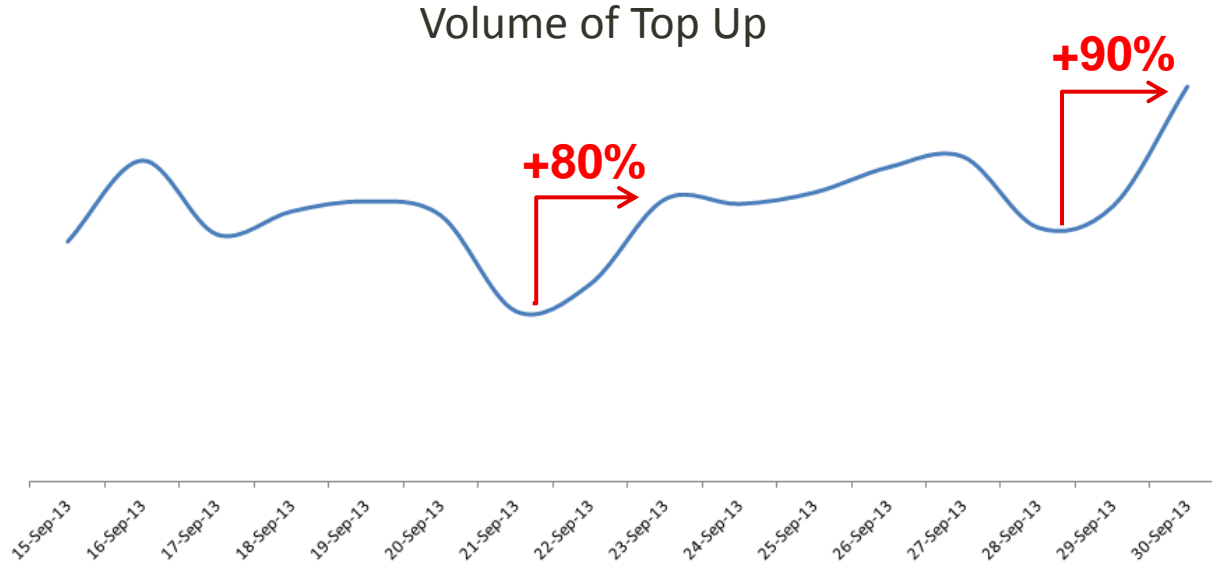
Large daily variability ➤ **Same PERFORMANCE LEVEL**

Business continuity

0 DOWN of top up service

Business Continuity even during technical release

Top Up service available 365gg / 24h

Security & PCI/DSS

| eCommerce service of virtual goods without 3D secure and no personal data required (mail, C.F., etc.) | PCI/DSS compliancy on Cloud solution |

Time To Market

3 months

From concept to go live

Go Live

without defect and roll back

Thank You

THANK YOU

todorov@amazon.co.uk