



Location and  
the cloud

Where to put your data,  
how to decide

# Why are we here?

Location matters because it impacts:

- Performance
- Costs
- Compliance
- Stakeholder perception
- Security and Privacy
- Data protection and DR decisions

## On our Regcast today

**Priti Mehta**

*Acuutech*

**Tim Phillips**

*The Reg*

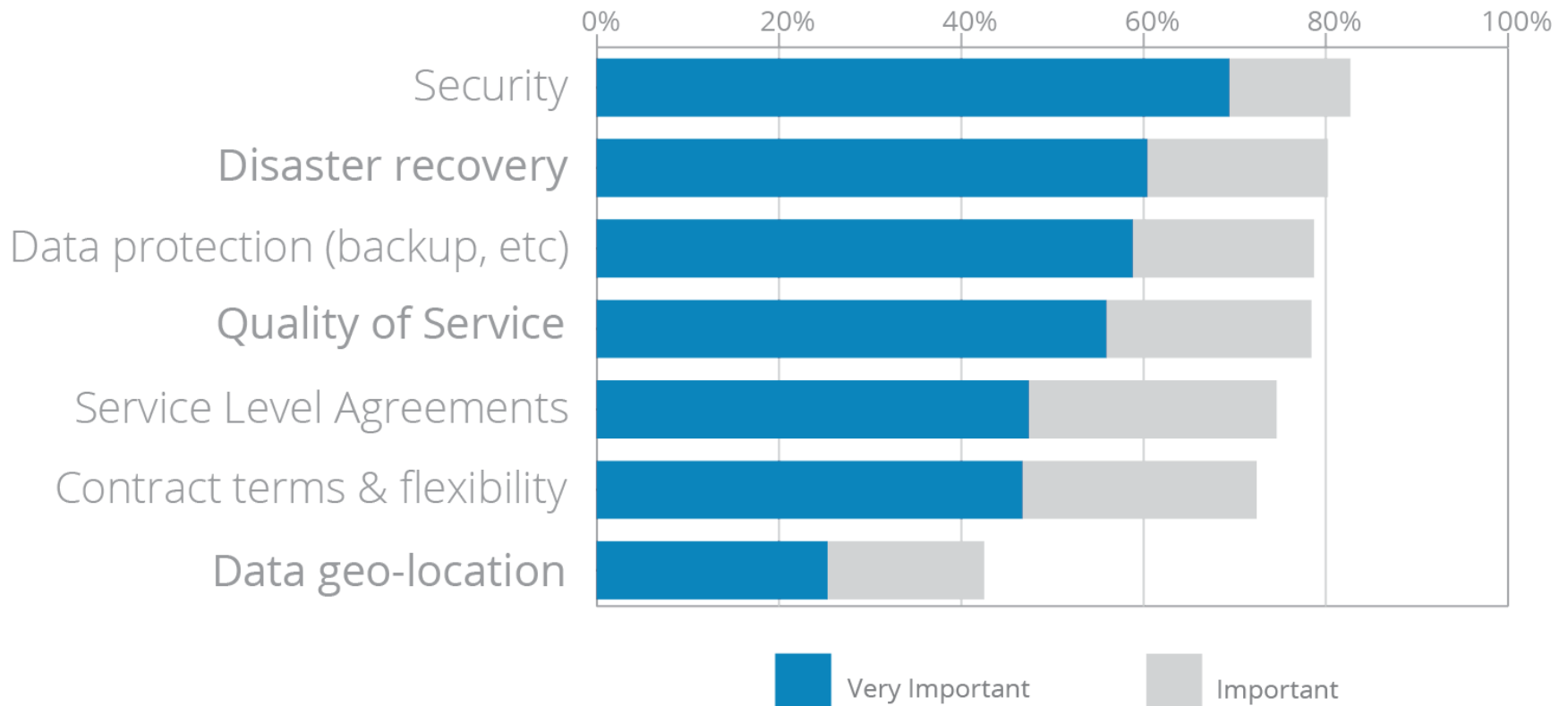
**Dale Vile**

*Freeform Dynamics*

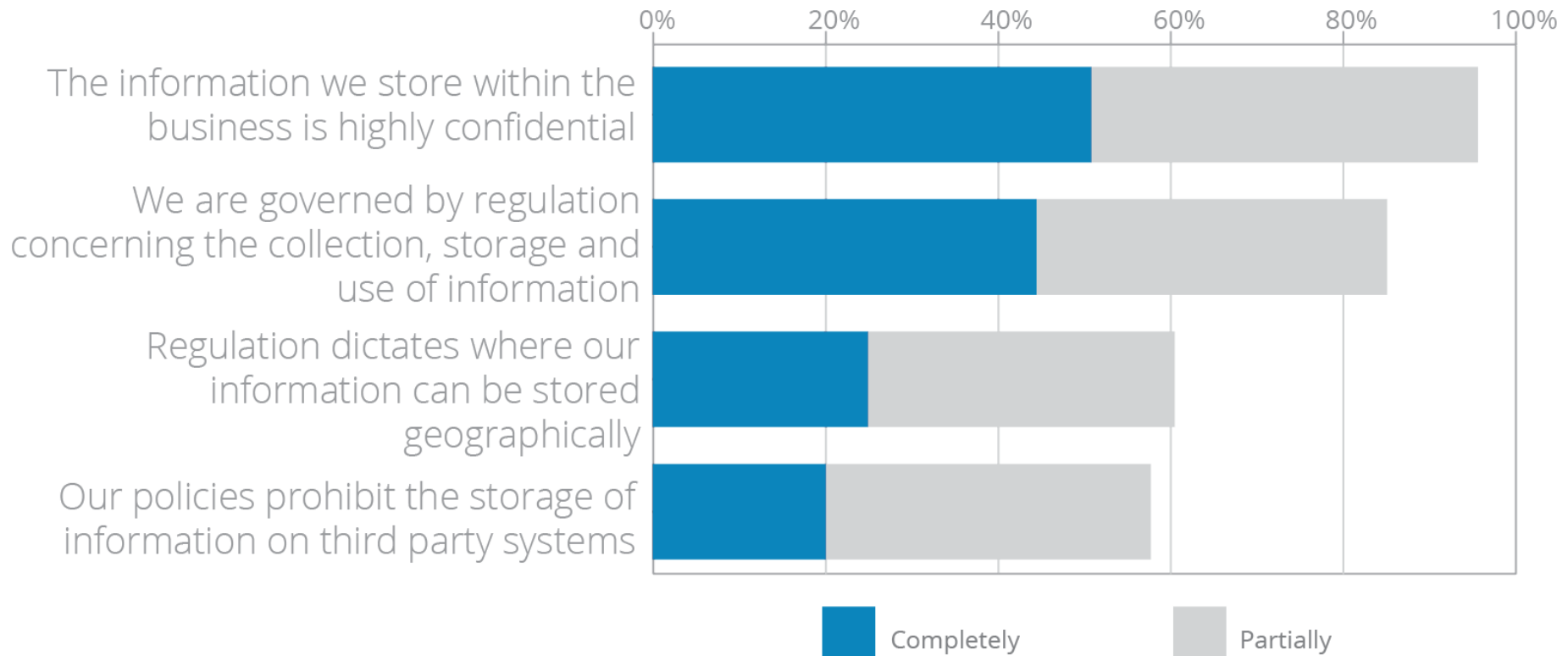
**Nigel White**

*IBM*

# How important are the following considerations when evaluating a hosted service?

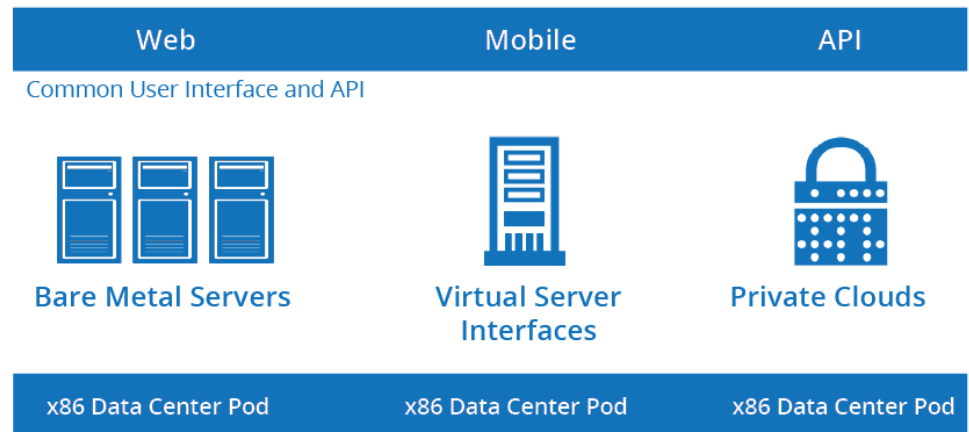


# How much do the following statements apply to your organisation?



# SoftLayer

- Common command and control interface across a unified architecture
- Combine bare-metal servers, public cloud instances and private cloud deployments into distributed hybrid architectures and manage from a single control pane and API
- All deployed on-demand and provisioned in real-time
- Ideally suited to big data deployments, high I/O and latency-sensitive apps



Unique **Triple Network Architecture** allows seamless communication across distributed environments

**Infrastructure Management System** provides orchestration and automation

# Major strategy and investment programme



Investing over \$1.2B to expand cloud presence

Provide clients with the localised data management solutions they require

IBM Cloud Managed Services and SoftLayer

# About Acutech

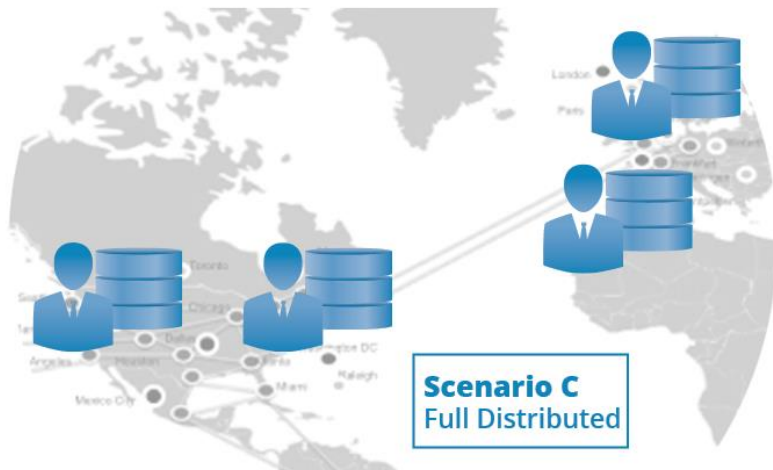
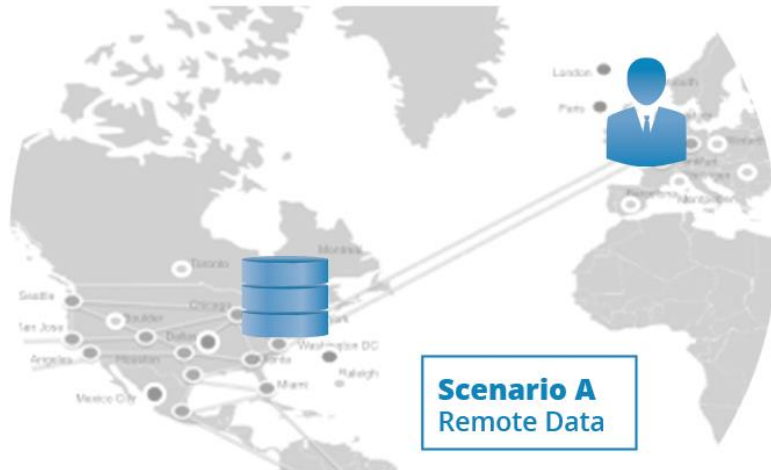


- Presence (Location)
- Speed of Provisioning
- Flexibility of Bare Metal
- Local applications Vs. Distributed applications
- Data Sovereignty

**Acutech**<sup>®</sup>



# Performance and cost



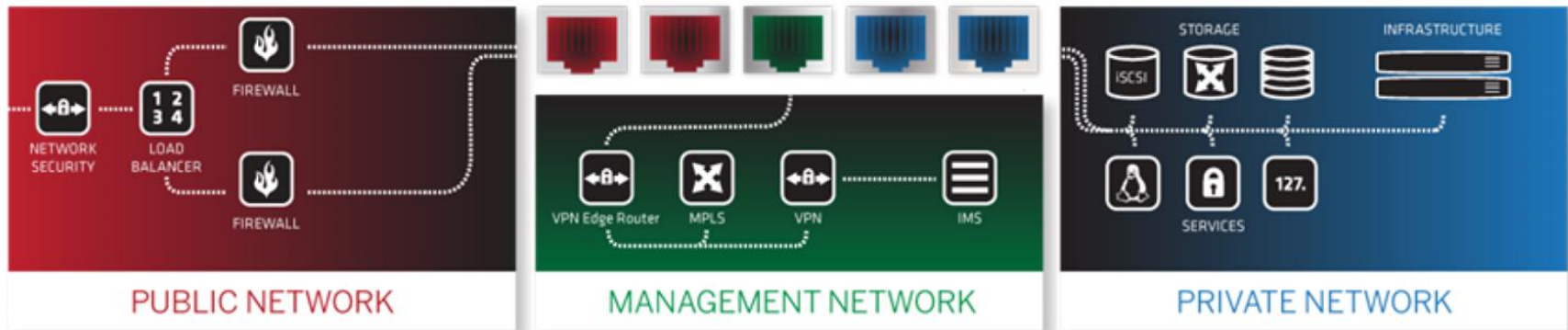
- Bandwidth and latency
- Local applications with high performance needs
- Distributed apps and usability
- Internet versus private access
- Cost of transport and QoS

# Compliance, perception, trust and security



- Regulation versus perception
- Real versus perceived risk
- Access from outside home jurisdiction
- Use of encryption and access security
- Trust versus security
- Need for monitoring / auditing

# SoftLayer provides cloud infrastructure at internet scale



## Flexible, Automated Infrastructure

### Data Center & Pods

- Standardized, modular hardware configurations
- Globally consistent service portfolio

### Triple Network

- Public network for cloud services
- VPN for secure management
- Private network for communications and shared services

### IMS (Automation Software)

- Bare metal provisioning
- Integrated BSS/OSS
- Comprehensive network management

## World-Wide services delivered locally

### 13 Data Centers + 15 new

- 100K Servers and 22M Domains in the US, Amsterdam and Singapore

### 19 Network Points of Presence

- Linked via 20GB point-to-point connections
- Close to users around the world with local and global diversity
- Seamless, direct, private and high speed access
- Public, private and data network architectures

# Security and privacy in Europe, post-Snowden

- Deliberate fearmongering using Snowden revelations to promote EU-only providers.
- Rising levels of EU-only protectionism: some governments in Europe are promoting and subsidising cloud provider 'national champions'.
- EU data protection regulation: political pressure in Europe inaccurately using PRISM to push for tougher data restrictions in EU.
- EU cloud policy: EU is developing special conditions for Europe.

# IBM response

Where data resides, and where it is processed, should be based on customer choice and not subject to a particular government mandate.

Governments should reject short-sighted policies, such as data localization requirements, that do little to improve security but distort markets and lend themselves to protectionist tendencies.

Local certification requirements, standardisation or model contract terms can amount to forced localisation by the back door and should be avoided.

Given the recent media focus on government surveillance, clients have asked us questions about their data: how best to secure it, where to locate it, and how we would respond should governments request access.

IBM is committed to protect its clients' data, wherever it is stored, and will use all appropriate measures under the law to do so.



# Kuuluu



- Online social media game.
- Volatility in requirements and usage.
- Beta: bare metal cloud in SoftLayer's data center in Amsterdam.
- Add architecture in Singapore or Washington, data center, it won't be a problem.
- Each pod supports up to 5,000 servers and is functionally independent.
- Data centers are all connected via private, 10 Gigabit point-to-point connections.
- CDN solution allowing the content to be placed closest to users.

# SilverSky



- Customer base includes 6,000 organizations in the financial services, retail, healthcare, energy, critical infrastructure and manufacturing sectors.
- Secure managed collaboration services from Microsoft, RIM and other vendors.
- Meet or exceed major federal Industry standards.
- now able to order and deploy new virtual instances in 15 minutes or less and bare metal instances in two to four hours.
- Can now offer customers full active-active failover for Disaster Recovery.

# You never expect it, it just happens



## Building left gutted by Soho fire

**An office building has been gutted by a fire in Soho, central London.**

The four-storey Dean Street building, used by finance firm Future Capital, caught fire on Friday afternoon.

Its entire third floor and most of its second floor were damaged in the blaze. The roof collapsed and its first floor and basement were also damaged.



▶ In Pictures: Soho fire

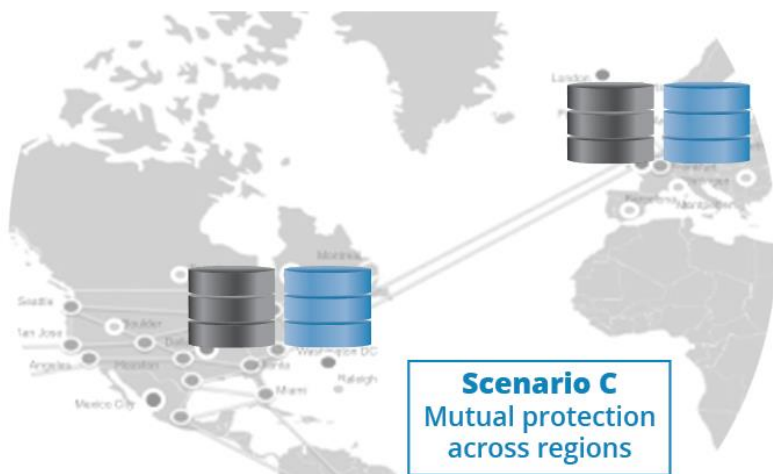
Two firefighters suffered minor injuries although no-one else was hurt. It took about seven hours to put out the fire.

### **Workers evacuated**

The cause of the fire is being investigated, a London Fire Brigade



# Data protection and disaster recovery



- Regulation and perception considerations apply equally to DR
- Performance considerations also apply to DR
- Recovery/restore versus failover
- Security, access, monitoring, etc

# Storage and network capabilities to help clients set up DR configurations

**SOFTLAYER**  
an IBM Company

Dedicated CloudLayer Managed Services Solutions Support Partners About Us Specials

## Solutions

- Solutions Overview
- Big Data
- Disaster Recovery
- Hybrid Environments
- Private Clouds
- Virtualization
- Web Apps and SaaS
- Small to Medium Business
- Large Enterprise

**Disaster Recovery**

Downtime isn't just inconvenient, it's expensive. Combine SoftLayer services to design comprehensive failover, disaster recovery and high availability strategies for keeping your mission critical applications running, maintaining data accessibility and ensuring business continuity. Global load balancing, geographically diverse DNS routing and hot swap backups can mitigate the risk of downtime in the event of even the most catastrophic system failures. Replication, snapshots and network storage help eliminate single points of failure and provide a restoration path for mission-critical data.

### Solution Options

Combining disaster recovery with our high availability solution provides the ultimate in business continuity.

Basic **Advanced** Premium

#### Disaster Recovery

Replication, snapshots, and network storage help eliminate single points of failure and provide a restoration path for mission-critical data.

Server EVault Storage  
Single Datacenter

Basic **Advanced** Premium

#### Disaster Recovery

Replication, snapshots, and network storage help eliminate single points of failure and provide a restoration path for mission-critical data.

Load Balancer Servers Offsite EVault  
Datacenter A Datacenter B

Basic **Advanced** Premium

#### Disaster Recovery

Replication, snapshots, and network storage help eliminate single points of failure and provide a restoration path for mission-critical data.

Load Balancer Servers Global Load Balancer Load Balancer Servers Offsite EVault  
Datacenter A Datacenter B Datacenter C

# Why is data location not always front of mind?

**Escalating cloud adoption over time**

Longer-term use and commitment

Initial scale-up and scale-out

Early limited deployments (and 'shadow IT')

Performance, DR and cost

Test, development, support, POC, pilot

Compliance and 'comfort'

Don't ask, don't tell, and/or defer consideration

Don't even think about it

**Recognition of data location considerations**

# Further reading

**SoftLayer Free Trial**

<http://reg.cx/2a5X>

**Lance Crosby CEO session**

<http://reg.cx/2a61>

**SoftLayer blog entries:**

Big Data at SoftLayer: The Importance of IOPS

Riak Performance Analysis: Bare Metal v. Virtual

Why Hybrid? Why Now?

<http://reg.cx/2a6K>

<http://reg.cx/2a6L>

<http://reg.cx/2a6M>

**IBM Managed Services Demo**

<http://reg.cx/2a5Z>

# Thanks for joining us



An archived version of today's event will be made available on The Register in the near future.

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