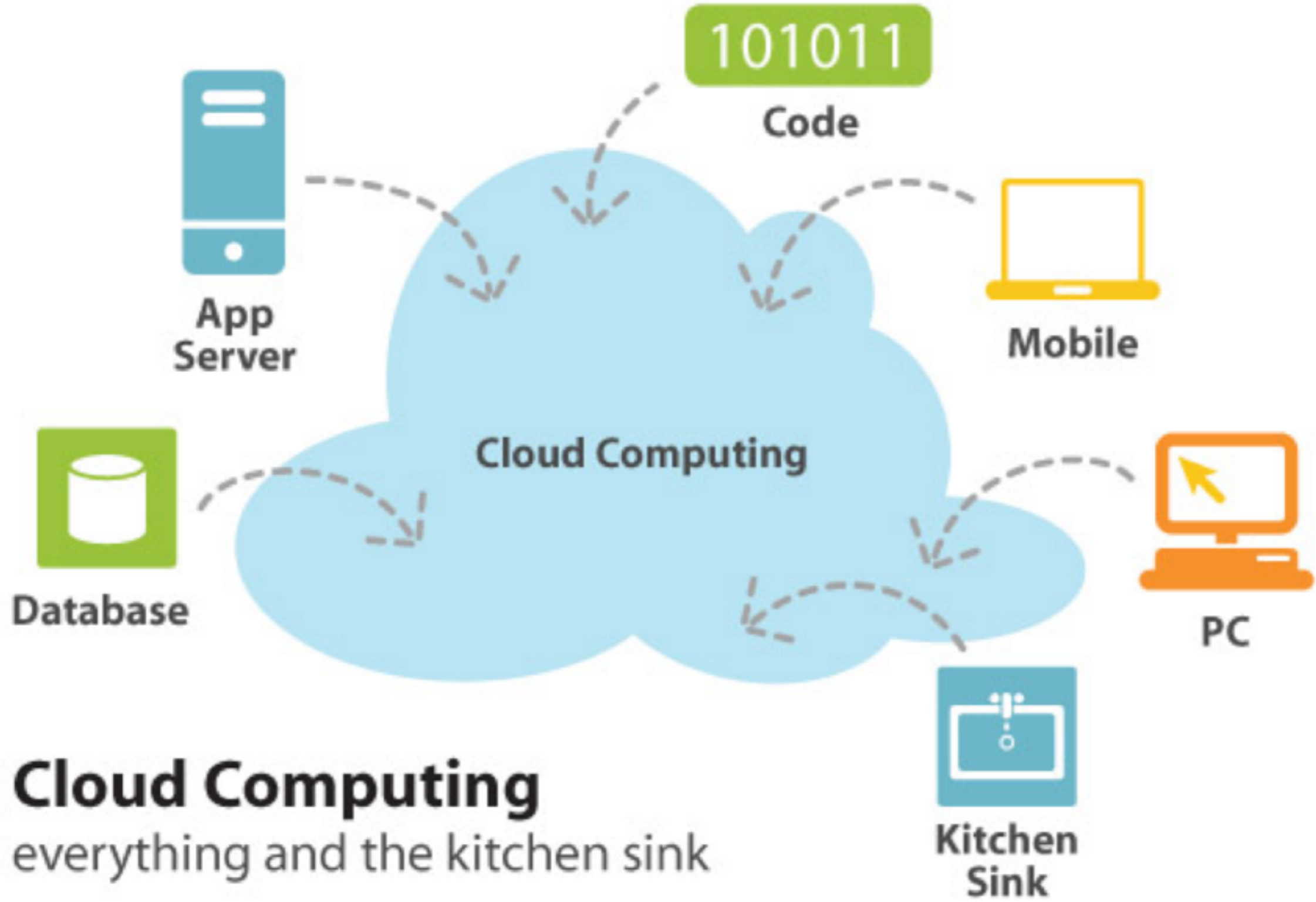


Cloud Security

Farzia | Mohammad | Hassaan

What is Cloud Computing?



Cloud Computing
everything and the kitchen sink

Software as a Service (SaaS)



Microsoft Online Services: Business Productivity Online Suite

SharePoint Online

Office Communications Online

Exchange Online

Office Live Meeting

facebook

Platform as a Service (PaaS)



Infrastructure as a Service (IaaS)

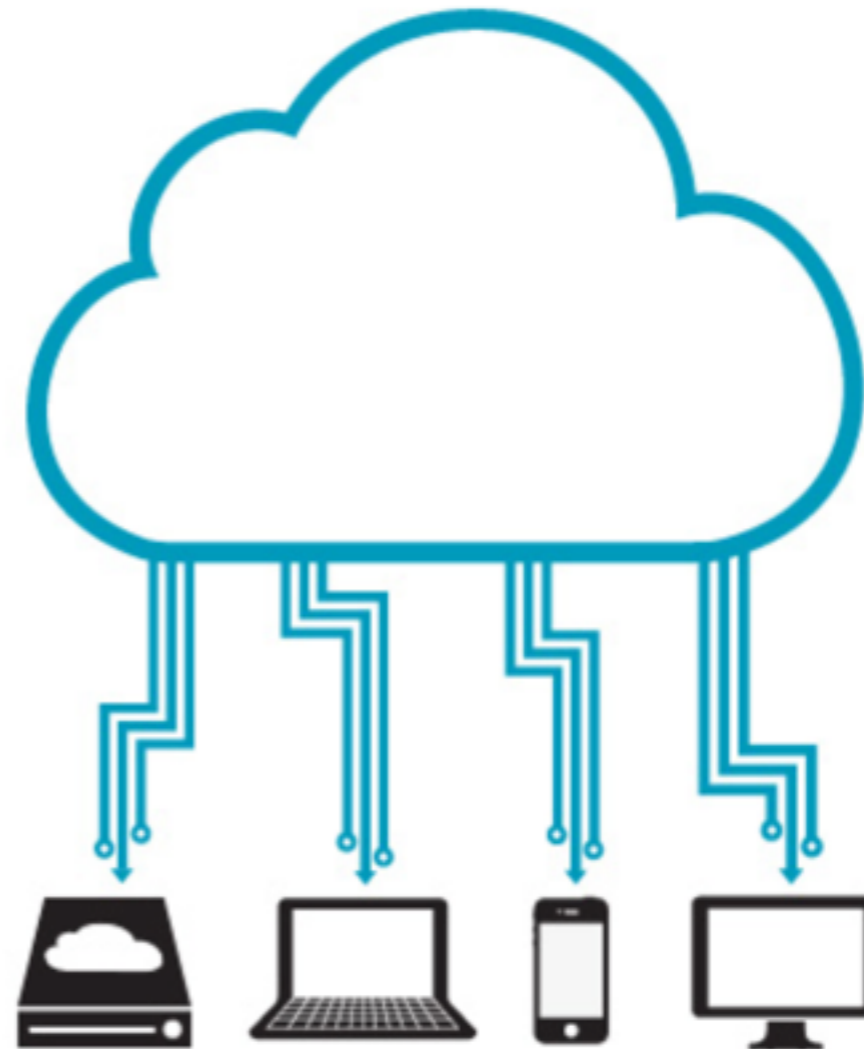
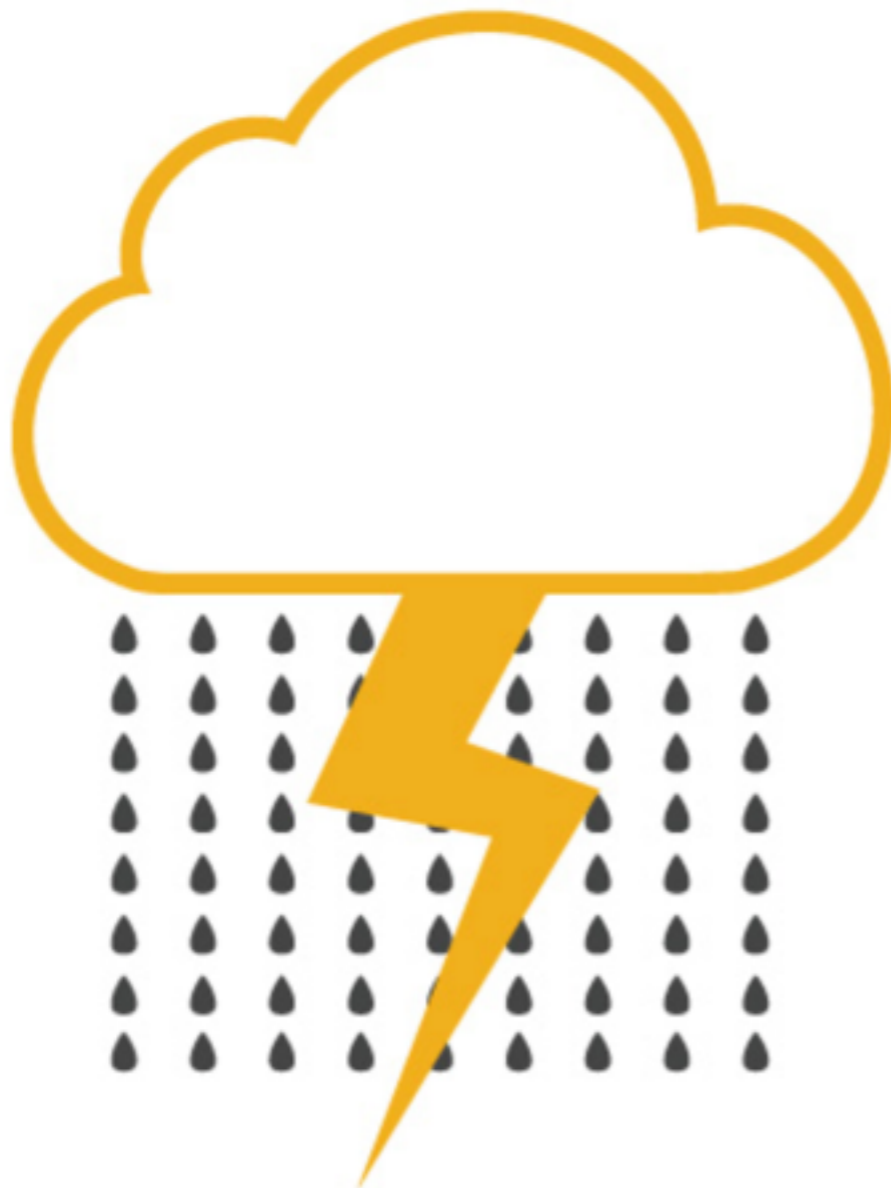


Myths VS Truths

What is it?

Myth

The cloud has something to do with the weather.



Truth

"Cloud computing" is the practice of storing, accessing, and sharing data across the internet.

Where is it?

Myth

The cloud is a place



Truth

Cloud providers have servers and data centers located all around the world.

Do we need it?

Myth

Our organization doesn't need the cloud.



Truth

Cloud computing can help your organization become more efficient and flexible and help you reduce IT-related expenses.

Is it safe?

Myth

The cloud isn't safe.



Truth

With encryption, authentication, and other precautions, security threats can be reduced to about the same level as with in-house storage.

Famous Security Breach Incidents



- “A disturbing privacy problem has been discovered in Google Drive which could have resulted in sensitive personal or corporate information stored on the cloud service being accessed by unauthorized parties” - Graham Cluley



- “Hackers are threatening a major breach in Dropbox security, claiming to have stolen the login details of almost 7 million users” – Claire Reilly



- “A leak that started as the latest round of personal pictures hacked from celebrities’ phones turned into a vast invasion of the privacy of actress Jennifer Lawrence and a handful of others” – Rachel Zarrell

Cloud Security

Cloud Security

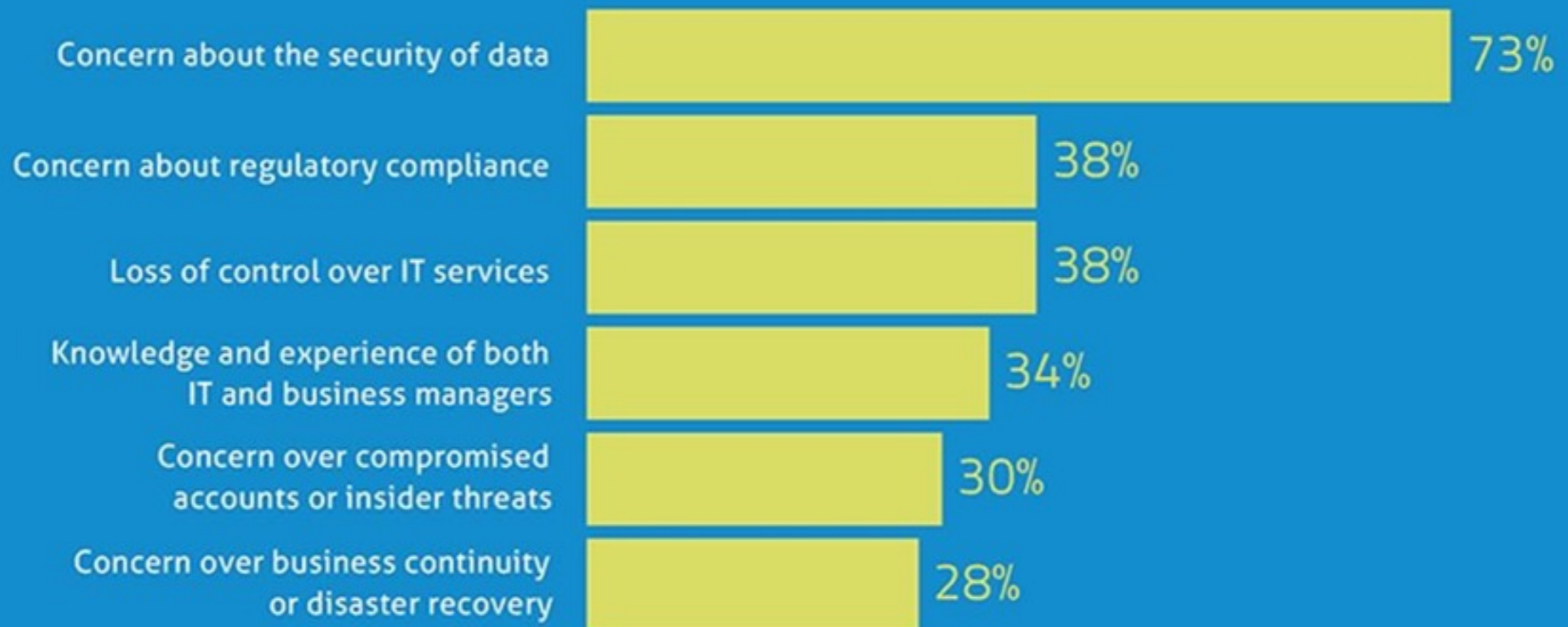
- Secure Infrastructure
- Secure Information



- Federated Identity
- Secure Devices

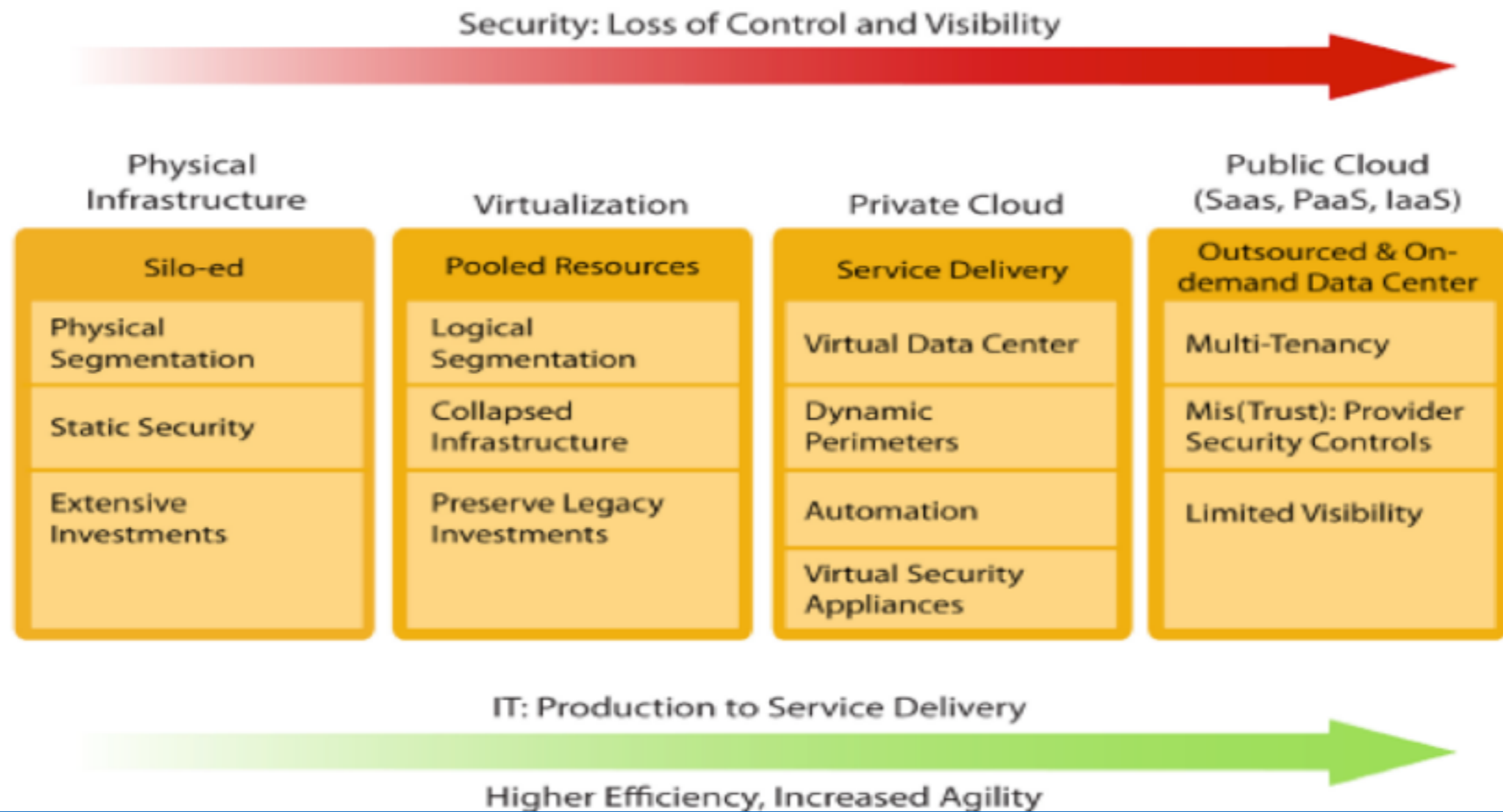


TOP CHALLENGES HOLDING BACK CLOUD PROJECTS



Source: Cloud Security Alliance "Cloud Adoption Practices & Priorities Survey Report"

Towards the Cloud: Transitions



Virtual Security: Better than Physical

Physical Security

Expensive

- Specialized hardware appliances
- Multiple point solutions

Complex

- Spaghetti of different rules and policies

Rigid

- Policy directly tied to implementation
- Not virtualization or change aware



Virtual Security

Cost Effective

- Virtual appliances with broad functionality
- Single framework for comprehensive protection

Simple

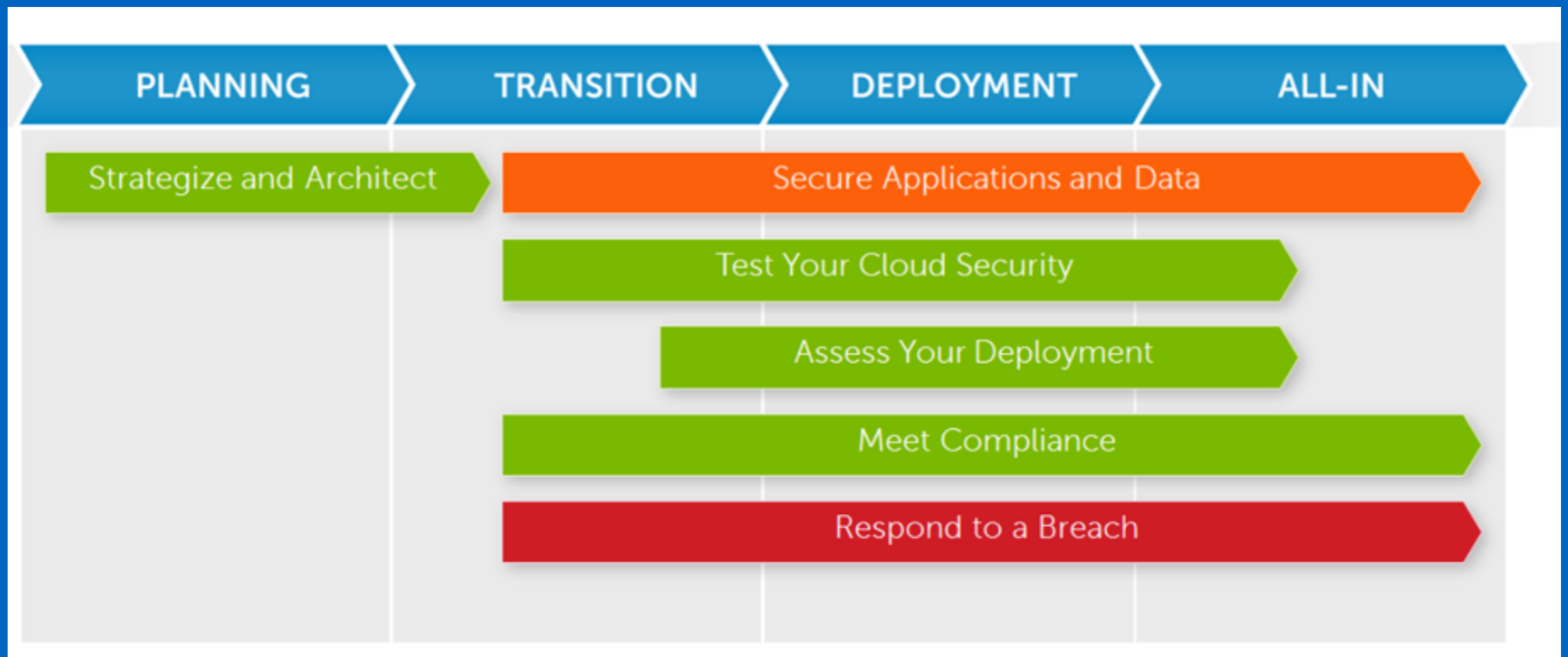
- No sprawl in rules, VLANs, agents
- Relevant visibility for VI admins, network and security teams
- Simplified compliance

Adaptive

- Virtualization and change aware
- Program once, execute everywhere
- Rapid remediation

Solution ?

Recommended Security Architecture



References

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Q & A

- Q1. What are the two most important concerns of an enterprise when moving from traditional IT infrastructure to the Public Cloud?
- Loss of Control and visibility

Q & A

- Q2.What are the key elements of Cloud Security policy?
- Infrastructure, Information, Identity and End-User Devices.

Q & A

- Q3.How is Virtual Security better than physical Security ?
- It's cost effective, simple and adaptive.