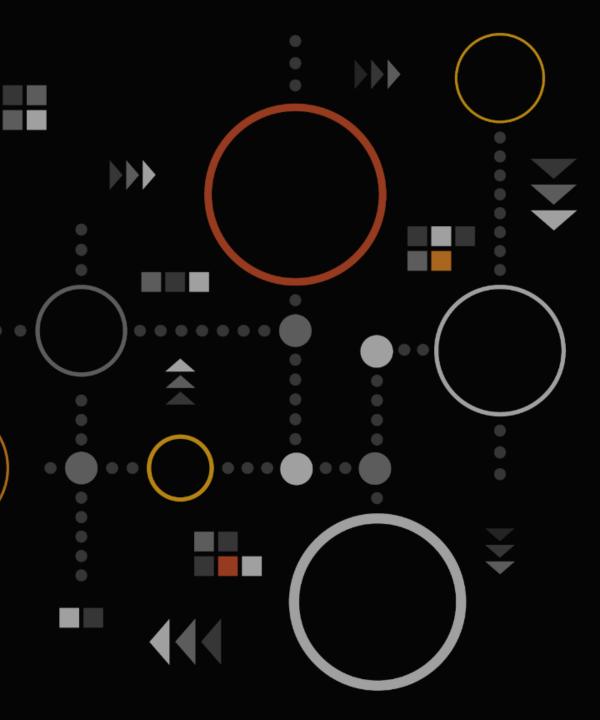




Debunking Cloud Transformation Mystery

30th October 2020



Welcome & housekeeping

- Please mute your microphone and/or devices.
- We will share the presentation after the session.
- If you have any technical issue, please feel free to contact us through the "chat function"
- You are welcome to raise questions to us at anytime by typing in the Q&A function.
- We will try to answer your questions towards the end of the webinar.

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Speakers Introduction

Moderator



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It is no longer 'if', but 'when and how' to move to cloud

When Cloud Meets COVID-19, Opportunities and Threats Emerge

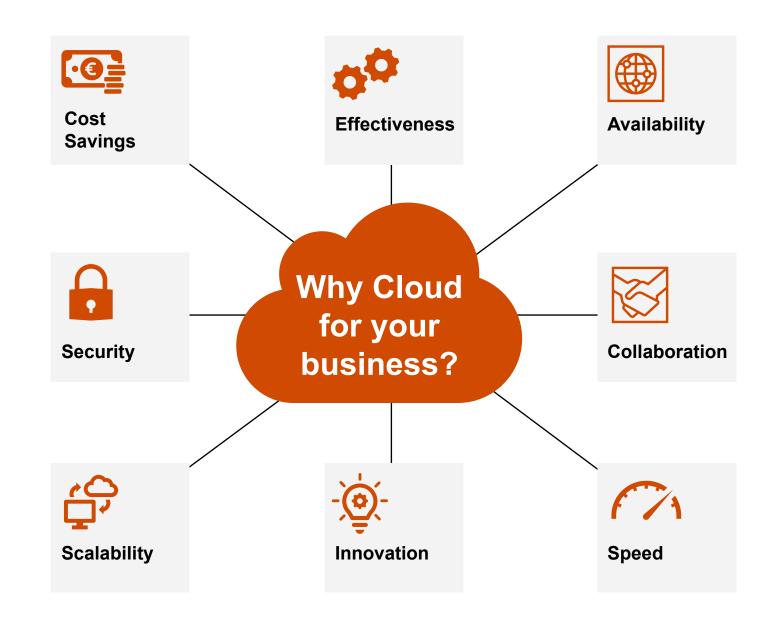
As we continue to maneuver through the uncertainty from the pandemic, cloud has been ever so important in helping companies achieve greater efficiency, and driving business change and agility.



We view cloud as an enabler for digital business transformation

Cloud is a **disruptive innovation** that challenges traditional business an IT models by changing hot technology products and services are provided and consumer. The cloud deliberately hides the foundational technical and operational complexity from clients so they can get on with their real jobs. With increasingly less dependency on internal IT cloud allows **tech orchestration to be more business-led and easier** than ever before.

We need to assist our clients across multiple dimensions along the cloud journey to align their goals and capabilities with cloud enabled growth.



Business Drivers for Cloud Adoption



Agility & Flexibility



Security & Operational Resilience



Innovation & Ecosystem Opportunities



Resource
Utilization & Cost
Management



Digital & Data Transformation

Benefits



High Availability

Greater Speed & Agility



Rapid Scaling



IT Cost Management

Barriers



Security & Data Loss Concerns



Integration to Legacy Environment



Skillsets and Capabilities



Loss of Control

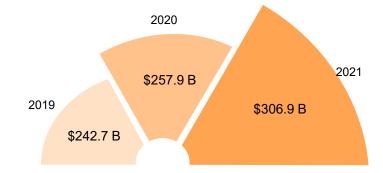
Cloud Adoption and Transformation is now a Global Trend

Cloud has emerged and became a primary delivery platform for leaders across the globe

Growth in cloud adoption



of organizations **already use** cloud computing or have applications in the cloud – **up from 73%**¹ in 2018.



The worldwide public cloud services market is **forecast to grow** from \$257.9 billion in 2020 to **\$306.9 billion in 2021**. ² The effects of the global economic downturn are intensifying organizations' urgency to **move off of legacy** infrastructure operating models.

Growth in cloud budget



32%

of total IT budget will be allocated to cloud computing within 2021.¹

Growth in cloud investment



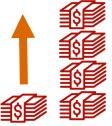
59% increase in cloud investment from 2018 to \$73.8 million in 2020 ¹ on average.

By 2024, annual global spend on cloud IT infrastructure is predicted to grow at a **8.4% CAGR** to reach **\$100.1** billion. ³



55%

of enterprises already have more than half of their workloads on cloud by the end of 2019. ⁴



laaS spending could rise from \$44 billion in 2019 to \$80.6 billion² in 2022 (183% increase).



74%

of IT leaders believe workloads will be run in the cloud within next 5 years.⁵



78%

of IT leaders anticipate their company's workloads will reside in **hybrid cloud**.5

Source:

- 1. IDG Cloud Computing Survey, 2020
- 2. Gartner July 2020 Gartner Forecasts Worldwide Public Cloud Revenue to Grow 6.3% in 2020
- 4. IDC Cloud Security Survey, 2019
- 5. LogicMonitor Evolution of IT Research Report, 2020

Resilience and Growth for Businesses in Asia Pacific



Spending on public cloud and related services is growing at CAGR of 25% across Asia-Pacific, faster than US and Western Europe.



Cloud spending is forecasted to double by 2023

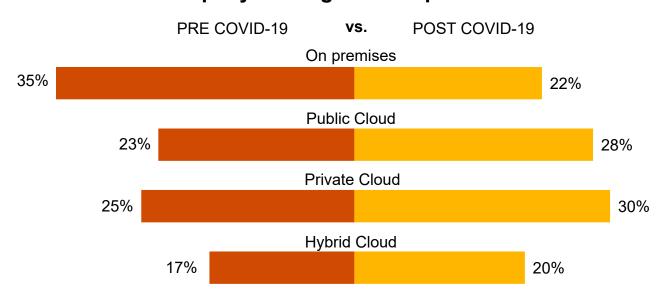


45% has cybersecurity concerns and choose to not host specific data on the public cloud

The Pandemic Further Accelerates Cloud Adoption

Where are the Workloads?

Workloads are rapidly moving from on premises to the cloud



IT Leaders believe the acceleration to cloud will continue

87%

of IT leaders believe the COVID-19 pandemic is causing organizations to accelerate their migration to the cloud

65%

of IT leaders said their workloads were in the cloud **before COVID-19**

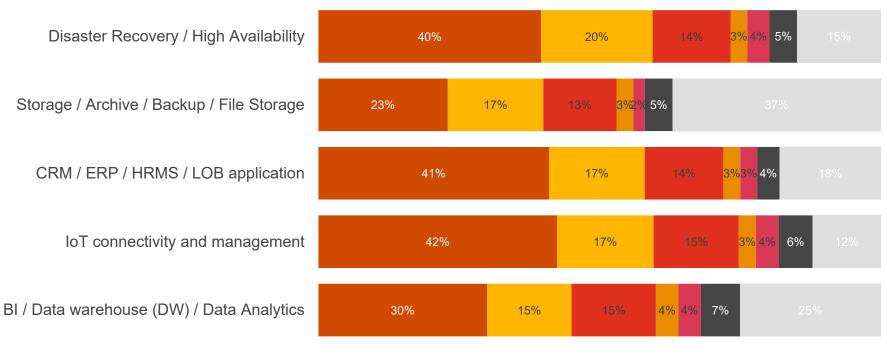
78%

say that their company's workloads will reside in the hybrid cloud after COVID-19

Source: LogicMonitor Evolution of IT Research Report, 2020

Leaders are Planning and Migrating Essential Workloads to Cloud

Application & Services being Migrated to the Cloud



- Currently migrating / deployed in the cloud
- Planning to migrate in next 12 months
- Planning to migrate in next 1-3 years

Have already migrate but moving / plan to move to a different cloud model

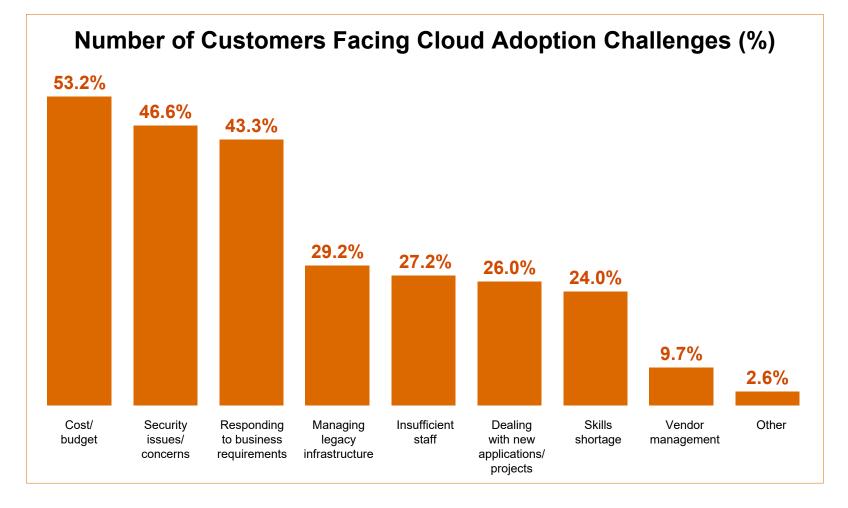
No plans

- Have already migrate but not moving / plan to move out of the cloud
- Currently bulking from scratch / greenfield development

Source: IDG Cloud Computing Survey, 2020

Customer Challenges from Adopting to Cloud

PwC's Cloud Transformation Solution specifically addresses challenges enterprises face to make their cloud journey more efficient and accelerate value.





KEY INSIGHTS:

Obtaining economic value and optimizing spend is one of the biggest challenges our clients face.

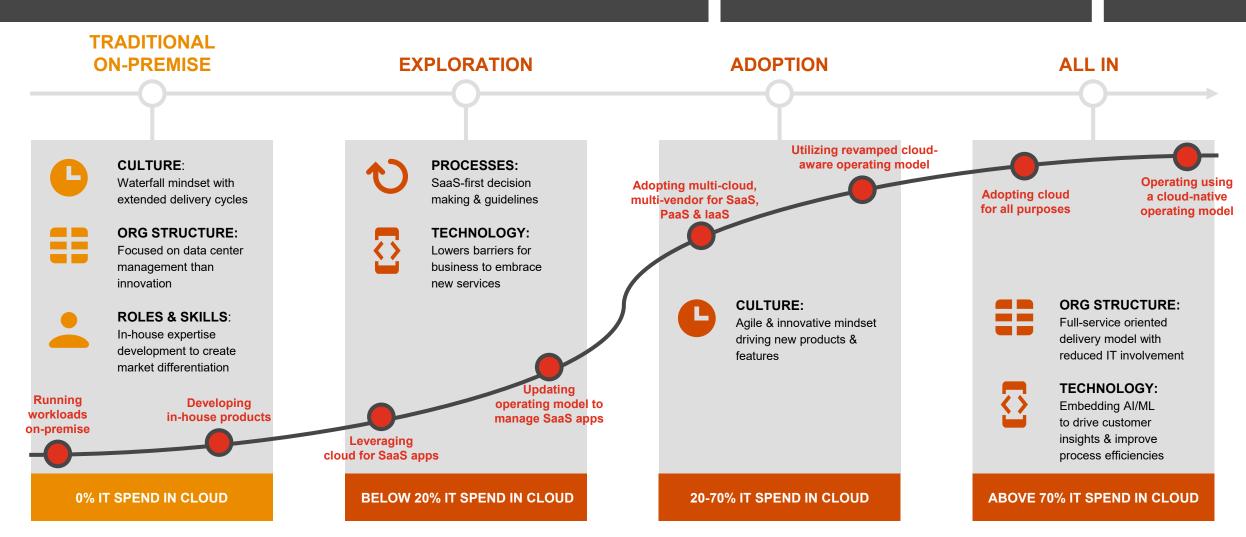
Security concerns and rapidly changing business challenges are other top concerns.

A foundational issue is designing the **operating model** of the enterprise to align with cloud.



Cloud Maturity Curve

We observed organisations in various adoption phases have different needs and challenges based on their spend in cloud and adoption level of cloud services.



Successful Transformation Programs Begin by Laying the Right Foundations

Based on our experience, clients that properly build out the cloud foundation are best positioned to quickly scale and extend the cloud foundation capabilities and thereby reap the most value from their transformation program

JOURNEY TO CLOUD

Laying the foundation

Establishing core Cloud- first capabilities...

- Accounts and subscriptions
- Connectivity
- · Identity and security
- Cloud services
- Cloud operations
- Financial management
- Regulatory compliance

Maturing the foundation

Operating in the right choice of Cloud for your business...

- Different Cloud options (Public, Private, Hybrid)
- Matured cloud services (e.g., containers and microservices)
- Policies and governance embedded in automation
- Key SaaS implementation
- Cloud migration factory repeatable and ongoing
- Cloud native for new development
- Cloud centre of excellence (CoE) accelerating cloud adoption

Evolving cloud capabilities

...towards a zero data centre environment by 2020 and beyond.

Seamless integration of new services to deliver faster, more stable and secure business capabilities

- · Scalability, agility and ability
- · Resilience, stable and secure platform
- Self-provisioning and automation as a rule
- Reduced development cycles (time to market)
- Pay for what you use (cloud only)
- Governed disruption
- IT as a partner of business innovation

Our Cloud Transformation Methodology

Cloud management office

Cloud infrastructure implementation and support

Stage 1 - Plan

1. Initiation / engagement Project management framework

2. Strategy
Roadmap for Cloud platform
enablement

3. Planning / alignment Work plans and roadmap

4. Assessments
Client environment evaluation

Stage 2 - Design

Organizational readinessNon-IT accommodation for new Cloud model

6. Architecture / design Cloud design and configuration

7. Governance Cloud governance framework

8. Process development and improvement Efficiencies and process improvement

Stage 3 – Construct

Configuration and buildout Cloud foundation and integrate with client environment

10. Application migration Migrate application to client environment

11. Security / compliance / audit Regulatory compliance and security obligations

Stage 4 – Manage services

12. Managed services /
operationalisation
Establish and support hybrid Cloud
solution

13. Usage / onboarding Enterprise Cloud adoption

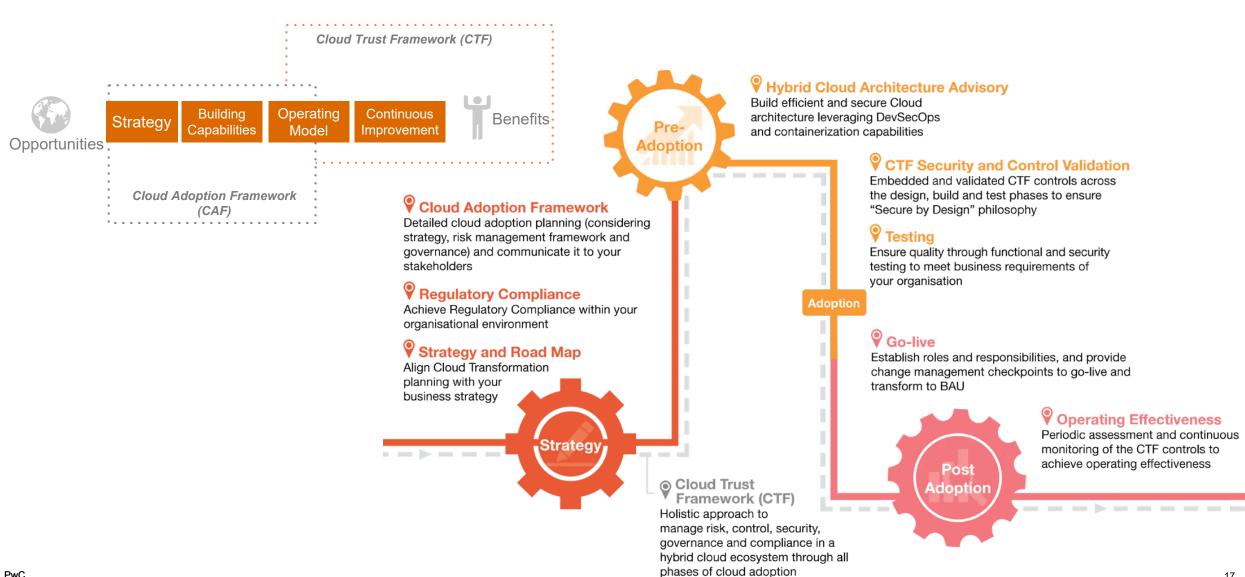
14. Optimization and continuous improvement

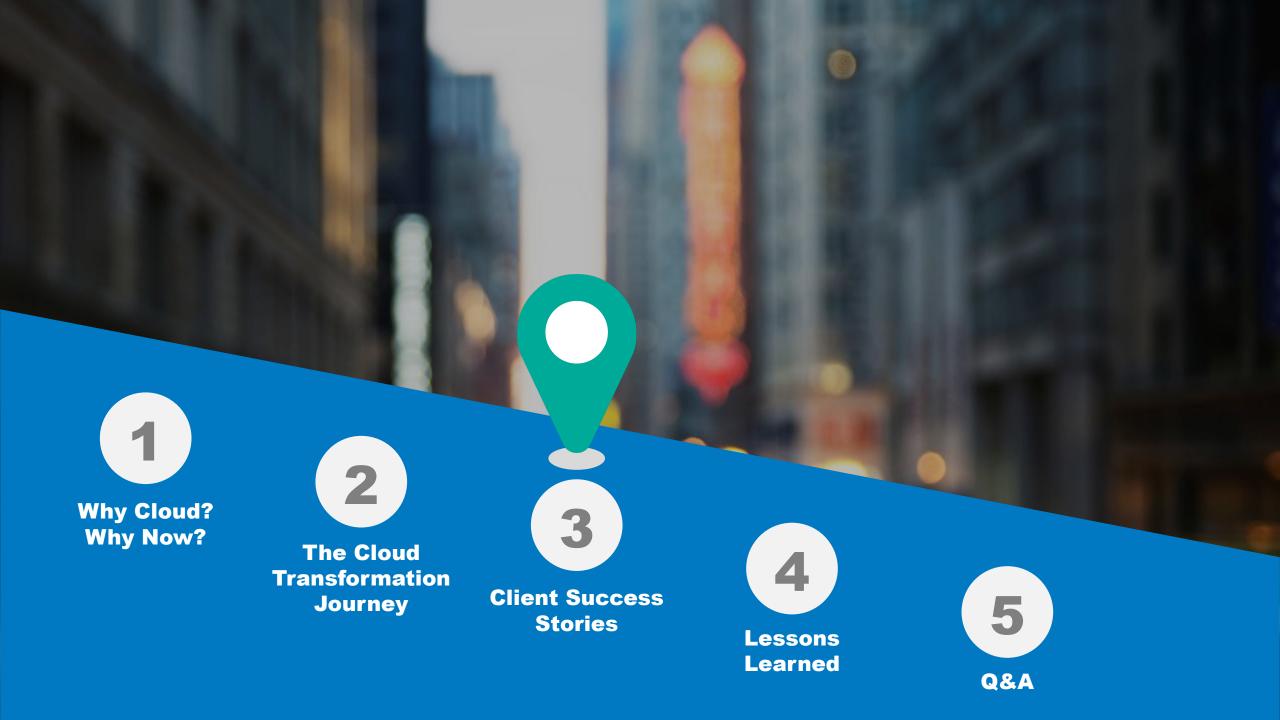
Business

Experience

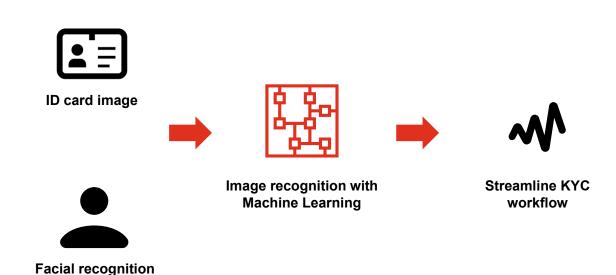
Technology

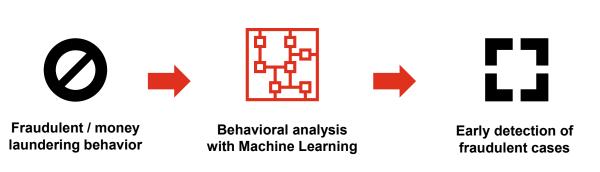
Roadmap to Safe and Secure Cloud Journey





eKYC, fraud detection and AML









Cloud Design & Architecture Workshop



Cloud Strategy and Roadmap



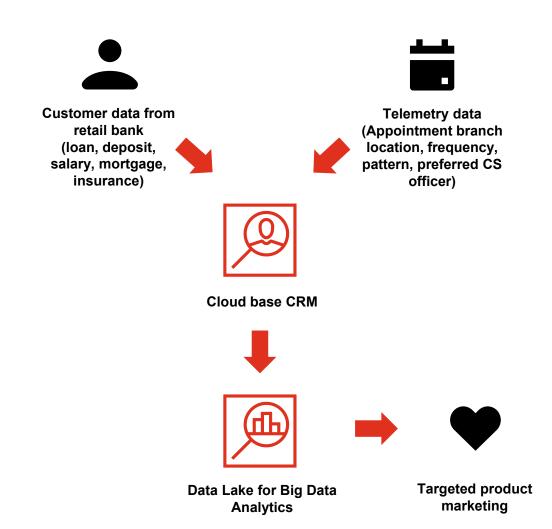
Landing Zone Build-out



Cost Optimisation



Customer Relationship Management, Data Analytics and Marketing







Cloud Design & Architecture Workshop



Cloud Strategy and Roadmap



Landing Zone Build-out

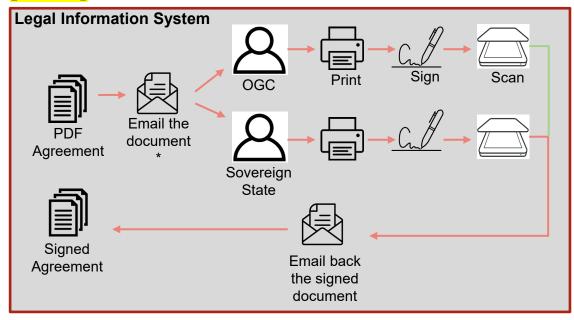


Cost Optimisation

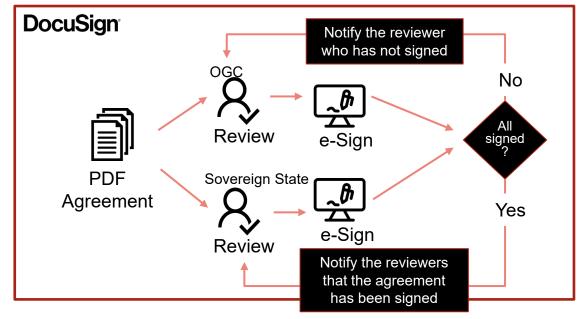


eSignature

[Before]



[After]







Cloud Design & Architecture Workshop



Cloud Strategy and Roadmap



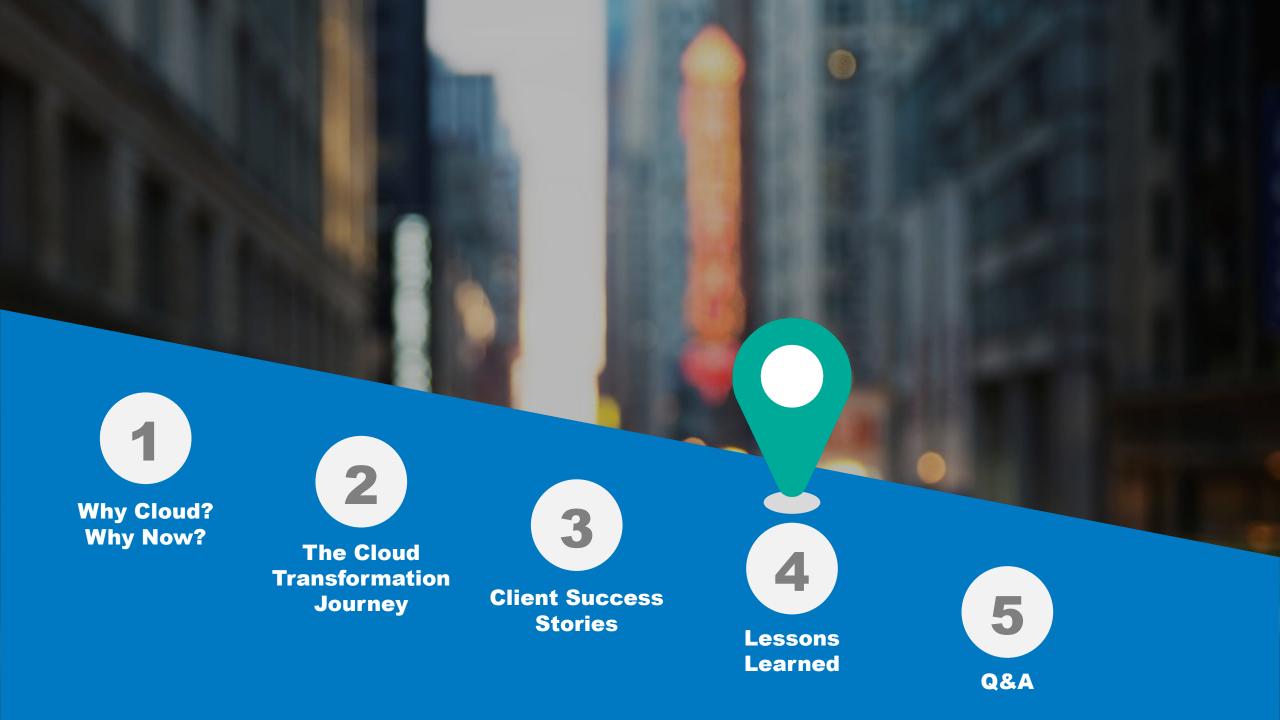
Landing Zone Build-out



Cost Optimisation



Security and Compliance



7 Key Lessons Learned in Cloud Transformation Journey

Cloud strategy provides 6x reduction in cost, 20x decrease in provisioning cycle time, and provides real business value

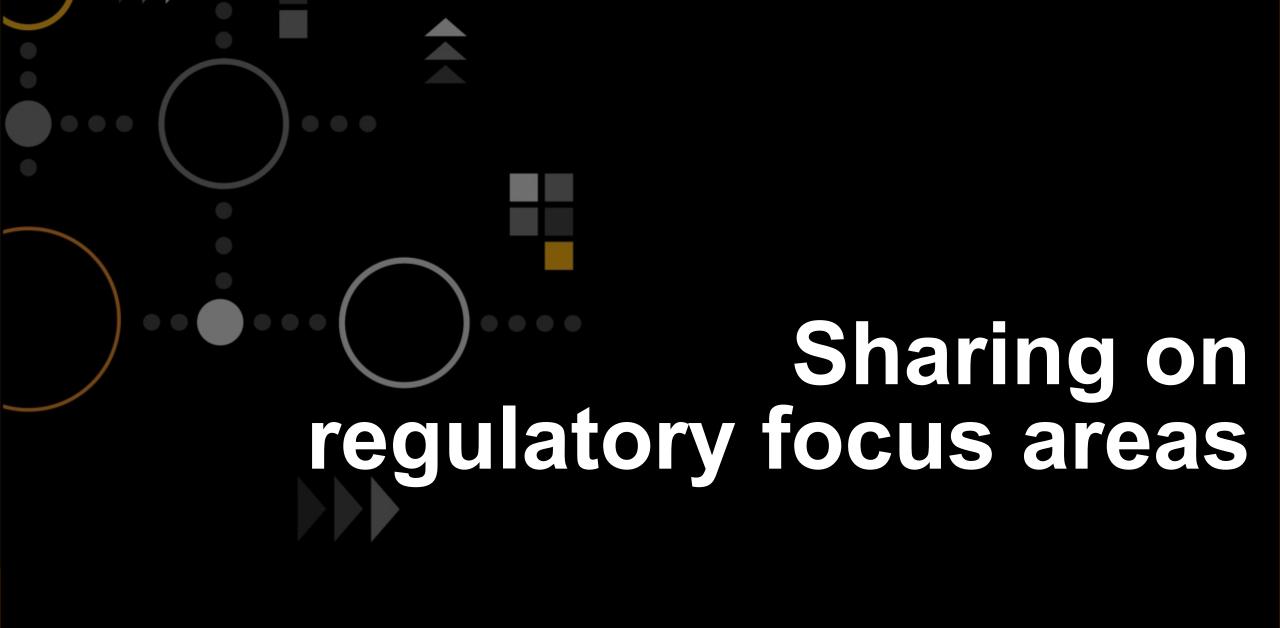
	Key Issues	Lessons Learned	What can be done about this
	Security Concerns	While cloud platforms provide security and scalability for applications, it is important to consider all cloud-based security solutions to ensure information security and recoverability, especially when cloud providers and/or vendors are involved.	 Security by design architecture Independent review of cloud infrastructure Third party assurance report Supplement additional security stack to integrate with database and applications on public cloud
THE PROPERTY OF THE PROPERTY O	Data Protection	As critical data will reside on the cloud, organizations must consider the implementation of various data protection measures, adoption of security tools or scale security across cloud applications, and/or the engagement of capable security partners.	 Ensure an adequate level of encryption for all data on the cloud Define access rights and enforce multi-factor authentication requirements
	Laws & Regulation	The movement to public/private/combination of clouds may be constrained by local regulatory requirements . The cloud model chosen and its operations must fulfil and comply with various security and regulatory standards .	 Use zone-specific clouds according to jurisdiction within data regulation boundaries Conduct independent reviews to satisfy concerns of the regulators

PWC 2

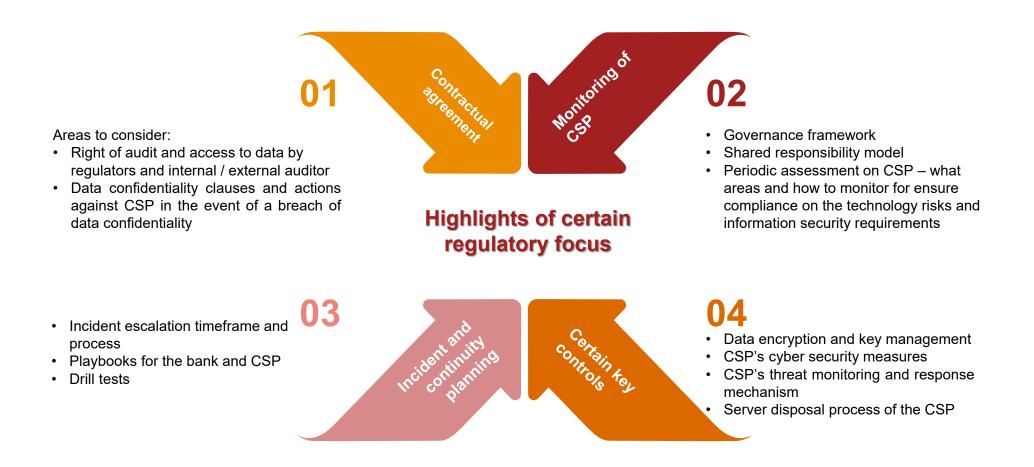
7 Key Lessons Learned in Cloud Transformation Journey

Cloud strategy provides 6x reduction in cost, 20x decrease in provisioning cycle time, and provides real business value

	Key Issues	Lessons Learned	What can be done about this
	Vendor Selection	Vendors should be selected depending on an organization's infrastructure needs and the flexibility of components & services offered. Reliability of a provider and the availability of services provided may often be more important than cost considerations.	 Conduct careful vendor selection exercises to ensure sufficient choices and the availability of alternatives Remediate vendor risks by considering independent assessor and vendor management services
	Investment & TCO	Costs and investment budgets are one of the key constraints when moving to cloud. While reduction in operational costs is usually a key driver for cloud adoption/migration, an effective cloud model must be carefully selected to realize such cost-benefits.	 Perform cost-benefit comparison of different options available – private cloud, public cloud, multi-cloud, hybrid cloud, etc. Compare between costs and functionalities
8-8	Skills & Competency	Cloud migration greatly affects company culture and its environment. Executives must set the right tone and strategy for its people, while the organization must evaluate the need for upskilling, reskilling or hiring talents to operate the cloud effectively and maximize its benefits.	 Formulate an appropriate target operating model Tailor to the corporate strategy, culture and values



Sharing on certain regulatory focus areas in relation to the **adoption of** cloud technologies

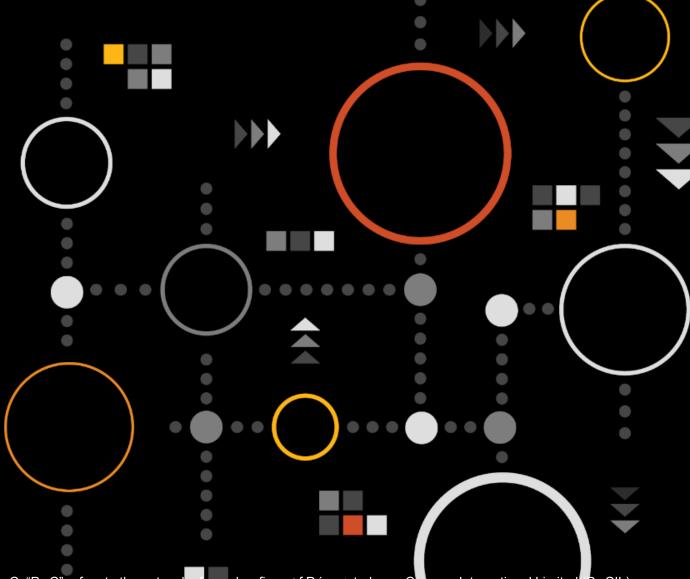




Thank you







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