Cloud Risk Management

pwc

An effectively delivered cloud strategy with appropriate Cloud Risk Management could generate operational efficiencies and improve customer satisfaction by driving business growth via enhancing collaboration. It can also give the an IT department the opportunity to be a strategic driver of business services as cloud gives the opportunity to scale the business, decrease time to market, and enhance collaboration.

Organisation will also need to consider the impact cloud usage will have on the business and the risks associated with this new approach.

What's on your mind?

The importance of IT services and the impact they make to the success of organisations has grown over time to a point where they are now essential. Outsourcing to cloud enables your organisation to focus on the business. However, there are also challenges to using cloud that organisations have to consider.

Here are some things you might be considering:

- **We are migrating a critical service to the cloud** – Are our contractual agreement sufficiently robust and meeting industry standards? Does our organisation have appropriate controls and/or policies in place? Are the cloud hosted services resilient and scalable?

- **We are creating a business case for moving to the cloud** – Are we going to get value for money? Is cloud going to be more expensive?

- **We now have a cloud first strategy** – Is our strategy in line with long term industry trends? Which services should be migrate first? Do we have staff with the relevant skills and capabilities? Do we need to change our operating model?

- **We have outsourced or are in the process of outsourcing our technology** – How do we ensure our outsourced services are reliable and resilient?

- **We are hosting critical customer data on the cloud** – How secure is our data? Do the cloud providers have appropriate logical and physical security?

- **Are our cloud based services meeting compliance and regulatory requirements such as GDPR?** – Are we sure we know where our services and data are located? Do we know who manages them? Will the third party comply with our regulatory requirements?

- **Cloud service usage is high across the organisation** – Are we are aware of all cloud services being used across the organisation and where secure data is being hosted?

Our point of view

An effectively delivered cloud strategy could generate operational efficiencies and improve customer satisfaction by driving business growth via enhancing collaboration. It can also give the IT department the opportunity to be a strategic driver of business services as cloud gives the opportunity to scale the business, decrease time to market, and enhance collaboration.

However, there are also challenges to the cloud that need to be considered such as getting value for money, managing the cloud providers, cloud governance, compliance and regulatory requirements, and possible skills shortages in cloud management capabilities.

What good looks like

If your organisation is reaping the business benefits of cloud services then it shows the following characteristics:

- Your cloud strategy is aligned to long term business objectives, while your business case is realistic and achievable

- Your new cloud hosted infrastructure is scalable, resilient and have appropriate security controls in place

- The business is cloud ready and have developed a clear roadmap for implementing the transition from the old operating model, which will be transformed by the introduction of cloud capabilities

- Ensuring cloud services used are meeting regulatory and compliance requirement

- The contractual obligations of your cloud providers are robust and clearly aligned with your business expectations

- You aware of all cloud services being used across the organisation and where secure data is being hosted

When to act

- You are making a significant cloud related change or embarking upon transformation
- You are creating a cloud strategy and require thought leadership
- You need to determine your readiness for cloud computing adoption and which services you should migrate first
- You are about to outsource or are reviewing outsource arrangements
- Your regulator has started to focus on outsource arrangements and the resilience of your critical services
- You need to discover, scope and plan for effective risk management of enterprise cloud services in preparation for GDPR
- An appropriate level of service is not being provided by the cloud provider

How we can help

We have a track record of helping clients on their cloud journey based on our in-depth experience gained from working with organisations of all sizes, from all industries and sectors. Our approach to Cloud Risk Management is founded on proven experience of providing the right intervention at the right time to make a difference to your business.

We have developed a Cloud Risk Management Framework to evaluate that the services being offered by your cloud service providers does not expose your organisation to any risks, and if they do, these are assessed and mitigated accordingly.

What you gain

Confidence
Ensuring alignment, governance, progress, delivery and quality of your cloud strategy

Protection
Safeguarding of your and your organisation's future
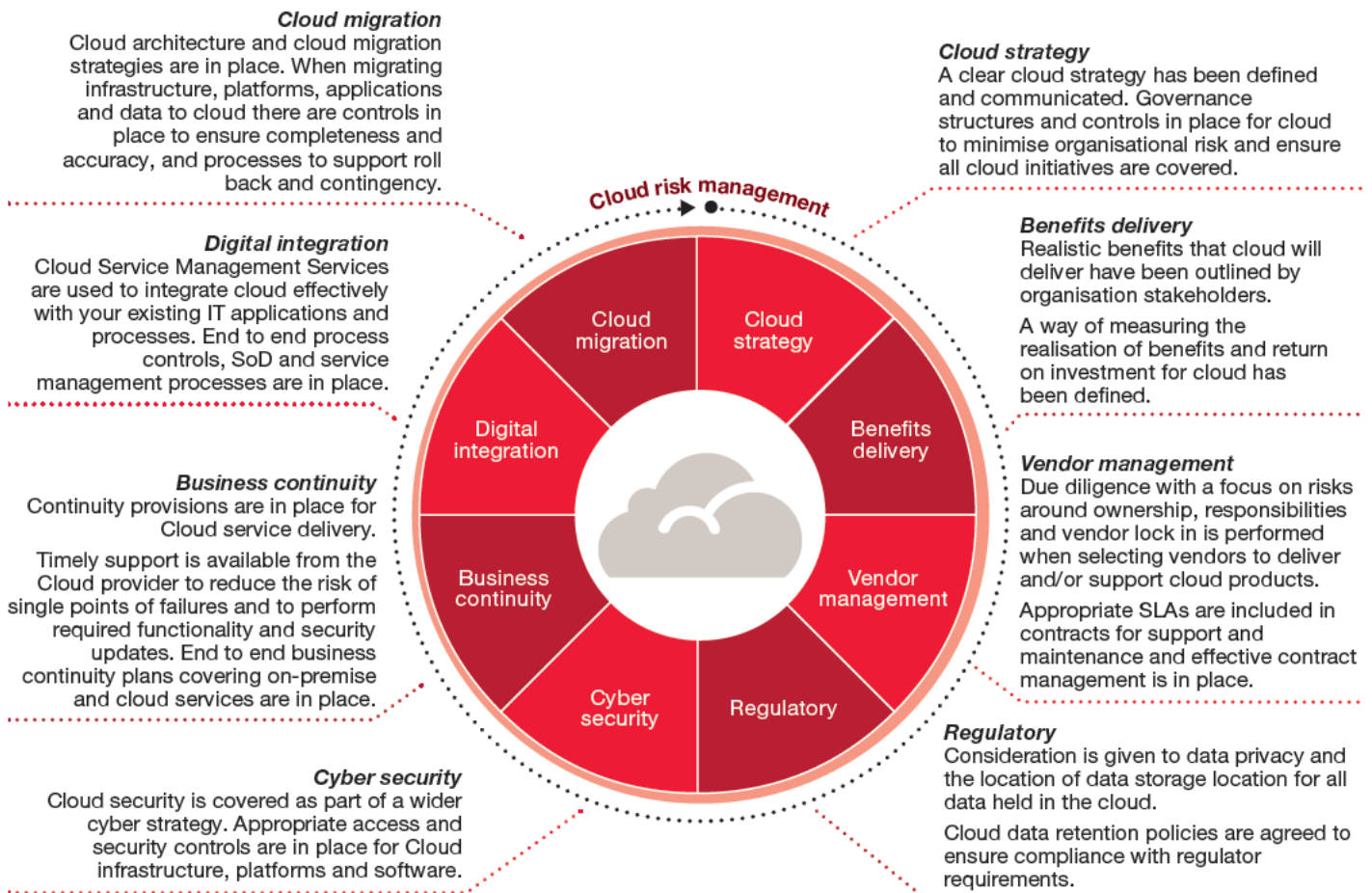
Reputational protection
Building trust, stakeholder confidence and belief

Protecting your investment
Delivering value and containing costs

Invaluable experience
Enhancing the delivery of your current and future cloud programmes

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Cloud migration
Cloud architecture and cloud migration strategies are in place. When migrating infrastructure, platforms, applications and data to cloud there are controls in place to ensure completeness and accuracy, and processes to support roll back and contingency.

Digital integration
Cloud Service Management Services are used to integrate cloud effectively with your existing IT applications and processes. End to end process controls, SoD and service management processes are in place.

Business continuity
Continuity provisions are in place for Cloud service delivery.

Timely support is available from the Cloud provider to reduce the risk of single points of failures and to perform required functionality and security updates. End to end business continuity plans covering on-premise and cloud services are in place.

Cyber security
Cloud security is covered as part of a wider cyber strategy. Appropriate access and security controls are in place for Cloud infrastructure, platforms and software.

Cloud risk management

Cloud migration · Cloud strategy · Digital integration · Benefits delivery · Business continuity · Vendor management · Cyber security · Regulatory

Cloud strategy
A clear cloud strategy has been defined and communicated. Governance structures and controls in place for cloud to minimise organisational risk and ensure all cloud initiatives are covered.

Benefits delivery
Realistic benefits that cloud will deliver have been outlined by organisation stakeholders.

A way of measuring the realisation of benefits and return on investment for cloud has been defined.

Vendor management
Due diligence with a focus on risks around ownership, responsibilities and vendor lock in is performed when selecting vendors to deliver and/or support cloud products.

Appropriate SLAs are included in contracts for support and maintenance and effective contract management is in place.

Regulatory
Consideration is given to data privacy and the location of data storage location for all data held in the cloud.

Cloud data retention policies are agreed to ensure compliance with regulator requirements.

Examples of our Cloud Risk Management work and client successes

Financial services

To remain competitive and keep up with technological change, a financial services client needed to adapt the way it interacted with customers and the way it delivered critical IT services. Senior Management had proposed a cloud First Strategy that required legacy infrastructure to be replaced with cloud services where possible. Using PwC's Trusted cloud Service Framework we performed an independent risk assessment of their critical services and their suitability for deployment to the cloud and whether a private, public, or hybrid solution would be best. Our deliverable enabled the business to have a clear roadmap for their transition from legacy to new infrastructure.

Pension provider

The client was migrating a critical business application hosting customer from their in-house Data Centre to the public cloud. We carried out a pre-implementation review on the design of the confirm good practices have been applied with regard to the security controls. In addition, we reviewed the scalability and resiliency of the new cloud hosted infrastructure. Our recommendations ensured the business was able to migrate the application to the public cloud environment without impacting business.

High street retailer

A high street retailer's website represented a substantial percentage of sales and was considered a key growth area for the business. Historically the website hosted on the private cloud had suffered from performance and availability issues. PwC were able to help by reviewing contractual agreements and identifying that the current service level agreements were not particularly robust nor was there an appropriate level of performance monitoring taking place. An update to the contract and a change in performance monitoring improved the client's service significantly.

Utilities firm

A utilities firm was concerned about its exposure to the threats from insecure and unsanctioned cloud services being used across the organisation. Using our cloud discovery tool we identified all cloud services being used and helped to create a clear policy regarding the use of unsanctioned services as well as educating colleagues across the business, developed a plan to block or eliminate high-risk services (e.g. PDF Conversion Tools), and helped to consolidate services and licenses (e.g. CRM services).

180306-152533-AK-OS