

Cloud Journey

Assess-Migrate-Manage

Customer Facing Presentation

May 20

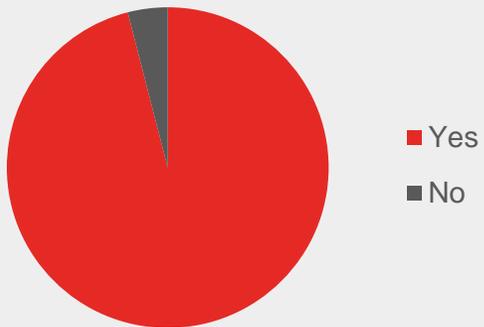
# Content

- ▶ Cloud Journey landscape and challenges
- ▶ TDL Cloud Journey model
  - I. Cloud Readiness
  - II. Cloud Security
  - III. Cloud Migration
  - IV. Managed Cloud
- ▶ Why TDL
- ▶ Next Steps

# Cloud Journey Landscape Today

Cloud usage is now ubiquitous

Using Cloud

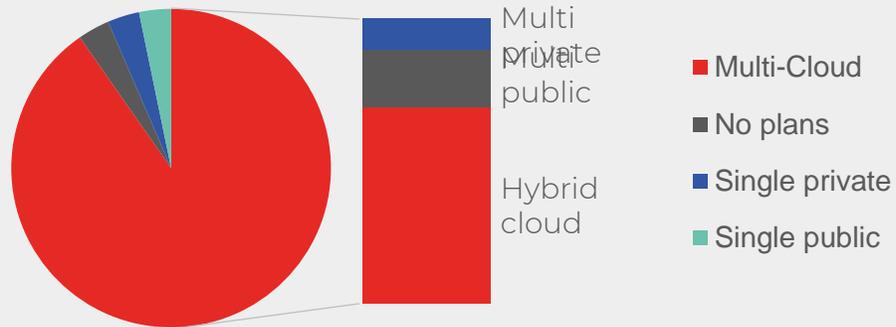


Virtually all organizations, **96%**, use the cloud in one way or another

Increasing number of workloads in public and private clouds

Enterprise Cloud Strategy

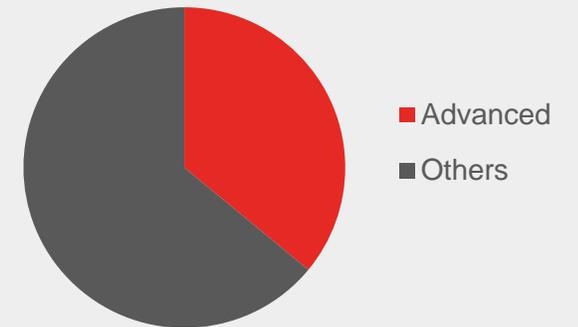
1,000+ Employees



The average business runs **38%** of workloads in public and **41%** in private cloud

Growing importance of advanced workloads to business

Future Plans

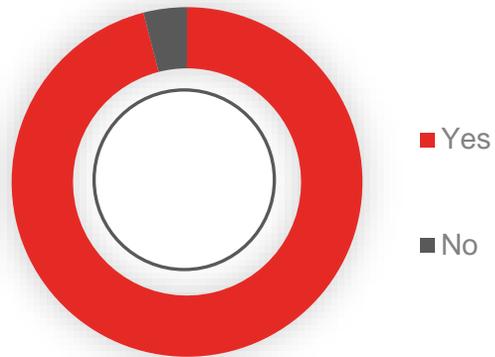


**36%** plan on embracing cloud for advanced use cases, including leveraging data services, warehousing, analytics, AI, big data and machine learning

# Cloud Journey Landscape - Today

## Cloud usage is now ubiquitous

### Using Cloud

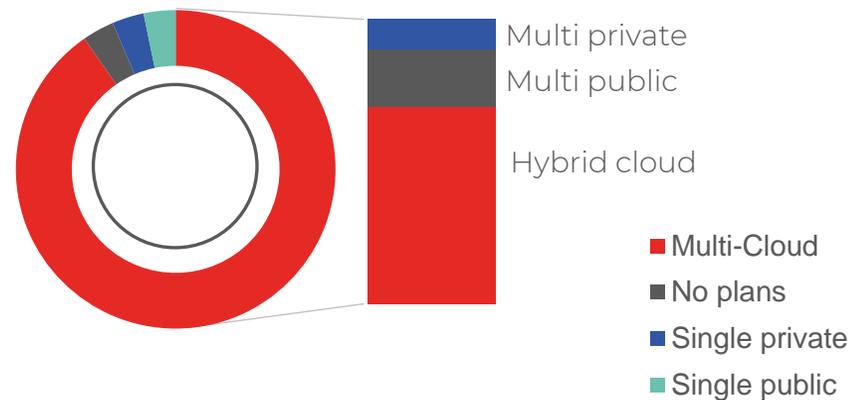


Virtually all organizations, **96%**, use the cloud in one way or another

## Increasing number of workloads in public and private clouds

### Enterprise Cloud Strategy

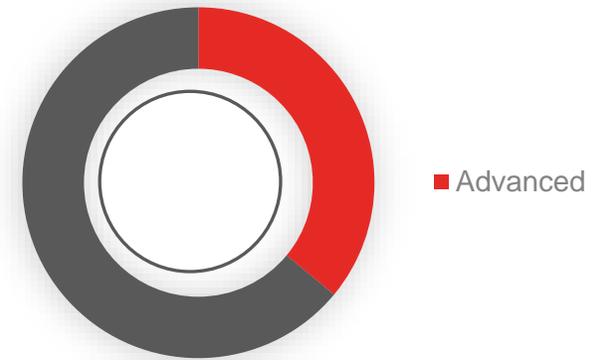
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The average business runs **38%** of workloads in public and **41%** in private cloud

## Growing importance of advanced workloads to business

### Future Plans



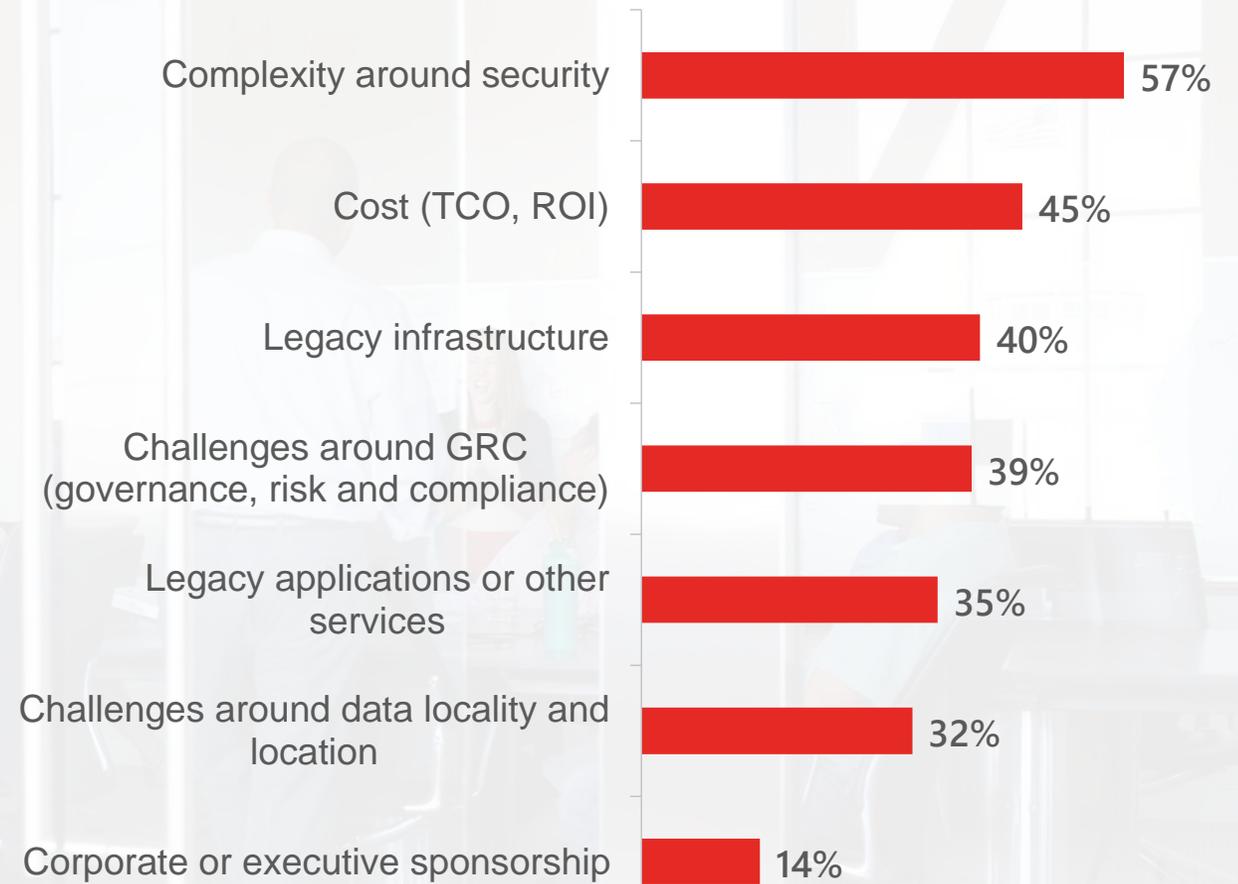
**36%** plan on embracing cloud for advanced use cases, including leveraging data services, warehousing, analytics, AI, big data and machine learning

## What does this mean to your organisation?

- ▶ A lack of transparency about true operational costs leads to less confidence in public cloud as a strategy
- ▶ Without a clear strategy for public cloud, IT is unable to deliver on the business increasingly agile requirements
- ▶ Missing out on the new security and governance capabilities that are delivered with public cloud
- ▶ A competitive disadvantage in the marketplace

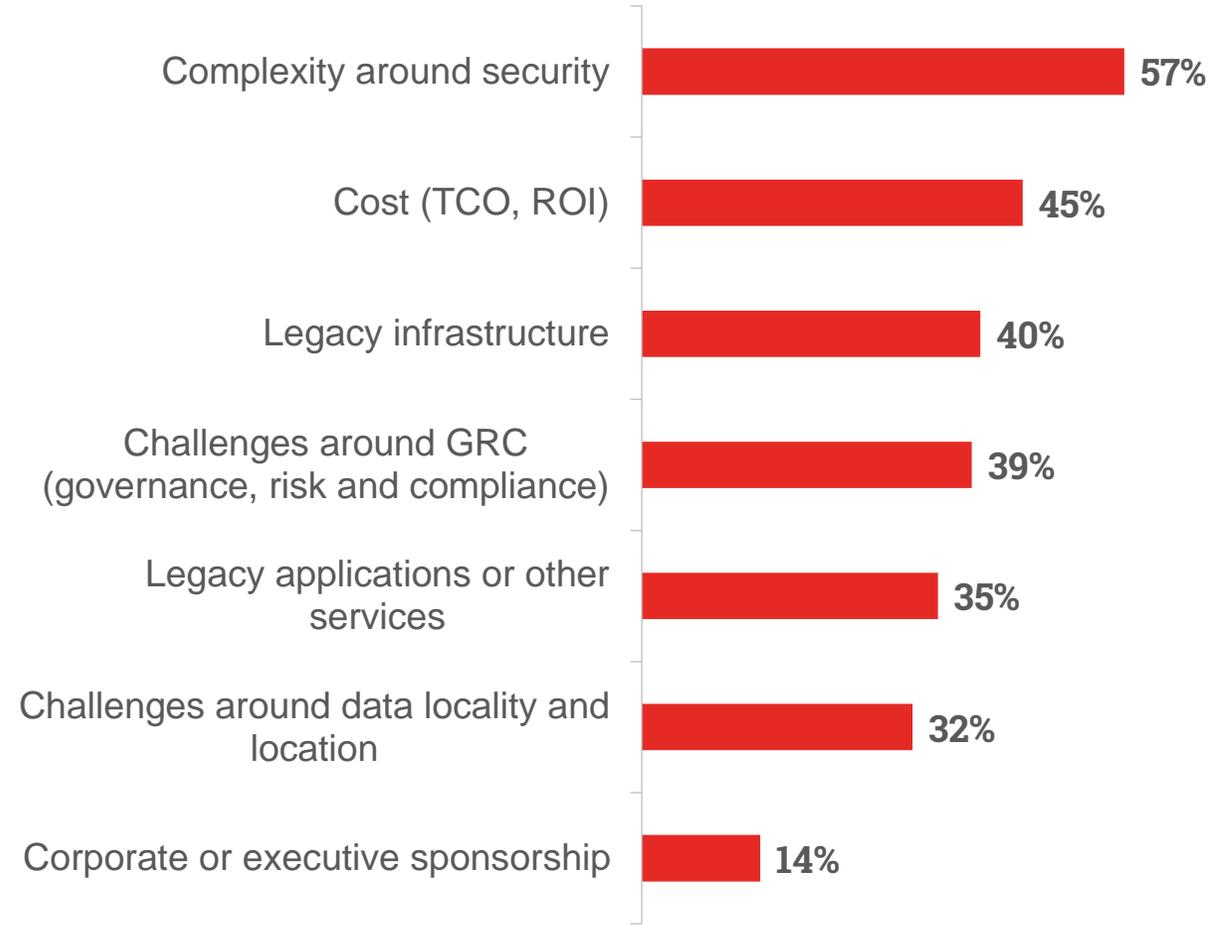


# Key Cloud Adoption Challenges



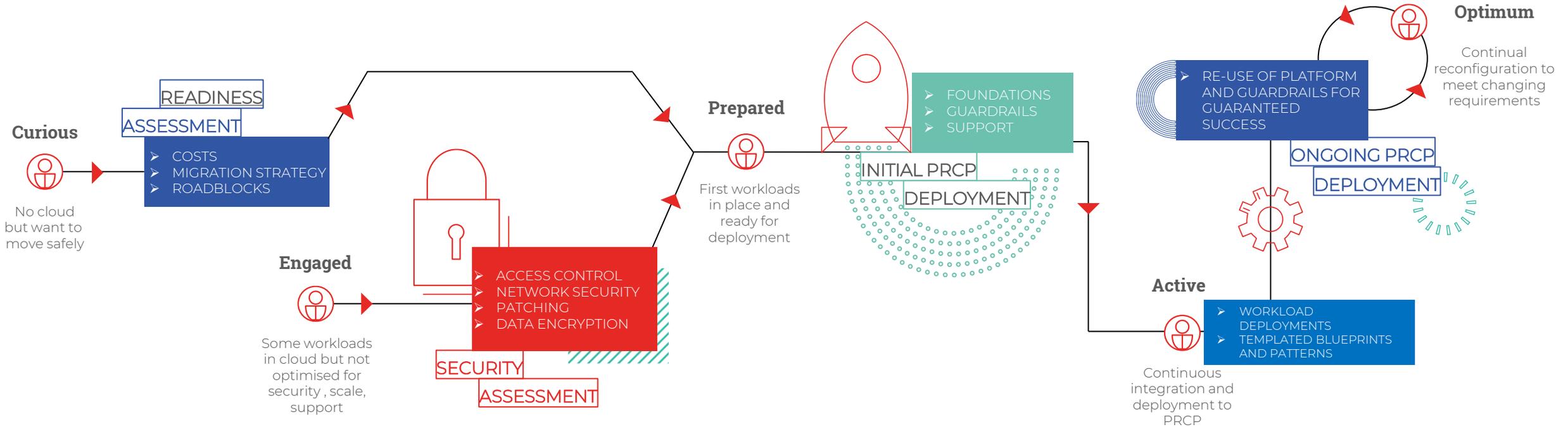
Cloud Expertise Essential to Success

# Key Cloud Adoption Challenges



**Cloud Expertise Essential to Success**

# TDL Cloud Journey

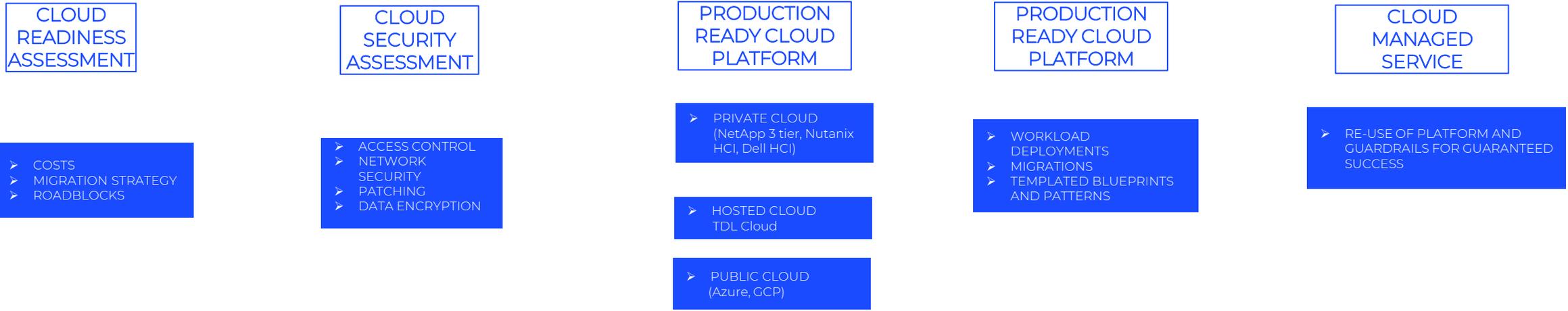


## Cloud Production Maturity

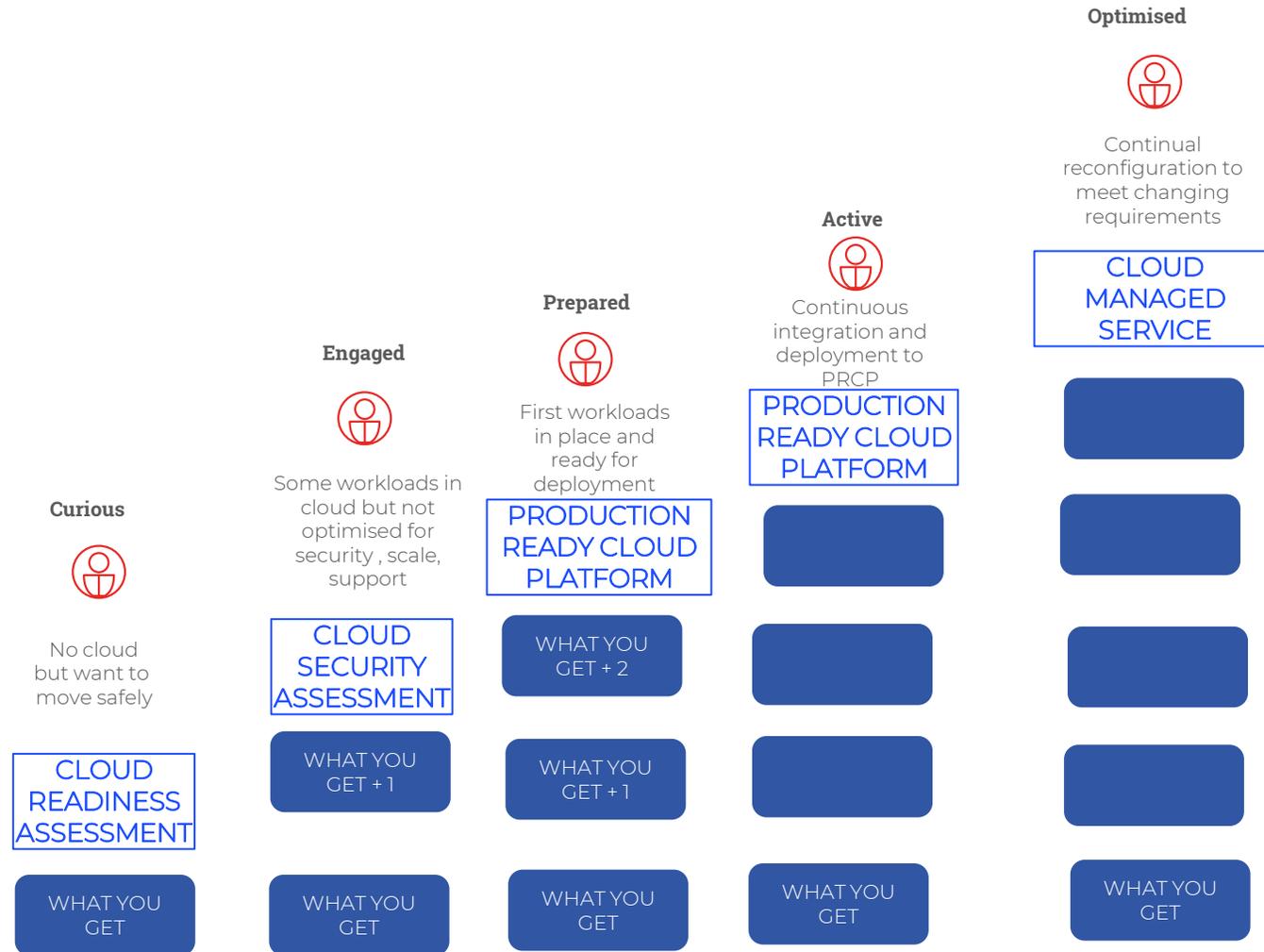
# Hybrid Cloud



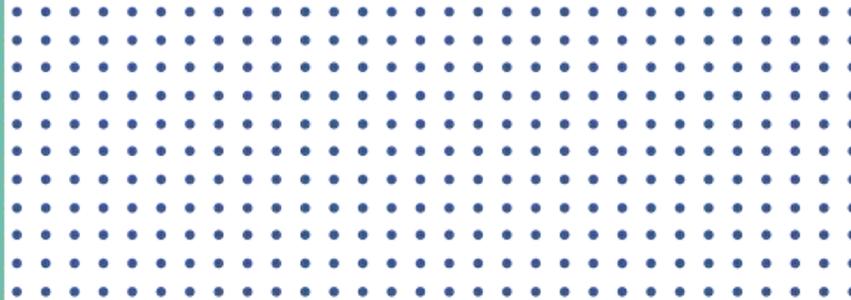
## TDL Cloud Maturity Journey



# TDL Cloud Maturity Journey



# Cloud Readiness



# Readiness Assessment

- ▶ Real-world sizing estimates and cost expectations
- ▶ List of incompatible workloads and a strategy for transformation
- ▶ Overall strategy roadmap with budget costs



## Next steps

1. Understand interest
2. Approve proposal to proceed
3. Questions and interviews
4. Workshop
5. Recommendations and roadmap



# Cloud Security



# Security Assessment

- ▶ Best practise security assessment against Logicalis Production Ready Cloud Platform standard incorporating Microsoft Cloud Adoption Framework, industry specific standards and real-world experience from our Azure Expert MSP Centre of Excellence.
- ▶ Four key focus areas:
  1. Security
  2. Network
  3. Governance
  4. Application Architecture.

Security Category	Awarded Grade / Colour
<b>Environment Analysis</b>	
Subscription Ownership	Needs Attention
Role Based Access Control	Needs Attention
Remote Access	Acceptable
Data Encryption	Needs Attention
Virtual Machines	Caution
Security State Monitoring	Caution
<b>Network Security</b>	
Networking	Acceptable
Zero Trust Approach	Caution
Connectivity to Customer Networks	OK
Inbound and Outbound access	Acceptable
Service Traffic	No Data
DMZ	OK
<b>Governance</b>	
Naming Conventions	Needs Attention
Cost Reporting and Tagging	Needs Attention
Monitoring	Caution
Azure Logging	Caution
Azure Backup	Caution
Patching	Acceptable
<b>Application Architecture</b>	
Availability and Resiliency	Needs Attention
Disaster Recovery	Needs Attention
Traffic routing	Caution
Traffic Management and segregation	Caution
Azure Backup	Caution



## Next steps

1. Understand interest
2. Approve proposal to proceed
3. Gather documentation
4. Assign read-only access to Cloud Consultant
5. Recommendations report is presented.





# Production Ready Cloud Platform

# Production Ready Cloud Platform

Transitioning the right workloads to the cloud in the right way is business critical.

But what's the best way to do this?



Do it yourself?



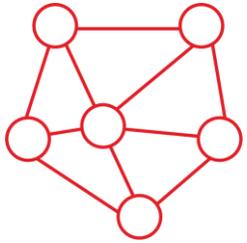
Engage expert consultants?



Pre-configured environment.



# Key considerations



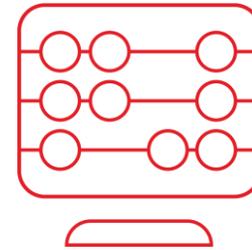
## Networking

- Secure, granular model
- Design principles of disabled by default, access only where required
- Detailed logging and auditing
- Next generation security capabilities built in



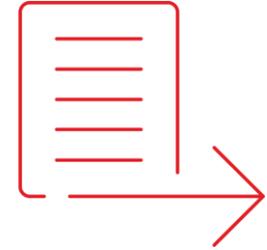
## Security

- Enshrine company policies, procedures and controls
- Protect administrative access, including ensuring access only from trusted locations
- Report non-compliance in real time
- Adhere to encryption and data sovereignty policies



## Design architecture

- Guidelines for all future deployments
- Built in disaster recovery and high availability
- Security principles



## Ongoing management

- Simplify portal administration
- Consistent backup and recovery
- Automated security management
- Leverage DevOps and automation
- Detailed reporting to avoid "bill shock"



# Out of the box compliance



## Australian Government Certified Cloud Services List (CCSL)

Microsoft is included in the Australian Certified Cloud Services List based on an IRAP assessment and certification by the ASD.

### Microsoft and CCSL

Microsoft has undergone an IRAP assessment and been certified on the CCSL by ASD for Azure, Dynamics 365, and Office 365. For each assessment, Microsoft engaged an ASD-accredited assessor who examined the security controls and processes used by Microsoft's IT operations team, physical datacenters, intrusion detection, cryptography, cross-domain and network security, access control, and information security risk management of in-scope services. The IRAP assessments found that the Microsoft system architecture is based on sound security principles, and that the applicable Information Security Manual (ISM) controls are in place and fully effective within our assessed services.

- In 2014, Azure was launched as the first IRAP-assessed cloud service in Australia, hosted from datacenters in Melbourne and Sydney. These two datacenters give Australian customers control over where their customer data is stored, while also providing enhanced data durability in the event of a disaster through backups at both locations.
- In early 2015, Office 365 became the first cloud productivity service to complete this assessment.
- In April 2015, the ASD announced the CCSL certification of both Azure and Office 365, and in November 2015, of Dynamics 365.
- In June 2017, ASD announced the recertification of Microsoft Azure and Office 365 for a greatly expanded set of services for Unclassified DLM information.
- In April 2018, ASD announced the certification of Azure and Office 365 at the Protected classification. Microsoft is the first and only public cloud provider to achieve this level of certification.

Their certification provides assurance to public sector customers in government and their partners that Microsoft has appropriate and effective security controls in place for the processing, storage, and transmission of sensitive and official information that holds Dissemination Limiting Markings (DLMs) or is classified at the Protected level. This includes the majority of government, healthcare, and education data in Australia.

- Learn about the [benefits of CCSL on the Microsoft Cloud](#).

# Out of the box compliance

## Security Center - Regulatory Compliance (Preview)

Showing 3 subscriptions

### Regulatory compliance assessment



### Regulatory standards compliance status



### Regulatory compliance

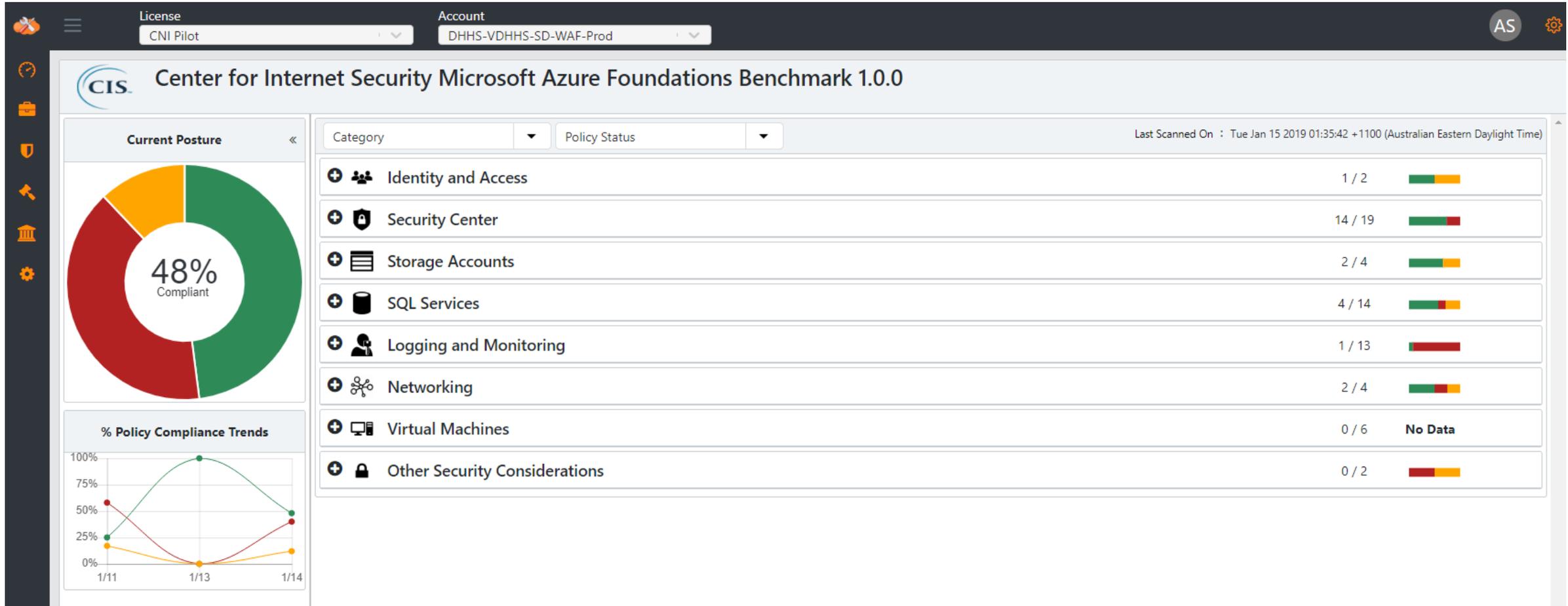


[Azure CIS](#) [PCI DSS 3.2](#) [ISO 27001](#) [SOC TSP](#) [All](#)

Under each applicable Compliance Control is a set of assessments run by Security Center that are associated with that Control. If they are all green, it means those assessments are currently passing; this does not ensure you are fully compliant with that control. Furthermore, not all controls for any particular regulation are covered by Security Center assessments, and therefore this report is only a partial view of your compliance status.

ASSESSMENT	RESOURCE TYPE	TOTAL RESOURCES
<a href="#">Configure IP restrictions for Web Application (Preview)</a> <a href="#">ISO 27001</a> <a href="#">SOC TSP</a>	Web applications	51 of 51
<a href="#">Use the latest supported PHP version for Web Application (Preview)</a> <a href="#">ISO 27001</a>	Web applications	50 of 51
<a href="#">Require secure transfer to storage account (Preview)</a> <a href="#">Azure CIS</a> <a href="#">ISO 27001</a>	Storage accounts	32 of 78
<a href="#">Remediate vulnerabilities in security configuration on your machines</a> <a href="#">Azure CIS</a> <a href="#">ISO 27001</a>	Virtual machines	32 of 84
<a href="#">Troubleshoot missing scan data on your machines</a> <a href="#">ISO 27001</a>	Virtual machines	28 of 84
<a href="#">Disable unrestricted network access to storage account (Preview)</a> <a href="#">ISO 27001</a>	Storage accounts	23 of 43
<a href="#">Enable diagnostic logs in Key Vault (Preview)</a> <a href="#">Azure CIS</a> <a href="#">PCI DSS 3.2</a> <a href="#">ISO 27001</a> <a href="#">SOC TSP</a>	Key vaults	21 of 21
1 2 3 4 5 6 7 < >		
OS SECURITY CONFIGURATION	RESOURCE TYPE	TOTAL RESOURCES
[CCE-4236-6] Accepting source routed packets should be disabled for all interfaces. (net.ipv4.conf.all.accept_source_route = 0) (Linux) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-4236-6] Accepting source routed packets should be disabled for all interfaces. (net.ipv6.conf.all.accept_source_route = 0) (Linux) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-4133-5] Ignoring bogus ICMP responses to broadcasts should be enabled. (net.ipv4.icmp_ignore_bogus_error_responses = 1) (Linux) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-3644-2] Ignoring ICMP echo requests (pings) sent to broadcast / multicast addresses should be enabled. (net.ipv4.icmp_echo_ignore_broadcasts = 1) (Linux) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-3561-8] IP forwarding should be disabled. (net.ipv4.ip_forward = 0) (Linux) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-5229-0] MSS: (DisableIPSourceRouting IPv6) IP source routing protection level (protects against packet spoofing) (2008) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
[CCE-24452-5] MSS: (DisableIPSourceRouting IPv6) IP source routing protection level (protects against packet spoofing) (2012) <a href="#">PCI DSS 3.2</a> <a href="#">SOC TSP</a>	VMs & computers	0 of 84
1 38 < >		

# Industry specific compliance



## Next steps

1. Understand interest
2. Approve proposal to proceed
3. Design workshop
4. Deployment of platform
5. Documentation and handover.





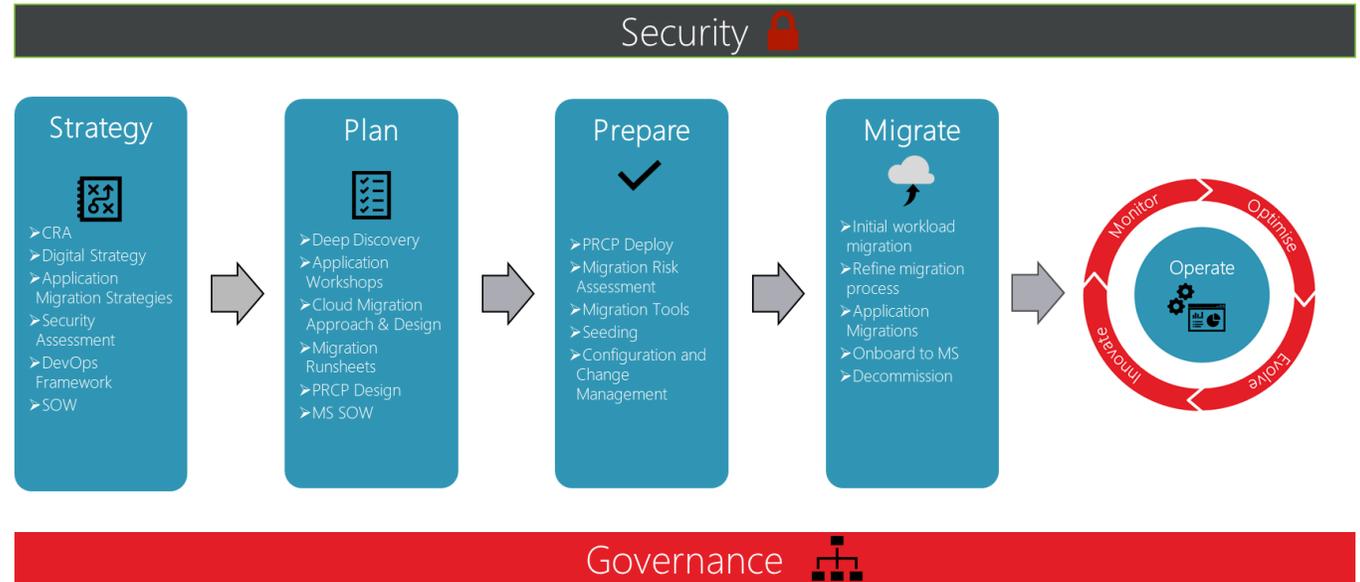
# Migration



# Migration

Leverage our years of experience in successful cloud migrations with an Azure Expert MSP audit approved Framework.

- ▶ Business Application focussed approach
- ▶ Lift and Shift focus, with transformation as 2<sup>nd</sup> stage to deliver a fast, low risk migration
- ▶ Optional onboarding to managed services.





# Managed Cloud

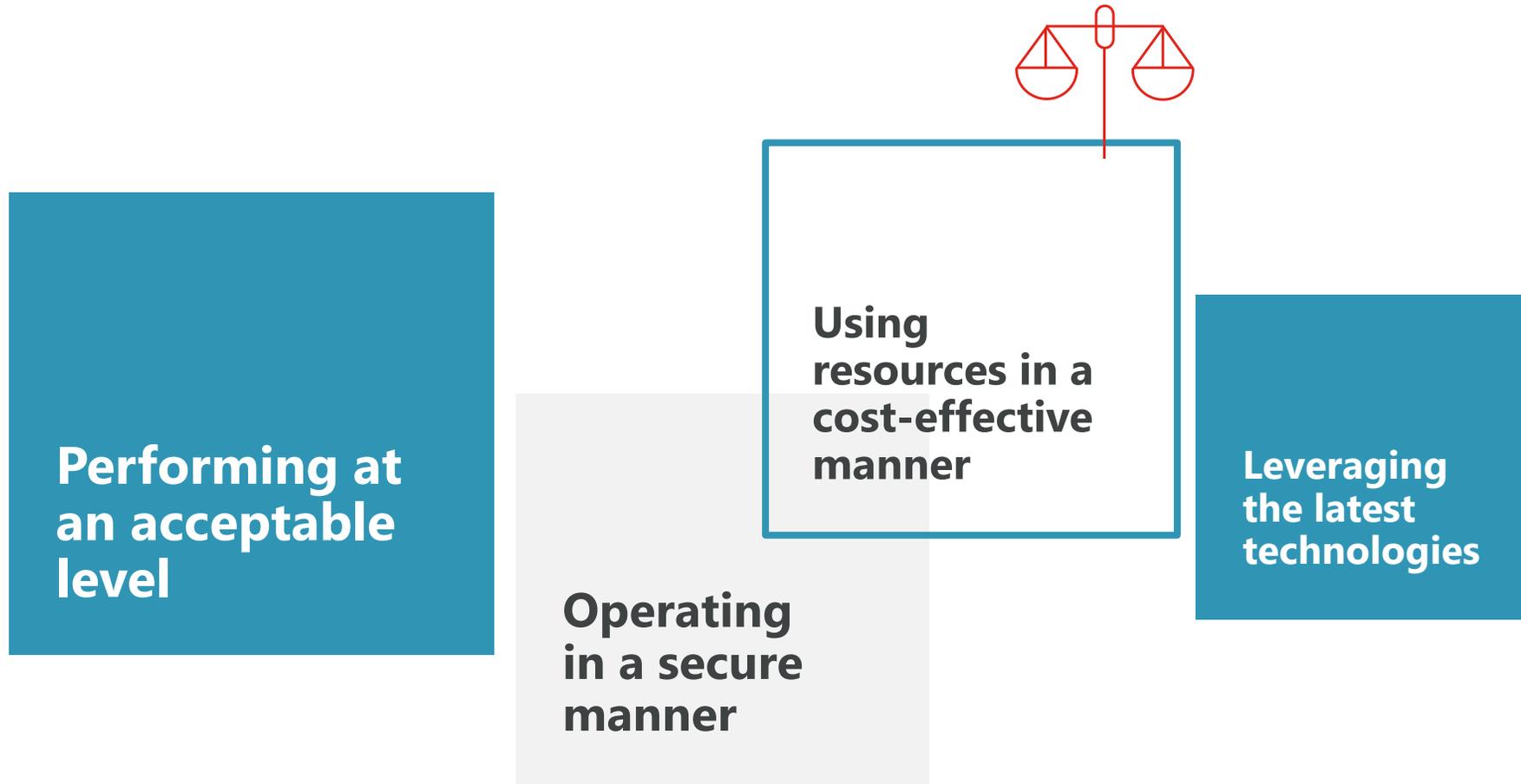
## Managed Cloud

Whether you are working on mission-critical apps, entire datacenter footprints, or hybrid environments, as an Azure Expert MSP we have proven capabilities to be able to help you.

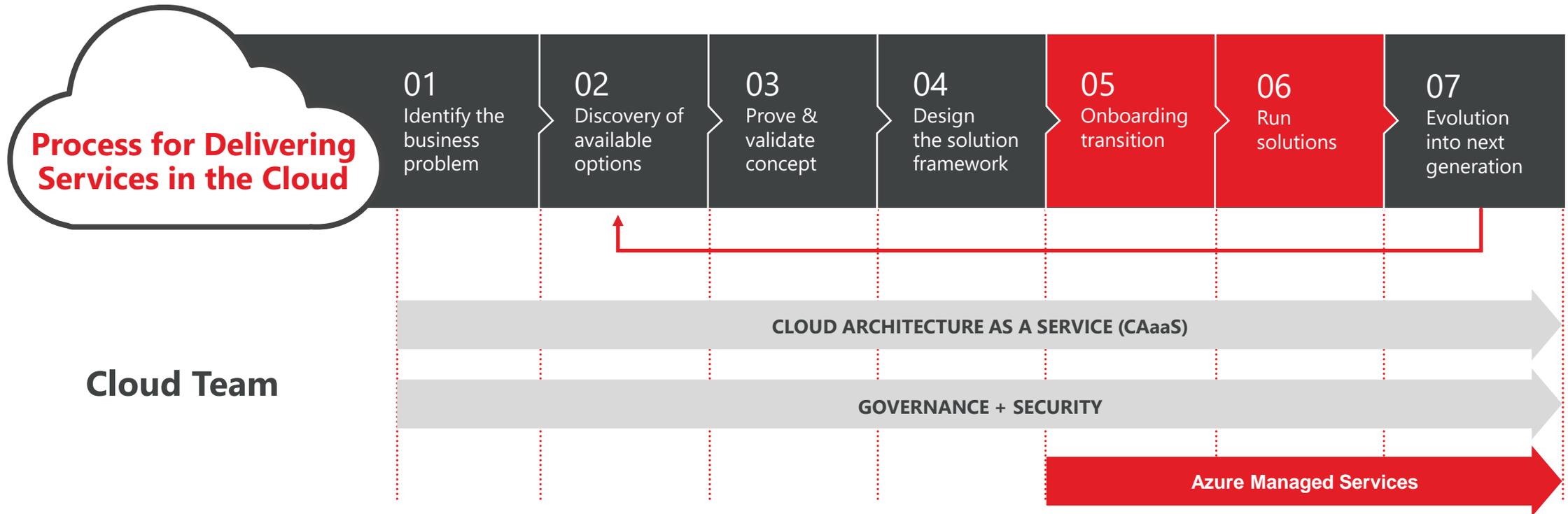
- ▶ Confidence in the availability of core workloads & applications
- ▶ Risk management for system security & reliability
- ▶ Governance to ensure cost optimisation
- ▶ Savings delivered & reported monthly
  
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- ▶ Olupta arum harum quam re



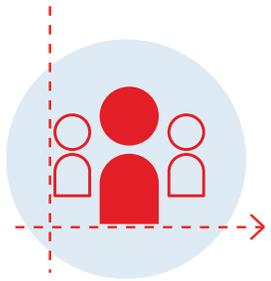
# Measures of success



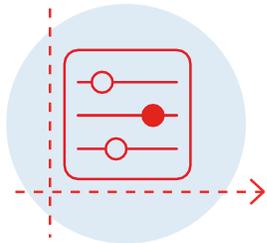
# Overall approach



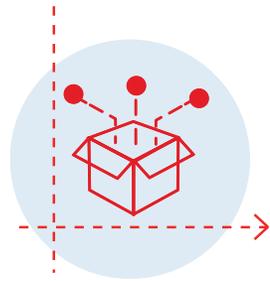
# Pillars for success



Support



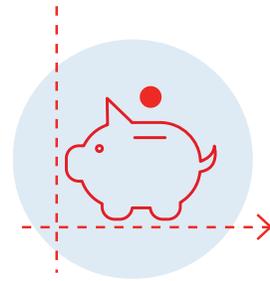
Monitoring



Capacity  
Management



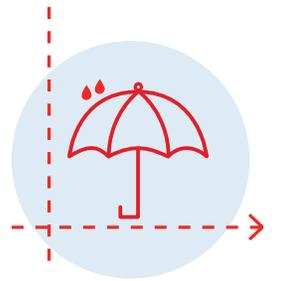
Security &  
Governance



Cost  
Optimisation



Cloud Architecture  
as a Service (CaaS)



Disaster Recovery  
Validation

# Why TDL



## Trusted and certified

*Whether you are working on mission-critical apps, entire datacenter footprints, or hybrid environments, Azure Expert MSPs have proven their capabilities to be able to help you.*



**Best of the best**



Highly evolved form of managed services partners



Deep skillsets across DevOps/Sysops, architecting cloud solutions and technical professional consulting



Proven to deliver business outcomes for your solutions and applications

