Cloud Transformation

HMB Cloud Adoption Framework

2020

Cloud Transformation Advisory Services

Cloud Adoption Framework

- Cloud Strategy
- Cloud Foundation
- Cloud Migration Planning
- Cloud Governance
- Cloud Operations
- Cloud FinOps

Cloud Strategy

Why are we going to the cloud?

Cloud Drivers

- Scalability to meet demands
- Agile adaptation to change
- Provisioning and procurement speed
- Innovate with new services and technologies
- Reduce operations and technical complexity

Business Drivers

- Reduce disruptions and incidents
- Capital cost avoidance on end of life assets
- Cost savings on PaaS and IaaS workloads
- Increase operational efficiencies
- Improve the customer experience

Program Development

- Review the business case
- Establish a cloud adoption team
- Produce and publish a vision statement
- Initiate the project charter
- Align IT, finance, and the business

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Cloud Adoption Questionnaire

1.0	Cloud Strategy	Yes	No	Not Sure	Comments
1.1	**Describe your current cloud adoption journey.**				
1.1.1	Building an initial strategy and assessing vendors.				
1.1.2	Selected a cloud vendor but have not started migrations.				
1.1.3	Working in a sandbox environment and starting to build out VM's.				
1.1.4	Deployed VM's and PaaS services but not a full application workload.				
1.1.5	Deployed a mission critical production application with integrations to on-premise.				
1.2	**What Cloud factors motivate your decision to move the public cloud?**				
1.1.1	Scalability to meet geographic needs and market demands.				
1.1.2	Innovate with new services and technologies.				
1.1.3	Increase business agility allowing speed to market.				
1.1.4	Reduce technical complexity and legacy applications.				
1.1.5	Utilize cloud database services and better manage your data.				
1.3	**What business factors motivate your decision to move to the public cloud?**				
1.3.1	Capital cost avoidance and decreased refresh cycles on end of support assets.				
1.3.2	Increase operational efficiencies and organizational processes.				
	Reduce disruptions and incidents.				
1.3.3	Improve customer experience.				
1.3.4	Exit or repurpose a datacenter.				
1.3.5	Shift from CAPEX to OPEX and look for annual cost savings.				
1.4	**What have you done to build out a Cloud Program and Adoption Strategy?**				
1.4.1	Have you created a formal business case for cloud adoption?				
1.4.2	Have you created a project charter for execution?				
1.4.3	Have you created a scope document to outline initial requirements?				
1.4.4	Have you broken down scope to workstreams or a work breakdown structure?				
1.4.5	Have you conducted public cloud vendor assessments?				
1.4.6	Have you selected a public cloud vendor?				
1.4.7	Have you started an OCM initiative to educate your organization on cloud?				

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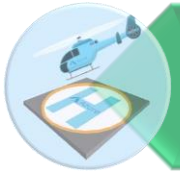
Cloud Foundation

Building the framework for execution

Inventory Digital Estate

- Compute and storage
- Dependency assessment
- Baseline security MVP
- Application tiers
- Analyze data
- BCDR requirements



Design Azure Landing Zones

- EA and tenant creation
- Management group
- Define implementation
- Account owners
- Organize resources
- Policy baselines

Identity Access Management

- Role based access
- Resource group access
- Subscription access
- Approval workflow
- Notifications / alerts
- Modern passwords

Security Controls MVP

- Set Azure policy
- Enforce tagging
- Azure Security Center
- Encryption
- Key management
- Log analytics

Infrastructure Prerequisites

- Network connectivity
- Network topology
- Inbound / outbound
- Assess firewalls
- Assess load balancer
- IP Planning

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Cloud Migration Planning

Rational delivery to the Cloud

Workload Assessments

- Identify first 10 projects
- Innovation–Re-architect
- Migration–Re-host
- Assess Non-Prod
- Minimal integrations
- EOL Assets

Application Rationalization

- Engage App teams
- App owner questionnaire
- Target SaaS, PaaS, IaaS
- Analyze APM data
- Tech assessment
- 6R proposal

Cloud Delivery Model

- Organize scrum teams
- Sprint planning – Epics
- Azure DevOps / Boards
- Right size – deploy
- Release management
- Pipelines for CI/CD

Testing and Acceptance

- Blueprints and templates
- Promote, test, fix
- BCDR testing
- Load testing
- Performance testing
- User acceptance

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- Stakeholder analysis
- Stakeholder engagement
- Communication plan
- Power/interest grid
- Build education plan
- Build training plan

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Cloud Governance

Processes, Procedures, and Standards

Policy Standards

- Set built-in policies
- Create custom policies
- Set compliance policies
- Enforce tagging
- Set policy assignments
- Initiate PolicySets

Tagging Standards

- Application name
- App tier / service class
- Budget approved
- Business unit
- Cost center
- Approver name

Security Controls

- Apply CIS controls
- Set security benchmarks
- Azure security center
- Azure Monitor
- IAM controls
- Network Security

Regulatory Compliance

- Assess compliance req.
- Set audit reporting
- Data classifications
- Endpoint protection
- Application controls
- IAM controls

Data and Automation

- Infrastructure as code
- Data classifications
- Robotic process automation
- Value in PaaS
- Process run books
- UI automation

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Cloud Operations

Optimize, Optimize, Optimize

Run Support Baseline

- Monitor health
- Log centralization
- Monitor subscriptions
- DNS monitoring
- Network monitoring
- App monitoring

Operational Compliance

- Policy management
- Patch management
- Blueprint management
- Data protection
- Backup management
- Disaster recovery

Program Management

- Validate intake process
- Demand management
- Design management
- Long term plan
- Portfolio management
- Agile delivery

IT Service Management

- Change management
- Incident management
- IT asset management
- Help desk training
- Cloud procurement
- Service integration

Cloud Delivery Organization

- Central vs Decentralized
- Innovation Scrum team
- Migration Scrum team
- Central cloud team
- App engagement
- Skills transition

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Cloud FinOps

Metric Driven Cost Optimization

Total Cost of Ownership

- Baseline variable IT costs
- Baseline fixed IT costs
- 5 Yr. on-prem projection
- Baseline KPI's
- Variable cloud costs
- 5 Yr. cloud costs

Cloud Budgeting

- CAPEX to OPEX planning
- Capital Cost Avoidance
- 6R use case cost analysis
- Target EOL assets
- Right-size planning
- License cost saving

Cost Management

- Budgets and alerting
- Right-size underused
- Shutdown underutilized
- Autoscaling
- Azure Hybrid Benefit
- Reserved Instances

Value vs Cost

- Speed and agility
- Reductions in downtime
- Operations to innovation
- Provisioning time
- Productive labor shift
- Scalability

Business Value

- Real time decisions
- Chargebacks/sharebacks
- Increased communication
- Simplify billing
- Daily spend visibility
- Unit economics

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Repeatable Program Delivery

Program Plan with Agile Delivery

Milesto	Task Mode	WBS	Task Name	Duratic	Start	Finish	Predeces
No		1	Cloud Transformation				
No		**2**	**Department 1**	**105 days**	**Wed 10/7/20**	**Tue 3/2/21**	
No		2.1	Strategy Assessment	5 days	Wed 10/7/20	Tue 10/13/20	
No		2.2	Foundation Assessment	20 days	Wed 10/14/20	Tue 11/10/20	3
No		2.3	Application Assessment	60 days	Wed 11/11/20	Tue 2/2/21	4
No		2.4	First Apps Assessed	15 days	Wed 11/11/20	Tue 12/1/20	4
No		**2.5**	**Migration Epic**	**40 days**	**Wed 11/11/20**	**Tue 1/5/21**	
No		2.5.1	Sprint 1	10 days	Wed 11/11/20	Tue 11/24/20	4
No		2.5.2	Sprint 2	10 days	Wed 11/25/20	Tue 12/8/20	8
No		2.5.3	Sprint 3	10 days	Wed 12/9/20	Tue 12/22/20	9
No		2.5.4	Sprint 4	10 days	Wed 12/23/20	Tue 1/5/21	10
No		**2.6**	**Innovation Epic**	**40 days**	**Wed 10/7/20**	**Tue 12/1/20**	
No		2.6.1	Sprint 1	10 days	Wed 10/7/20	Tue 10/20/20	
No		2.6.2	Sprint 2	10 days	Wed 10/21/20	Tue 11/3/20	13
No		2.6.3	Sprint 3	10 days	Wed 11/4/20	Tue 11/17/20	14
No		2.6.4	Sprint 4	10 days	Wed 11/18/20	Tue 12/1/20	15
No		2.7	Department 2 SOW	2 days	Mon 11/2/20	Tue 11/3/20	
No		**2.8**	**Department 2**	**85 days**	**Wed 11/4/20**	**Tue 3/2/21**	
No		2.8.1	Strategy Assessment	5 days	Wed 11/4/20	Tue 11/10/20	17
No		2.8.2	Foundation Assessment	20 days	Wed 11/11/20	Tue 12/8/20	19
No		2.8.3	Application Assessment	60 days	Wed 12/9/20	Tue 3/2/21	20
No		2.8.4	First Apps Assessed	15 days	Wed 12/9/20	Tue 12/29/20	20
No		**2.8.5**	**Migration Epic**	**40 days**	**Wed 12/30/20**	**Tue 2/23/21**	
No		2.8.5.1	Sprint 1	10 days	Wed 12/30/20	Tue 1/12/21	22
No		2.8.5.2	Sprint 2	10 days	Wed 1/13/21	Tue 1/26/21	24
No		2.8.5.3	Sprint 3	10 days	Wed 1/27/21	Tue 2/9/21	25
No		2.8.5.4	Sprint 4	10 days	Wed 2/10/21	Tue 2/23/21	26
No		**2.8.6**	**Innovation Epic**	**40 days**	**Wed 12/30/20**	**Tue 2/23/21**	
No		2.8.6.1	Sprint 1	10 days	Wed 12/30/20	Tue 1/12/21	22
No		2.8.6.2	Sprint 2	10 days	Wed 1/13/21	Tue 1/26/21	29
No		2.8.6.3	Sprint 3	10 days	Wed 1/27/21	Tue 2/9/21	30
No		2.8.6.4	Sprint 4	10 days	Wed 2/10/21	Tue 2/23/21	31