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FinOps Services & Solutions on Microsoft Azure

OVERVIEW

AGENDA

FINOPS DASHBOARD

A demonstration of our FinOps dashboard that we use internally and with clients to help manage and contain spend on multi-cloud environments

FINOPS SERVICES

- Governance
- FinOps Team
- Operational View

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Highly Skilled IT Executives

Offices Both On & Offshore

Established Methods

Experienced Innovative Team

cloudEQ is a professional services company providing tailored cloud-based solutions.

Our focus is on cloud execution tailored to meet your goals and work with you to evaluate your current cloud model to improve performance, increase security, deliver automation, reduce cost, and optimize your cloud environment.

BRINGING EQ TO TECHNOLOGY

We possess the Emotional Quotient necessary to forge comprehensive relationships with our Client's Leadership, Business, and Technology teams.

We demonstrate this through empathy and understanding of their business goals, market challenges, and dependence on people for success.

It's our ability to see the entire landscape of business challenges that enables cloudEQ to guide our clients to valuable outcomes.

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WE SPECIALIZE IN CLOUD SERVICES

PROGRAMS & PROJECTS

Cloud Migrations, Code Review Observability, Cloud Security, Data Lake, FinOps, DevSecOps, CI/CD, Cloud Readiness, IoT, Project/ Program Management, *and more*

DEVELOPMENT

Application Development, Data Platforms, Mobile Apps, PaaS Solutions, Integrations, Azure, AWS, GCP, Deploy Observability, FinOps, DevSecOps, *and more*

MANAGED SERVICES

Production Support, Cost Optimization, DevSecOps, Observability, Cloud Security, FinOps, IT Operations, DataOps, Application Support, *and more*

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FINOPS SOLUTION OFFERINGS

FINOPS ASSESSMENT

6-8 Week Engagement

Utilization and Performance

Savings Recommendation

Maturity Model

DASHBOARDS

IT and Business custom dashboards

Recommendations for Savings

Tracking of actions and results

Continuous monitoring

FINOPS SERVICES

On-going team support

Own KPI Tracking and Reporting

Extended COE team available

DevOps operating model

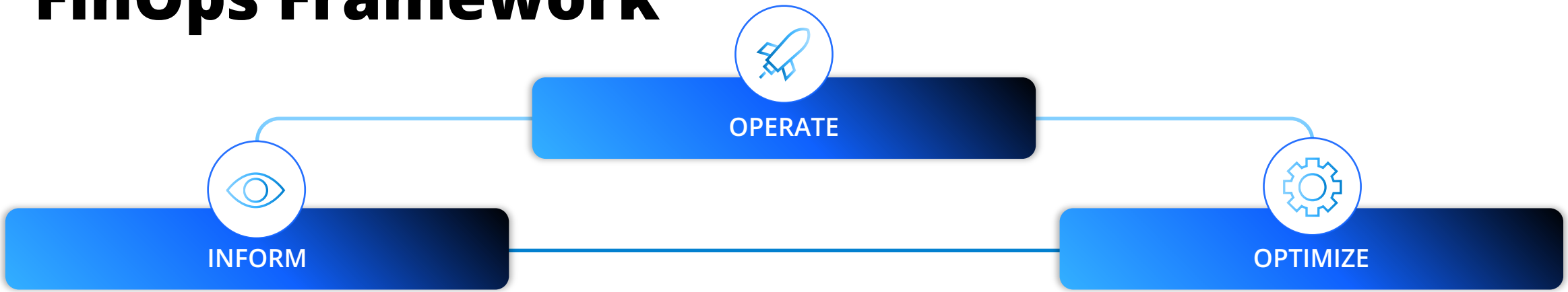
Governance Model

Microsoft Azure FINOPS Assessment

Microsoft Azure Cost Assessment

- Frameworks
- FinOps Maturity Model
- Findings
- Enablement
- Next Steps

FinOps Framework



Understand costs

- Tagging strategy
- Define budgets & forecasts
- Understand chargeback policy

Monitor cost

- Show back reporting
- Trends and analysis
- Budget monitoring

Usage optimization

- Right size
- Workload management
- Automation

Cost optimization

- Licensing
- Marketplace
- Reservations
- Hibernation
- Dynamic Scale

Enable real-time decision making

- Real-time cost analysis
- Real-time cost optimization reporting

Align plans to the business

- CCOE
- Communication
- Prioritization of efforts
- Regular stakeholder review

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FinOps Maturity Model

Area	Maturity Level	High Level Next Steps	Level 1	Level 2	Level 3
FinOps	0.0	Key Findings	Very little reporting and tooling	Capability is understood and followed within the department	Capability is understood and followed by all teams within the organization
			Measurements only provide insight into the benefits of mature the capability	Difficult edge cases are identified but the decision to not address them is adopted	Difficult edge cases are being addressed
			Basic KPI's set for the measurement of success	Automation and/or process cover cost of the capability requirements	Very high goals/KPI's set on the measurement of success
			Basic processes and policies are defined around the capability	Most difficult edge cases are identified and effort to resolve has been estimated	Automation is the preferred approach
			Capability is understood but not followed by all the major teams within the organization	Medium to high goals/KPI's set on the measurement of success	
			Plans to address "lob handing fruit"		

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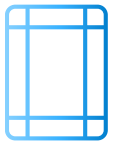
Scope of Cost Assessment

Utilization of

- Servers
- Storage
- Containers
- Disk

Performance

- Servers
- Storage
- Containers
- Disk



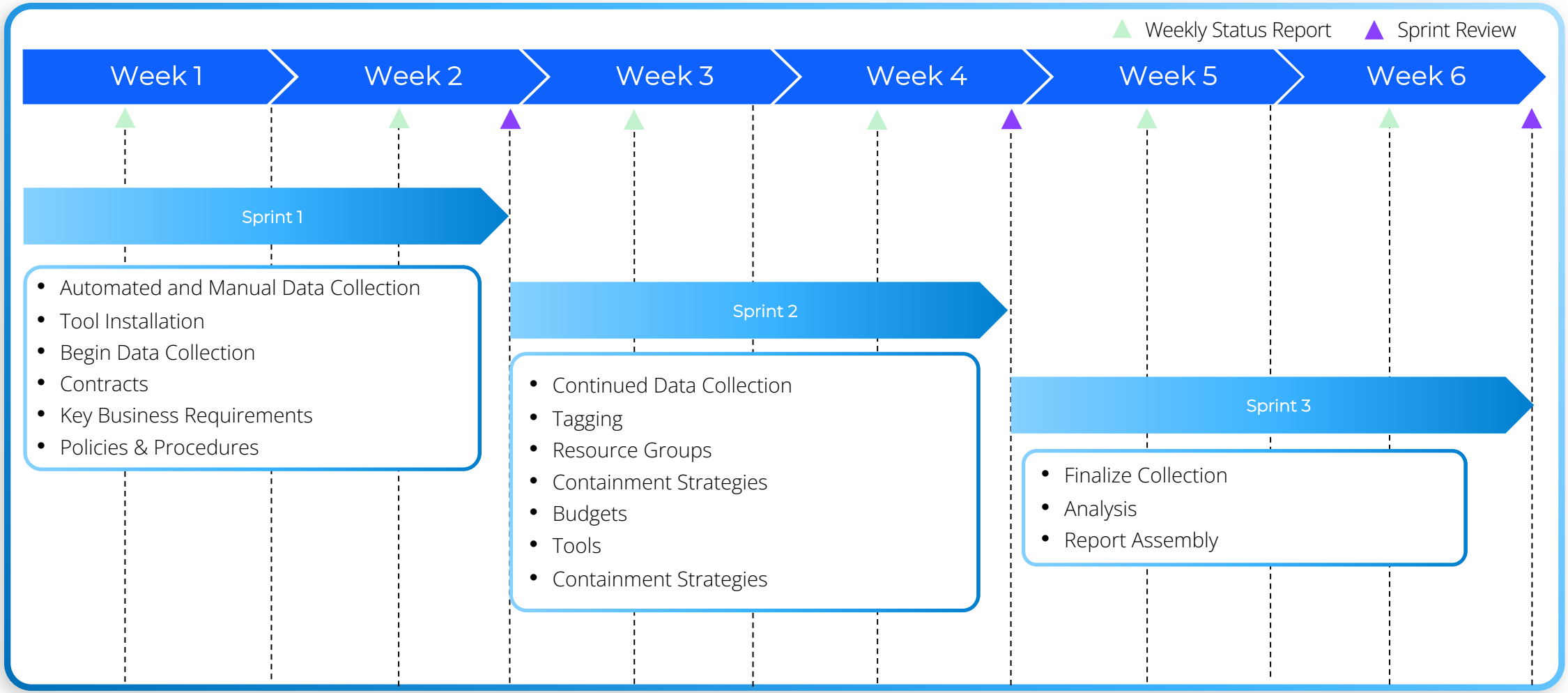
Administration

- Tagging
- Resource Groups
- Containment Strategies
- Budgets
- Tools

Review of Pricing

- Microsoft Azure Contracts

Timeline



Client Responsibilities

Identity and Access (IAM)

- Access to cloud environments with contributor access
- Access to virtual environments/management consoles

Access to the technical team, business team, and technical documents

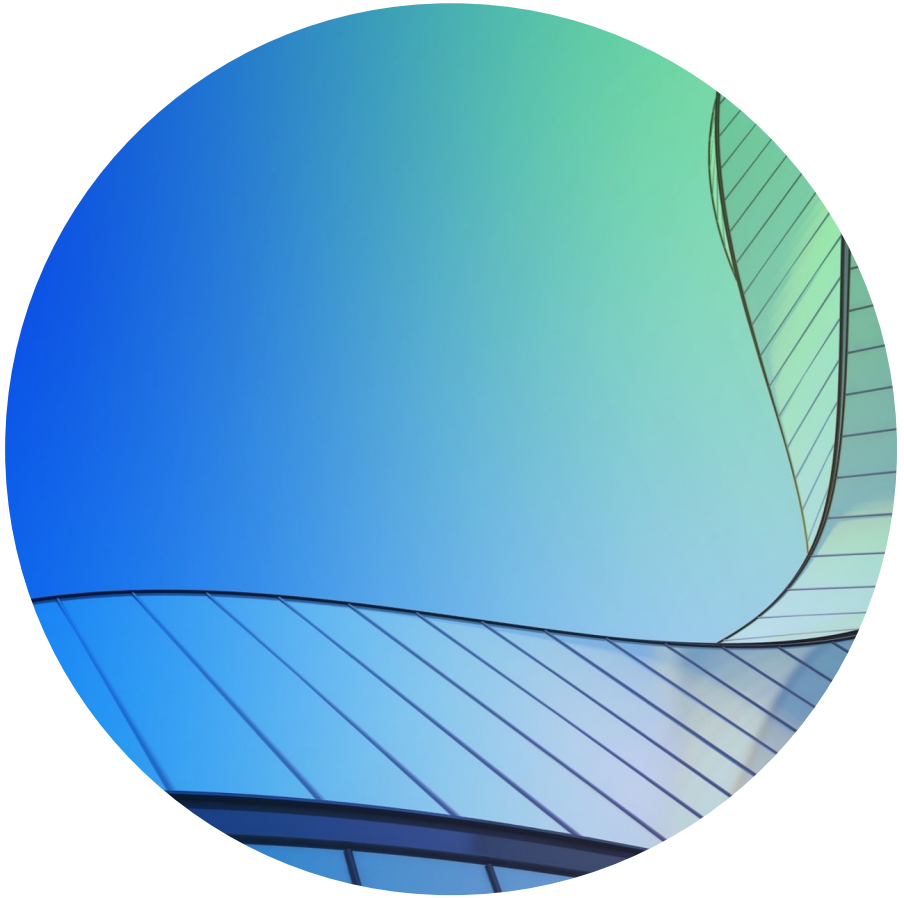
- Availability of staff for interviews and data collection
- Current upgrade plan
- Business calendar

Firewall access

- Ports opened for tools and data collection

Financials

- Current financial spend (cloud/software) for savings calculations
- Cloud provider contracts



FINOPS Dashboard

FinOps Custom Dashboard (Microsoft Azure)

Environment specific real-time information to drive cost containment

Customize cloudEQ's internal analysis tool for use by the IT and Business teams to monitor the current state

Comprehensive real-time monitoring capability for users to track cloud costs;
Finance, Operations, Engineering, and Stakeholders

Provides insights on expenses across various cloud services and cloud consumption

Cloud costs can be viewed with further drill down using various filters;
Tags, Resources, Services, Accounts, Locations, and Clusters

Provides cost savings/containment recommendations based on internal policies;
i.e., idle resource retention

Ongoing tracking of spend, actions taken and the subsequent effect on the budget

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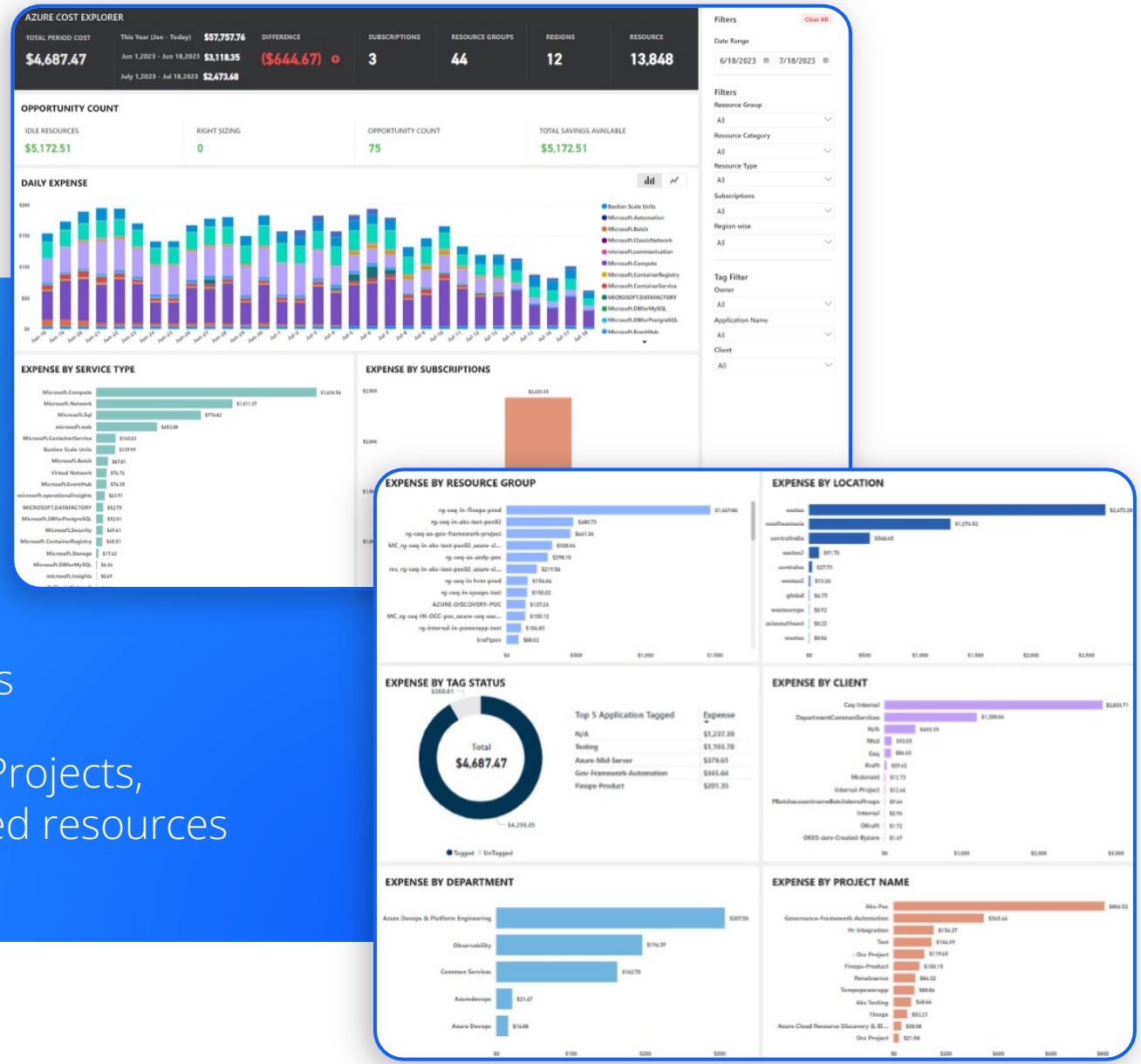
FinOps Dashboard

Cost Explorer View

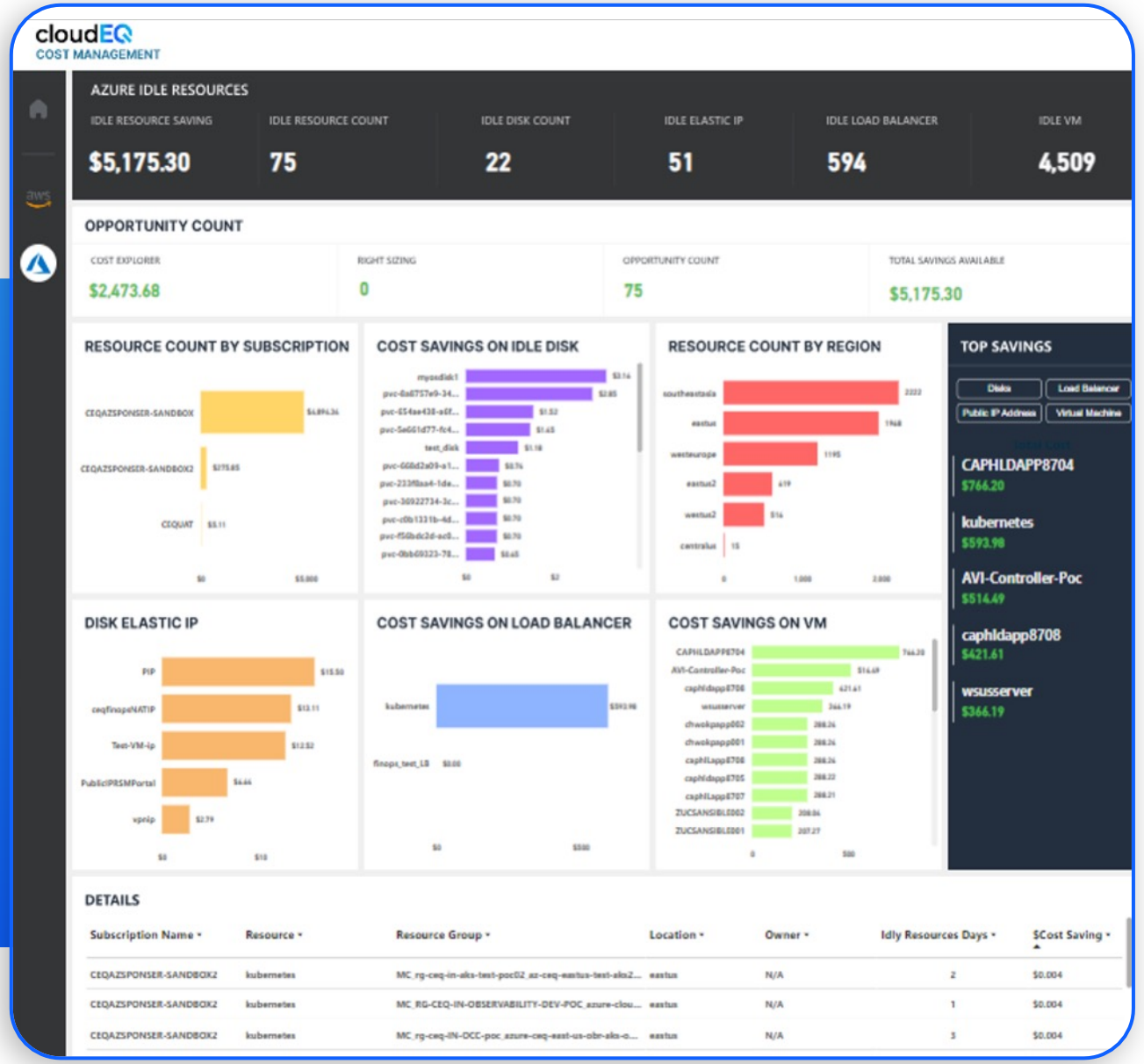
- Granular level visibility into Azure cloud spend across various verticals
- Multiple filters to enhance search capability to highlight custom results
- One click view of accumulated daily costs
- Segregated view of costs consumed by Projects, Locations, Inter-departments, and Tagged resources



FinOps Dashboard

Idle Resource View

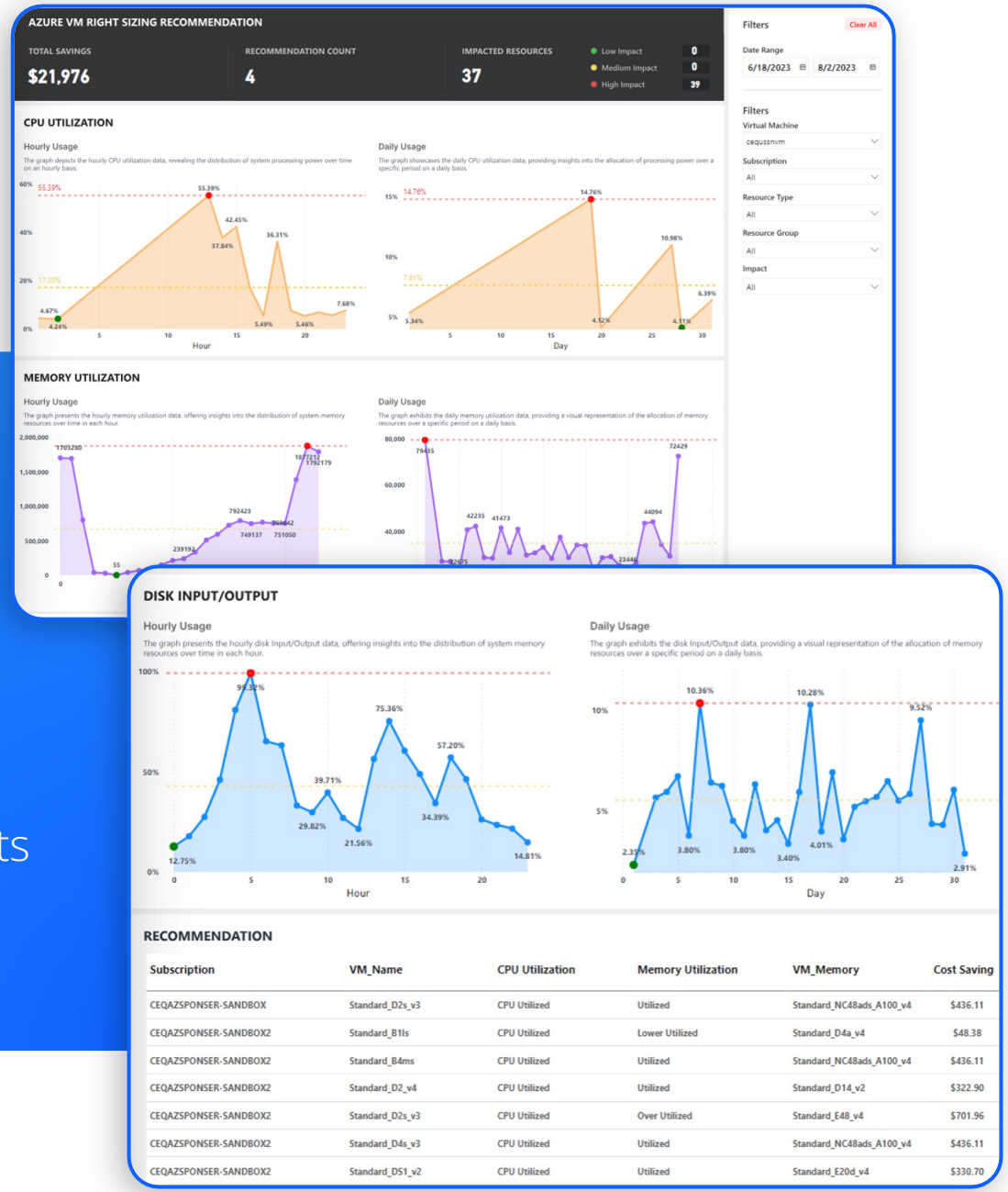
- Real-time information on Azure idle resources
- Cost savings recommendations on idle disks, load balancers, and public/elastic IP addresses
- VM/EC2 instances
- Detailed view of resources to review



FinOps Dashboard

Recommendations View

- Captures CPU, Memory and Disk I/O data
- Dedicated filters to check the running cost of a VM
- Recommendations for VM right-sizing & subsequent Projected Cost Savings
- Impact categorization(High/Medium/Low) to save costs at a single glance.



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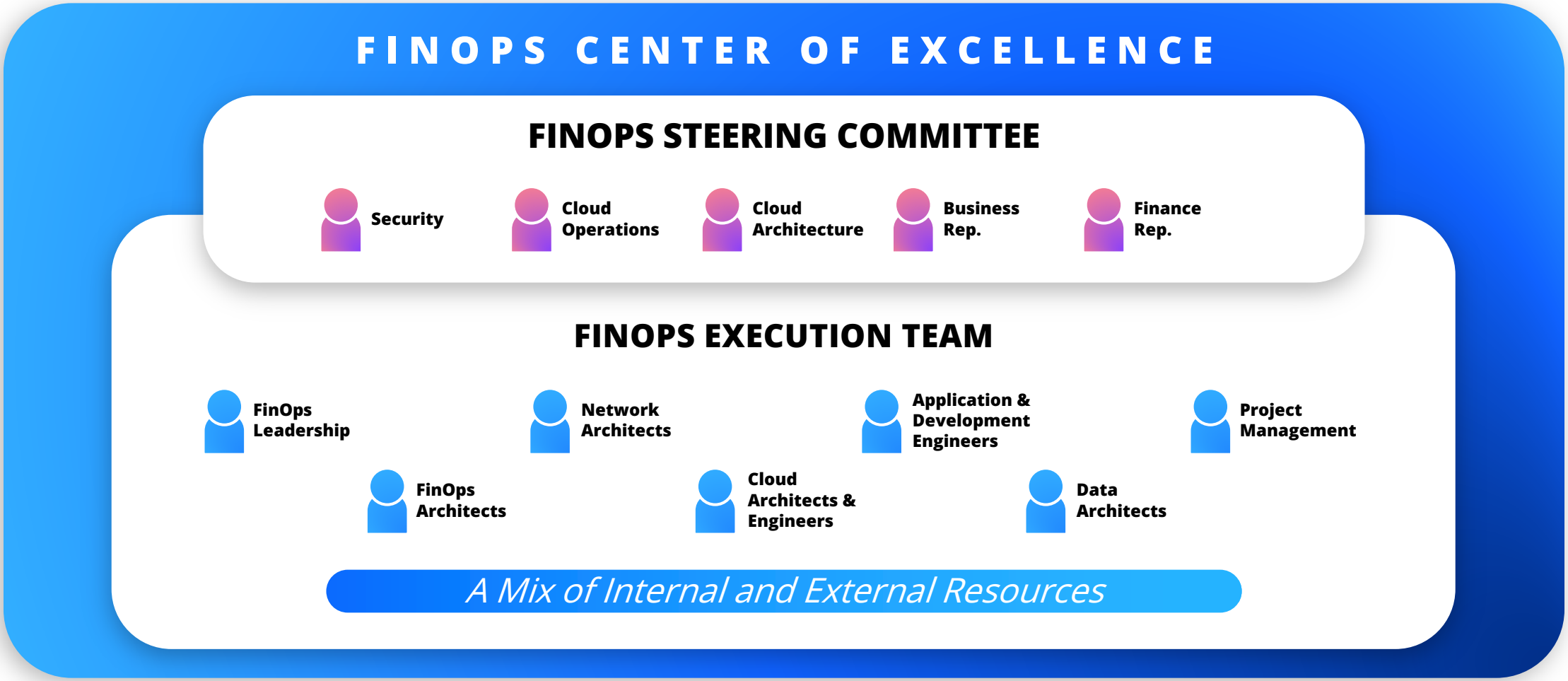
FINOPS SERVICES on Microsoft Azure.

ORGANIZATIONAL ALIGNMENT



Value of FinOps team

FINOPS CoE
ROLES

FinOps Service

FinOps leadership and on-demand technical team to drive execution

FINOPS TEAM

Cloud Operations

Cloud Architecture

Business Rep.

Finance Rep.

STEERING COMMITTEE

FINOPS TEAM

The FinOps team is composed of skilled IT professionals providing analysis, oversight and best practices around FinOps and cloud best practices. The team includes cloud, data, application and network architects & engineers to address issues and review designs. The FinOps leader would engage the extended team on as needed basis and help with migrations, implementations and recommendations.

RESPONSIBILITIES

- Drive and implement the recommendations
- Define commitment goals for discounting
- Define good FinOps KPIs and track them
- Surface spending habits and anomalies
- Apply and update governance to reflect best practices in cloud spend
- Meet regularly to address FinOps processes
- Gather and analyze FinOps recommendations and choose to implement
- Architectural reviews and recommendations

BENEFITS

- Access to network and cloud architects to provide checks and balances
- Dashboard creation management and support.
- Perspectives from a neutral 3rd party.
- Management of FinOps recommendation engines
- Fast tracking standards and best practices
- Automation opportunities for Devops
- Deeper FinOps recommendations based on the entire services analysis.
- Custom reporting
- Support during budget season
- Updating and support of the LCC tool
- KPI development, tracking and reporting
- Services scale and evolve as needed

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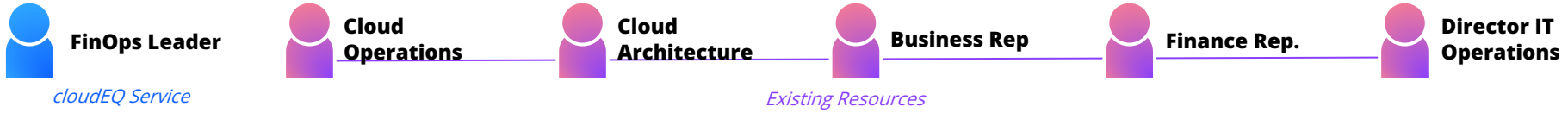
FINOPS MEETING AGENDA

SAMPLE

FINOPS CoE
ATTENDEES



MONTHLY FINOPS MEETINGS

1. Previous month spend review
2. Where the current spend stands
3. Cost Optimization recommendations tasks status
4. Anomalous spending
5. KPI Reviews
6. Deployment changes
7. Budget updates

QUARTERLY FINOPS MEETINGS

1. Review outstanding changes to understand why they did not proceed
2. If these changes are not valid or desirable update the change ticket and make note as an exception.
3. Budget review from last month focusing on changes
4. Review new recommendations from FinOps
5. Determine new changes and enter change tickets assign to cloud operations
6. Update Governance site to make note of exceptions or development of new standards and policies
7. Review old changes and financial impact
8. Validate actual previous month bill vs forecast

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cloudEQ FinOps Proof Points

40%

Savings planned on compute

46%

VM Savings

$2.5M

Reduction in Run Rate

Next Steps

1. **Review your FinOps strategy and goals**
2. **Identify any opportunities that cloudEQ can support the project**
3. **Propose services for consideration**

THANK YOU

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APPENDIX

FinOps Responsibilities

	FinOps	App	IT	Finance	Sourcing	Business
Establishing cloud cost control guardrails	A	I	C	C		
Cloud cost tagging standards & compliance	A	R	C	R	C	
Cloud cost allocations keys	A	R	C	R		
Synchronizing actual & planned cloud spend with budgets and plans	A	I	C		R	C
Help application teams identify work-load level cost efficiency targets	A	R	I			C
Workload level cost efficiency realization	C	A	I			C
Optimize enterprise level costs through right sizing; resource decomms	A	R	C	I		
Lead buying strategy to capture savings via reserved instances/spot pricing	A	C	C		R	C
IT planning, forecasting & Budgeting	C	R	A	R		C
Bottom-up planning and forecasting	C	R	A	R		C
Business Unit Economics	C	R	A	R		A

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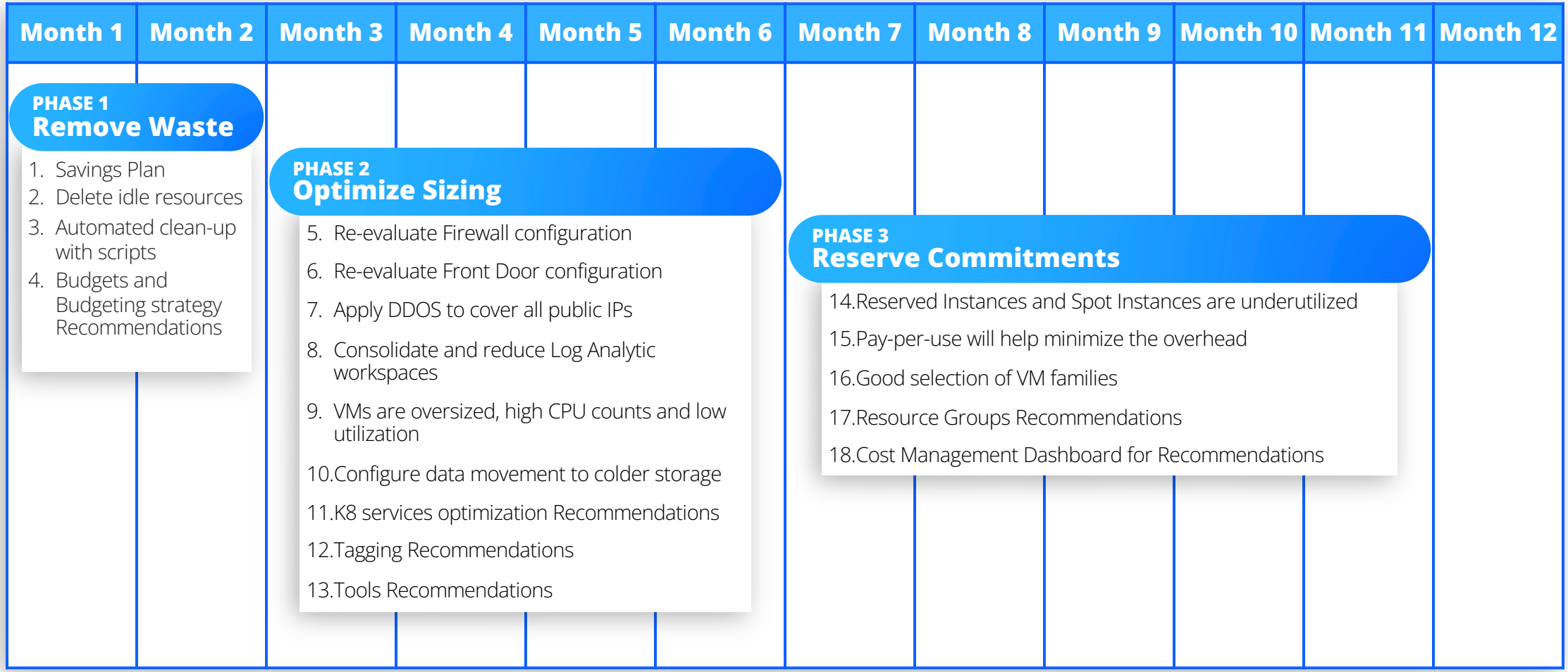
Sample FinOps First Year Roadmap



FINAL PROJECT CLOSEOUT

The FinOps Assessment has been successfully completed and full scope delivered.

Assessment Outcomes	Completed ?
Visibility to make the right cloud spending decisions	☑
Breakdown of cloud costs by business area / application platform	☑
Control over cloud costs while maintaining or increasing application performance	☑
Methodology by which to improve organizational standards and optimize costs over time	☑

Deliverables	Completed?
FinOps Analysis Report	☑
Cost Optimization Recommendations	☑
Governance & Best Practices Guide	☑
Ongoing Maintenance & Operations Guidelines	☑
Proposed Remediation Plan	☑
Cost Forecasting Tool	☑

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SAMPLE RECCOMENDATION SET

18 Areas of Recommendations *Laid out by the Assessment Report*

1. Reserved Instances and Spot Instances are underutilized
2. Re-evaluate Firewall configuration
3. Re-evaluate Front Door configuration
4. Delete unutilized PIPs and NICs
5. Delete Idle resources
6. Log Analytic workspaces can be consolidated and reduced
7. DDOS should be applied to cover all public IPs
8. VMs are oversized, high CPU counts and low utilization
9. Configure data movement to colder storage
10. Automated clean up with scripts
11. Pay-per-use will help minimize the overhead
12. Good selection of VM families
13. K8 services optimization Recommendations
14. Resource Group Recommendations
15. Tagging Recommendations
16. Budgets and Budgeting strategy Recommendations
17. Cost Management Dashboard for GTIL Recommendation
18. Tools Recommendations

cloudEQ Team

EXPERIENCED TEAM

- 130 + combined years of executive leadership
- 600 + combined staff years of MSP experience
- Over 300+ people worldwide
- 80+ New Relic trained resources
- Ongoing staff education and learning of new skills
- Global presence

CERTIFIED EXPERTS

Expert Certifications

- Azure – 918 Certifications - CSP Gold 4 Designations
- AWS – 85 Certifications - CPPO & Advanced Partner
- Google – 14 Certifications - Partner
- New Relic – 85 Certifications – Partner of the Year
- ServiceNow – 48 Certifications - Registered
- Virtana – 15 Certifications - MSP
- Beyond Trust – 14 Certifications – MSP
- Big Panda – 90 Certifications – Focus Partner

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How Do We Promote Cost Savings

We start by asking/researching below questions:

- **Why** have costs gone up/down and what are main the cost drivers.
- **What** does the current forecast look like and whether the forecast is in accordance with pre-defined business metrics.
- Do we know **why** and **what** are we spending so much on and does it add any value to our Digital Strategy.
- **How** much control do we have over our spend and at **which** rate at which we are paying.

Once we access information/visibility into Spend, we work on organizing Account structures through Cost Allocation/Tagging, Understanding Trend Analysis(Usage Forecasting), Setting guardrails through Budgeting at every level, Triggering Notifications and Alerts for Cost anomalies and suggesting RI/SI/SP.