ADASTRA

FinOps – Taming the Cloud

Adastra 2 - 2 – 2 Offer: FinOps in Azure

A FinOps PARTNER YOU CAN TRUST

FinOps ensures continuous calibration of your cloud's health & usage telemetry through a disciplined approach. It is a cultural transformation which operates on the tenets of cross-functional collaboration between Engineering, Operations, Application, Product, Infrastructure, Procurement and Finance teams thereby enabling data-driven decisions.

FinOps tames cloud elasticity by empowering teams to wield greater financial control and foresight.

FinOps is your organization's key to unblock cloud migration opportunities and get granular visibility of your usage.

Measurement & Accountability

Cost Optimization

Planning & Forecasting

Cloud Financial Operations

Adastra's **four golden pillars (See/Save/Plan/Run)** enable cost transparency, accountability & actionable insights**.** Adastra will perform discovery and define a roadmap to transition your organization to greater data driven maturity:

- Discovery of your strategic objectives & current state
- Discovery of key systems, applications, Azure services, and Azure cloud tenants
- Perform gap analysis, identify waste, capture findings and formalize future state goals
- Provide prioritized target state roadmap
- Provide FinOps charter to set up Centralized model/Champion model
- Provide Stakeholder engagement model and FinOps RACI
- Perform skills assessment and plan to enable the FinOps Target Operating Model (TOM)
- Early recommendations to stop the short-term bleeding

Step 1	Length: 2 hours Value: $500 CAD Introduction to FinOps & why it is a burning platform today Successful Use cases	
Step 2	a) Maturity Assessment & one Quick Win Length: 2 Weeks Value: 20K CAD FinOps Maturity Questionnaire to classify maturity stage (Crawl/Walk/Run), Maturity Results discussion, Review optimization opportunities & propose one quick win	b) Discovery, customized framework, findings & Target state roadmap Length: 2 months Value: 80K CAD Azure Environment Analysis, Discovery of Data Sources, Current state report with early recommendations, Stakeholder engagement model, Target state roadmap, Executive Presentation

Organizations are struggling to control growing Cloud costs

The average organization
uses 1,935 cloud services.

– 2023 McAfee Cloud Analytics Report

The industry average of cloud wastage is 32%
of the total
cloud spending.

– 2023 Flexera State of the Cloud Report

For some organizations, combined average
monthly spend reduced by 60% post optimizing.

– 2021 White Paper Hobson, Flexera

Over 50% of the enterprises say that “cloud
cost management”
is their biggest problem.

– 2023 Flexera State of the Cloud Report

On average, an enterprise overspends its cloud
budget by 30%.

– 2022 McKinsey Cloud Economics Report

Cloud FinOps - a specialized skill set

FinOps is a cultural practice.

It’s the way for teams to manage their cloud costs, where everyone takes ownership of their cloud usage supported by a central best-practices group.
Cross-functional teams in Engineering, Finance, Product, etc. work together to enable faster product delivery, while at the same time gaining more financial control and predictability.

Enables organizations to get the most value out of every dollar spent on the Cloud…

…by enabling accountability & visibility among Engineering, Finance and Business teams…

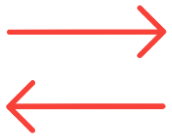
…to collaborate on data-driven spending decisions

….It is NOT shorthand for ‘Financial Operations’

FinOps typically reduces cloud spending by 20-30%

Before….	After….
Obscure Cloud costs and allocation	Clear and Transparent cost planning and allocation
Cloud wastage	Ongoing cloud calibration to control cost and usage
Deterioration after build	Capability for continuous improvement and control
Lack of ownership	Culture of accountability
Guesswork	Data driven insights for action

The benefit of Cloud flexibility requires continuous calibration



Decentralized

The Application team is siloed from Finance & Procurement teams to align on commit & spending decisions

Variable

Cloud spend tends to be variable rather than fixed

Scalable

Instant access to resources enables innovation but often results in overprovisioning

Prone to neglect

Resources are provisioned and then forgotten

Adastra starts with FinOps Maturity Assessment

- The Crawl/Walk/Run approach is used to assess an organization's maturity level concerning Cloud financial management practices
- It is a progression model , and organizations typically move through these phases gradually as they gain experience and knowledge in FinOps practices
- Each phase represents an opportunity for growth and improvement in managing cloud costs effectively

Key Characteristics within each phase

Crawl

- Limited Awareness
- Reactive Approach
- Limited Governance
- Minimal Optimization

Walk

- Increased Visibility
- Cost Tracking & Allocation exists
- Basic Cost Optimization
- Emerging Governance

Run

- Proactive Cost Management
- Automated Cost Controls
- Cost-conscious decision-making
- Mature Governance

People & Process are the foundation of FinOps Framework

Maturity

Crawl ▶ Walk ▶ Run

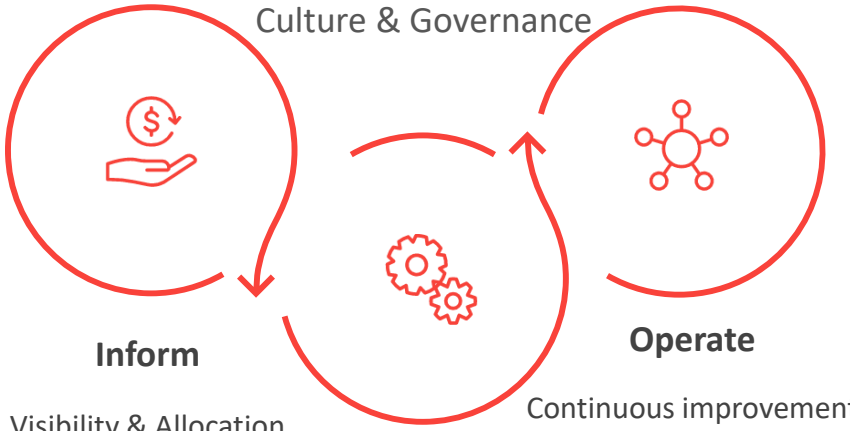
Principles

- Teams need to collaborate
- Everyone owns their cloud spend
- Centralized team that drives FinOps
- Timely & Accessible reporting
- Decisions are driven by business value
- Take advantage of the variable cloud cost model

Personas

- FinOps Practitioner
- Executive
- Business/ Product Owner
- Finance/ Procurement
- Applications/ Operations/Engineering

Phases



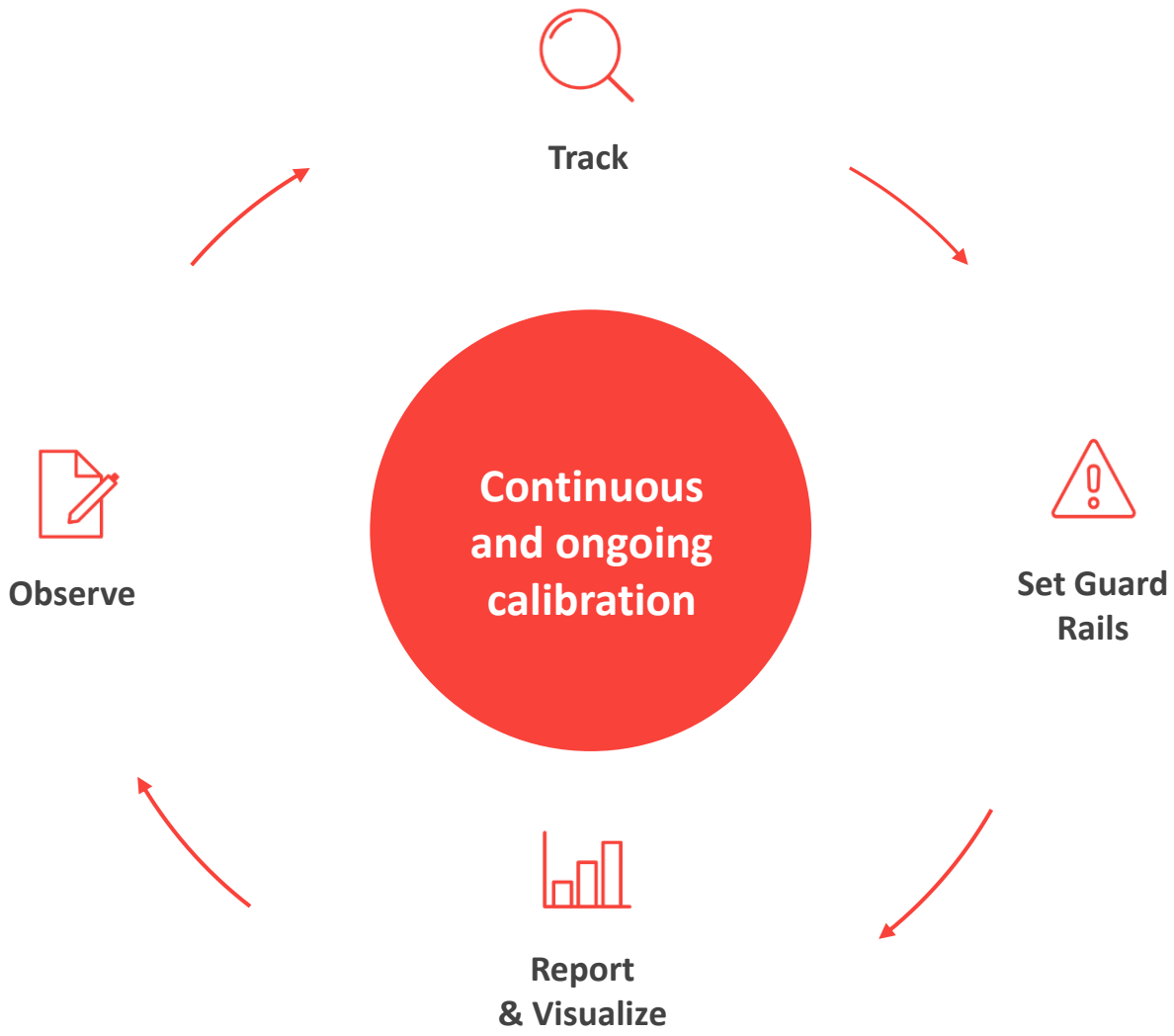
Domains

- Understanding cloud usage & costs
- Performance tracking & Benchmarking
- Real time decision making
- Cloud cost optimization
- Cloud usage optimization
- Organizational Alignment

FinOps is a discipline and cultural mindset

It is the process of observing, evaluating & managing the health, performance and availability of cloud-based applications, architecture & services

It uses automated/manual techniques & tools to determine if the cloud infrastructure/environment is performing as expected in real-time and identify issues affecting service availability



Bond BL Case Study

Executive Summary:

- Adastra worked with Bond BL Client to stop overspend of 300k
- Assessed their maturity level in FinOps Adoption
- Adastra provided tagging scripts to “jumpstart” FinOps implementation. Designed a chargeback model with transparent allocation methodology by Cost Centre (usage based).
- Enabled budgeting & forecasting which will reduce cost variance from over 25% to 12%

Background:

- Our client provides loyalty platform services and operates in a landscape with seasonal and volume spikes during certain times of the year. Cloud budget and forecasting was a challenge. Allocation model was high-level and unexplainable, causing pushback from clients

Objectives:

- Gain trust from Clients on integrity of Cloud expenses

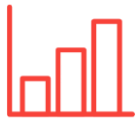
Methodology:

- Assessment of current state budget and forecasting. Consider volatile vs. non-volatile cloud services
- Stakeholder interviews to understand gaps in cost allocation for shared services and to understand organizational environment

Deliverables:

1) Developed a plug and play forecasting template tailored for Clients business (i.e. seasonal spikes, historical usage, business growth etc.)
2) Target state chargeback model based on relevant cost categories
3) RACI matrix of various stakeholders involved in the cost optimization, monitoring & allocation process
4) Presented a playbook for more offerings

FinOps identifies levers to activate for optimization & monitoring



Reviewing right-sizing reports on monthly basis

Incorporating native tool recommendations

Identify and Delete and/or downsizing underused resources

Reducing on-demand purchase via proposed RIs

Cleaning up storage & non-prod environments after use through regular checks

Monitoring threshold crossovers, budget & anomaly alert notifications etc. Reporting spend through visualizations

Snapshot of Adastra's Customized FinOps Playbook Appendix 5

Playbook

- FinOps Charter, Framework & engagement model
- FinOps Roadmap & FinOps Personas
- How to establish a FinOps Champion model
- How to enforce policies at enterprise level to successfully establish FinOps best practices
- How to operationalize the Azure well-architected framework
- Top ten cost optimization techniques that bring maximum savings
- Cost optimization checklist for technical resources in each phase of the SDLC
- Current state Maturity Assessment with plan on what progress looks like in advanced maturity phases

- Operationalization plans for each of the 8 FinOps Domains
- Workshop: How to realize the Business value through a FinOps model
- Workshop: In depth session on cloud cost optimization
- How to perform cost estimation on new/existing workloads
- Building customized cost dashboards per service per department for visualizations
- Knowledge documents on Azure monitor, Azure Cosmo DB profiler & query explorer, SQL server management studio
- How to make sense of utilization reports from Azure to detect underutilization
- Budgeting & Forecasting accurately & establishing fair chargeback models

& much more.....

Typical Adastra FinOps framework development is 12-15 weeks engagement

Discovery Phase:
Current State Analysis, maturity assessment, Gap Analysis

4-6 weeks

FinOps Framework & Plan:
Target state & Roadmap, RACI Model, Optimization techniques, Playbook

8-9 weeks

Implementation

Steps to Jumpstart

Cultural enablement & monitoring

Long term

Why care about Optimizations? Appendix 1

Helps **attain ROI faster** by eliminating wasteful spending from under-use, lack of visibility & governance

Every dollar saved can be **reinvested** appropriately

Maximizes business value through data-driven insights

Helps **identify & minimize cost overruns** which can otherwise eat into your margins

Helps **resolve architectural misconfigurations** that may affect client service

Embed FinOps as a culture in the SDLC fabric Appendix 2

- Do Azure Cost Estimation
- Use efficient resource provisioning
- Optimize data transfer between regions and across zones
- Consider the required capacity, availability & performance
- Assess future scalability needs
- Limit the types of VMs used

- Consider using Containers
- Use VM Scale Sets to prepare for auto-scaling
- Choose the right storage tier, data store
- Use Managed Services
- Use Spot VMs for low priority workloads
- Consider component co-locality for latency-sensitive apps

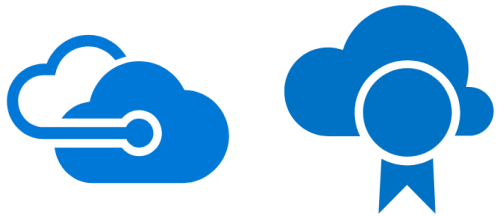
- Turn down no-prod resources after hours
- Review under-utilized resources
- Resize VMs
- Continuously act on Azure Advisor cost reviews
- Use Dynamic provisioning when available to automate deployment

- Review under-utilized resources
- Act on Azure Advisor guidance
- Clean up Test environment after use
- Optimize data transfer between regions and across zones
- Do performance testing to establish baseline

- Use RIs for long running workloads
- Review under-utilized resources
- Resize VMs
- Clean up Dev environment after use
- Optimize data transfer between regions and across zones

- Monitor cost using native tools
- Act on native tool advisor guidance
- Review under-utilized resources
- Resize VMs

Microsoft Azure tools provide reporting Appendix 3



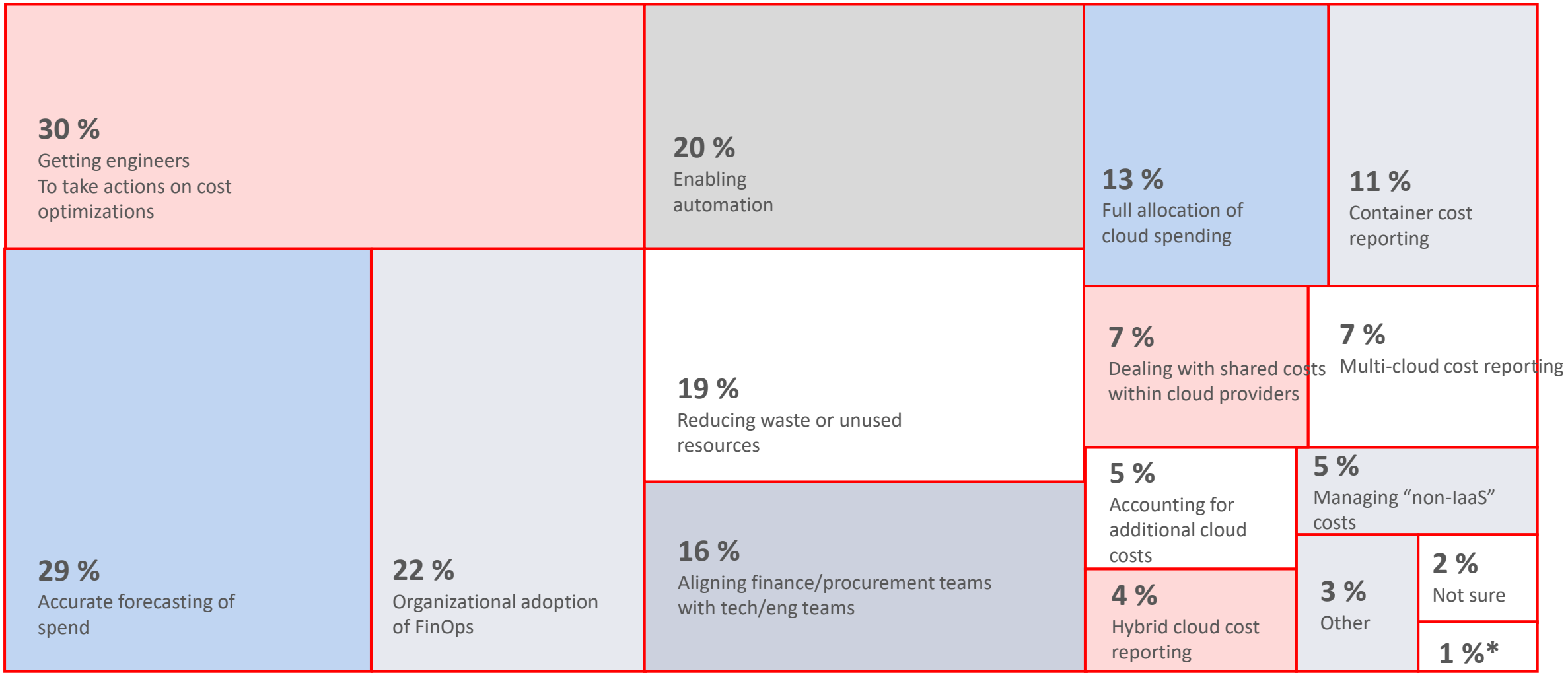
MS Azure Advisor analyzes your configurations and usage telemetry and offers personalized, actionable recommendations to help you optimize your Azure resources
for Reliability, Security, Operational Excellence, Performance & Cost

Microsoft Power BI

Data visualization software

Power BI is a unified, scalable platform for self-service and enterprise business intelligence (BI). Connect to and visualize any data, and seamlessly infuse the visuals into the apps you use every day

Top Challenges faced by other cloud-users – Appendix 6



*Multi-currency reporting