Operationalizing FinOps and Automation
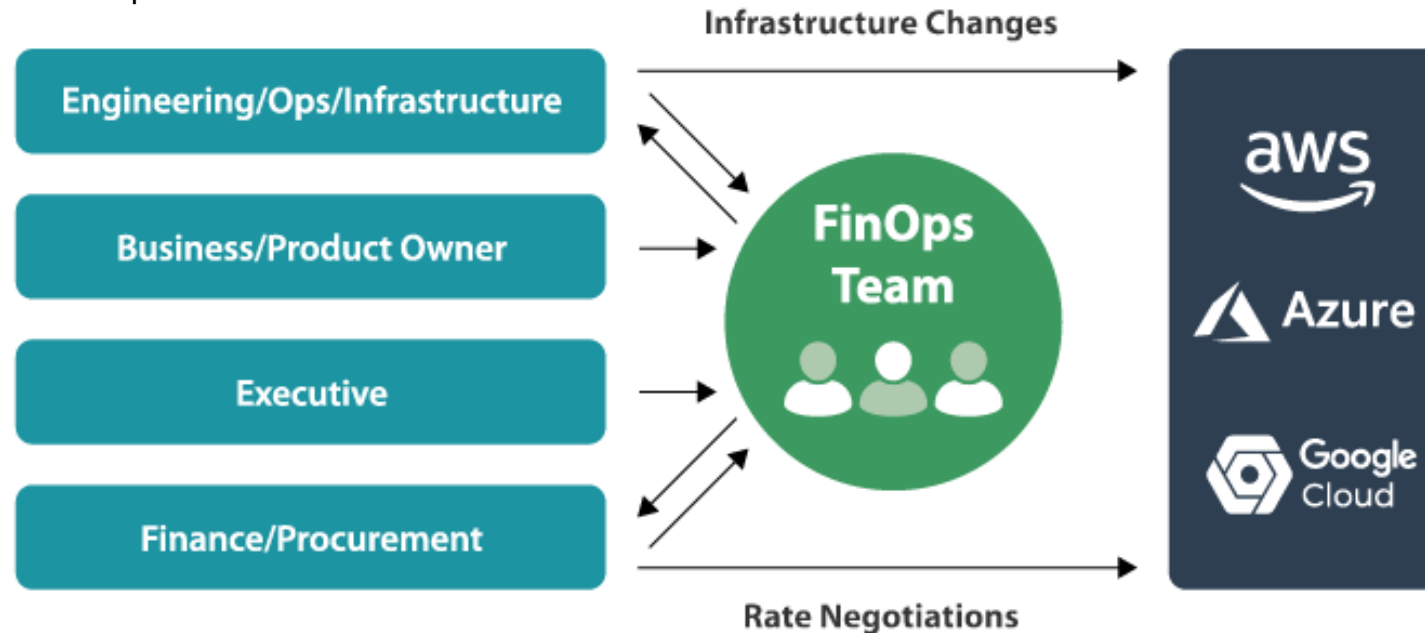
—

with IBM Turbonomic

IBM

What is FinOps?

FinOps is an *evolving* cloud financial management discipline that aims to **maximize business value** in hybrid and multicloud environments.

FinOps = Finance + (Dev)Ops, emphasizing that collaboration between business and operations teams is required.
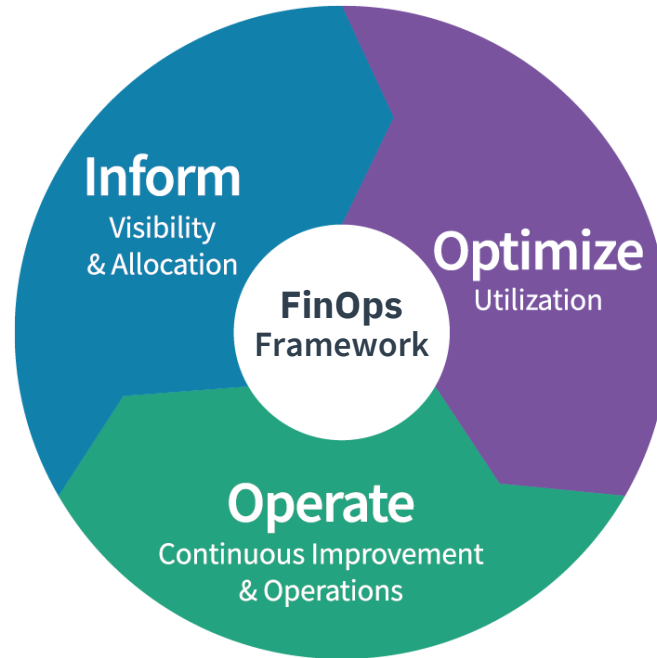
FinOps Team Structure

FinOps Framework by FinOps Foundation

FinOps: Bridging the gap between Finance, Engineering & Operations

IT Finance

Needs to know exactly what they are paying for, and who within their organization is incurring those costs.

Under pressure to limit cloud spend to only what is necessary.

Inform
Visibility & Allocation

Optimize
Utilization

FinOps Framework

Operate
Continuous Improvement & Operations

Engineering & Ops

Needs to continuously build, innovate and make sure applications meet all business objectives.

Under pressure to limit cloud spend to only what is necessary.

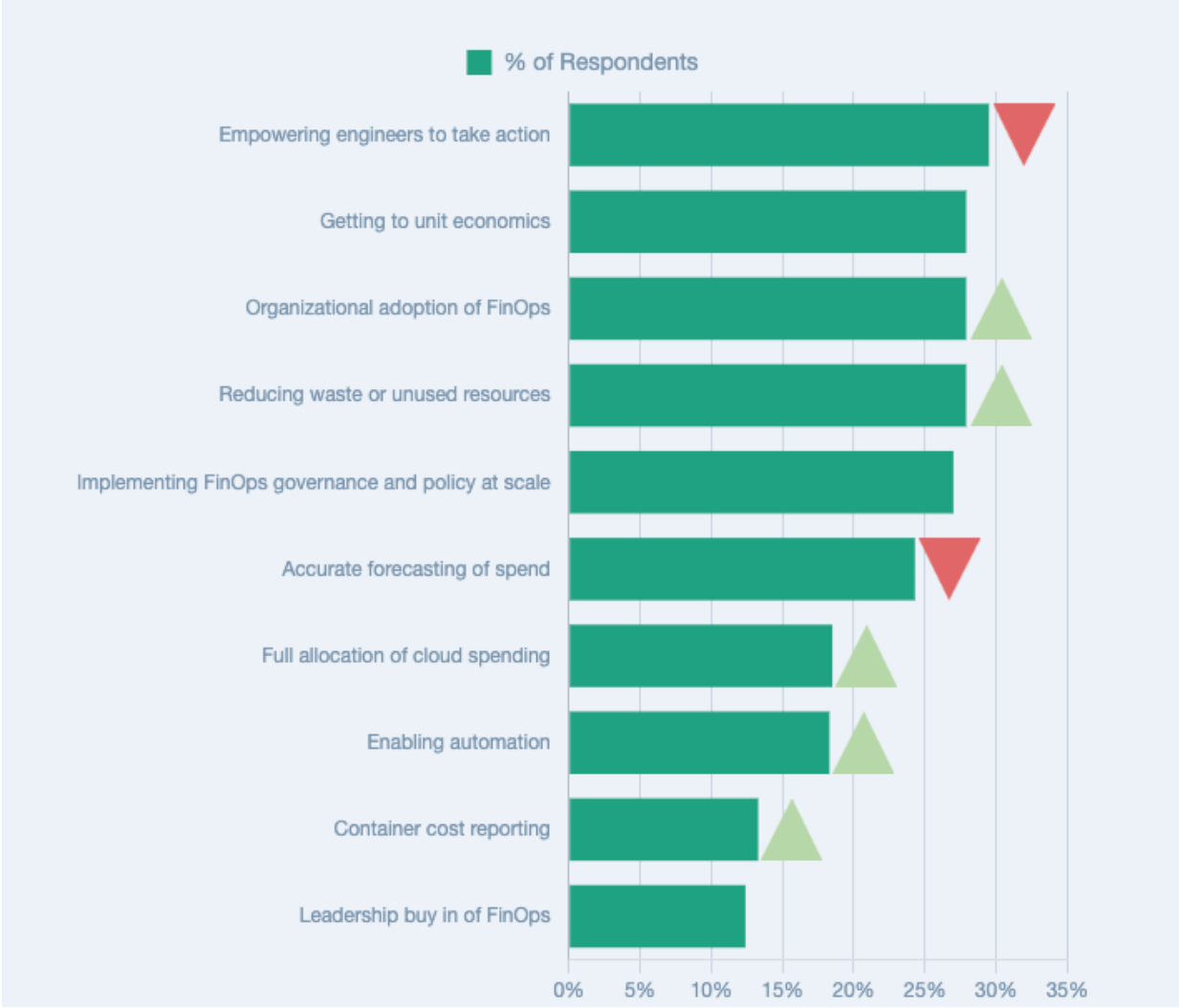| Understanding Cloud Usage and Cost | Cost Allocation Chargeback / Showback | Budget Management & Forceasting | Performance Tracking & Benchmarking | Cloud Rate Optimization | Cloud Usage Optimization |

FinOps Framework by FinOps Foundation

What challenges does FinOps aim to solve?

IBM POV on ultimate problem:

Clients are overspending in the cloud to avoid performance risks. This wasted spend has financial and environmental costs—and doesn't solve for continuous performance.

Key FinOps Challenges

The State of FinOps 2023 – FinOps.org

How Turbonomic optimizes public cloud to meet FinOps goals

Compute optimization

Automatically determines the correct instance type for cloud application workloads. The only solution that simultaneously considers IOPs and discounts.

Storage optimization

Determine when you need to scale between cloud tiers, size up/down volumes, delete unattached volumes and modify capacity to perform at the lowest cost

PaaS optimization

Maximize the business value of PaaS through dynamic scaling of Azure App Service plans, Azure SQL and AWS RDS database resources. Help ensure applications get exactly the resources they need while eliminating wasted database capacity and empty ASPs.
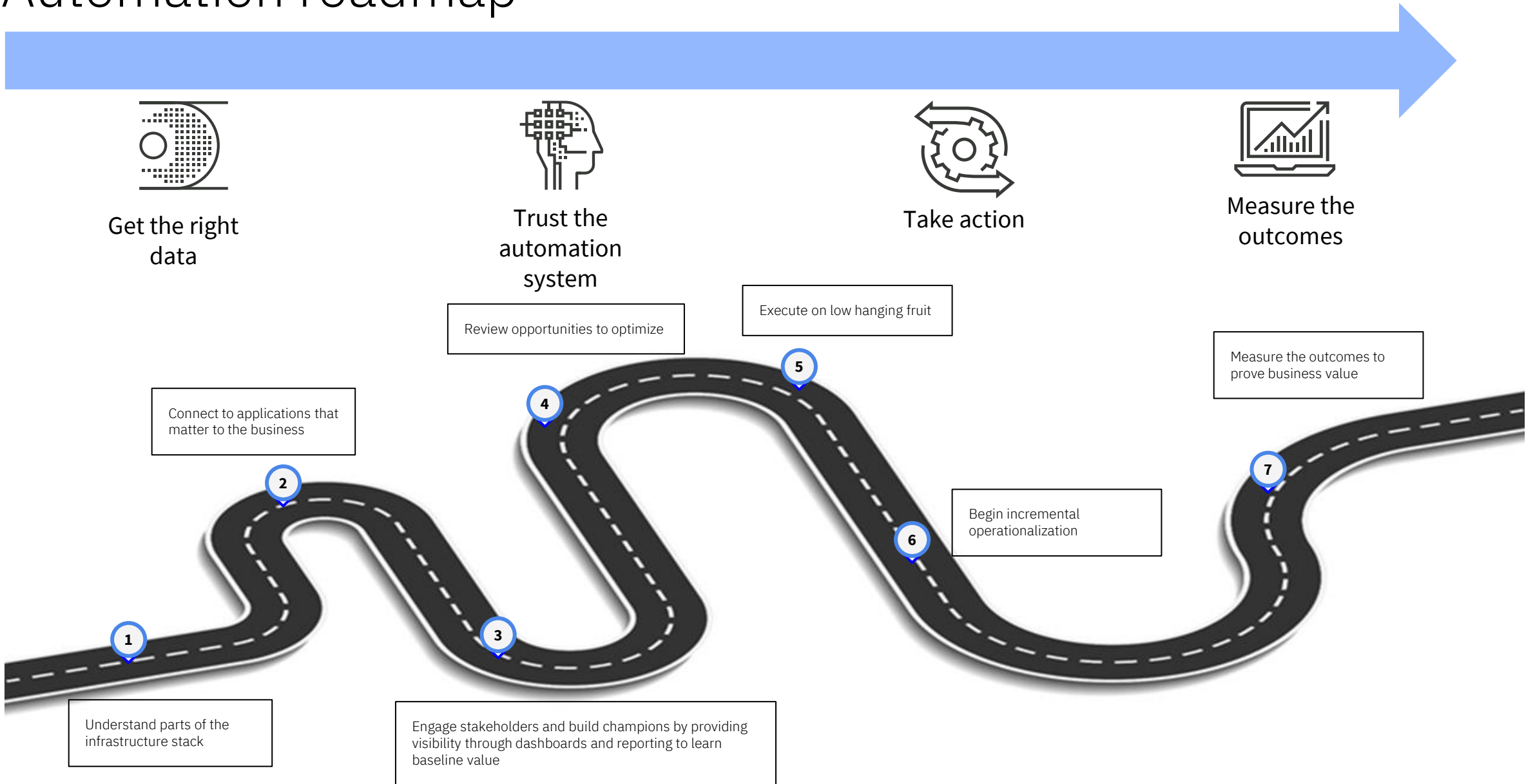
RIs and discounts

Provides specific, automatable compute scaling actions based on utilization, so you can fullt use existing RI inventory and maximize reservation-to-VM coverage. Turbonomic automatically ingests and displays negotiated rates

Cloud parking

Self-service the state of a VM by turning it on or off. Can also dynamically schedule times for state enforcement, ensuring VMs are only on when needed.

Automation roadmap

Get the right data

Trust the automation system

Take action

Measure the outcomes

Review opportunities to optimize

Execute on low hanging fruit

Measure the outcomes to prove business value

Connect to applications that matter to the business

Begin incremental operationalization

Understand parts of the infrastructure stack

Engage stakeholders and build champions by providing visibility through dashboards and reporting to learn baseline value

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Accelerate FinOps with you can trust

Trustworthy decisions

App-first, performance aware analysis enables actions can be safely automated.

Execute with ease

Safely automate and integrate with any organizational workflow. Deliver tangible results immediately and continuously.

Visible business impact

Build trust with application developers by accurately demonstrating the impact of dynamic resourcing on the performance of mission-critical applications.

Demo

"[IBM] Turbonomic not only provided visibility, but also prevented stability issues as we automated actions. We dramatically reduced the number of performance issues, plus reduced our Azure spend and complexity."

— Enterprise software **company for hospitality industry**

33%

Reduction in cloud spend due to dynamic scaling and rightsizing.

3.1 M

Present value public cloud consumption savings in USD.

471%

Return on investment in less than six months.

Forrester: Total Economic Impact of IBM Turbonomic