Fine-tuning FinOps

The next step

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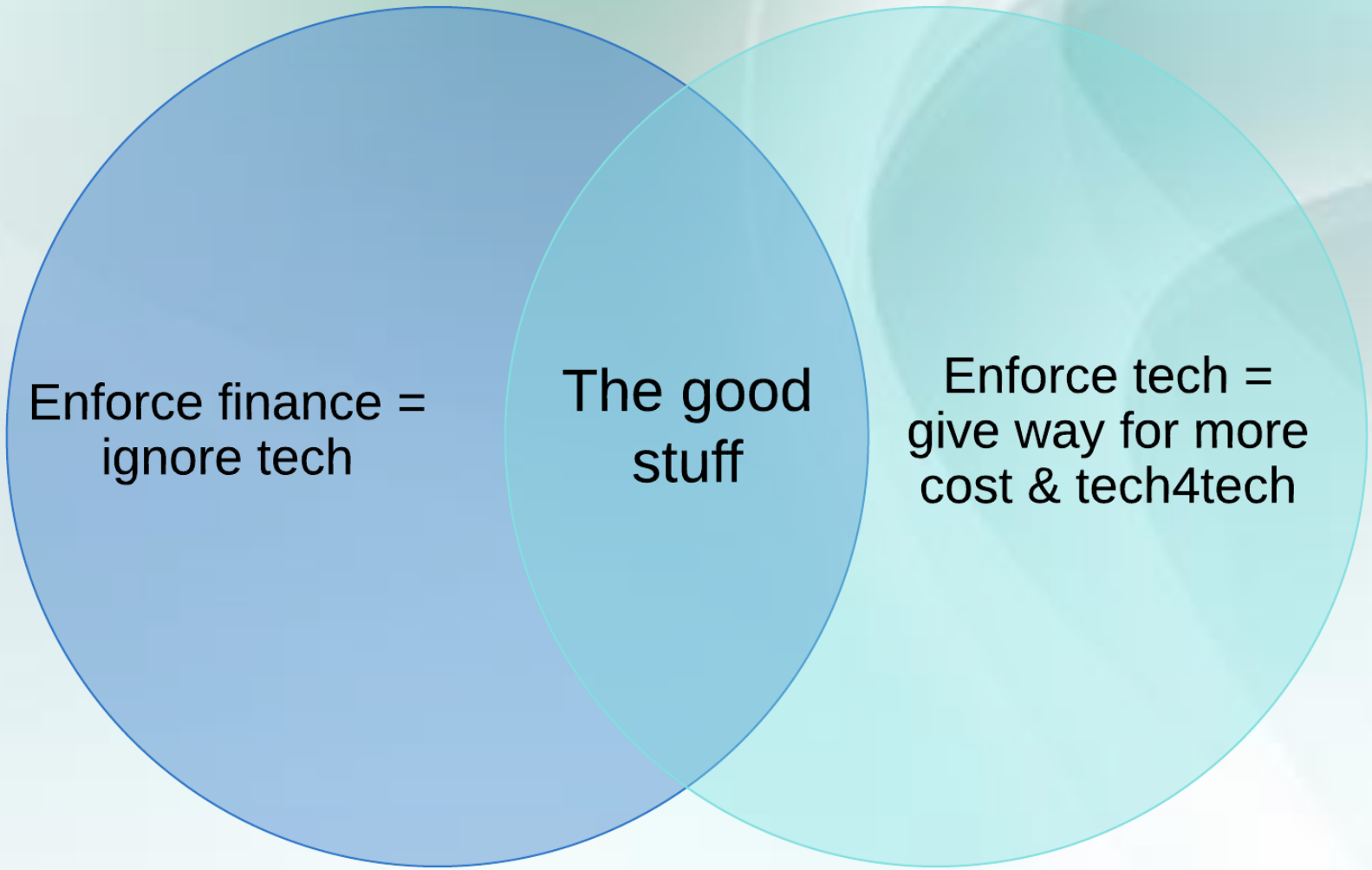
FinOps is an evolving cloud financial management discipline and cultural practice that enables organizations to get maximum business value by helping engineering, finance, technology and business teams to collaborate on data-driven spending decisions.

Definition Updated: November 2021 by the FinOps Foundation Technical Advisory Council

FinOps is about ways to save money in the cloud

- Before the cloud – predictable
  - Buy finite resources for finite results
  - Waterfall facilitated the approach
- Cloud – unpredictable
  - Pay as you go is the way to go
  - Agile = changing request -> changing approach -> different resources -> unpredicted cost -> difficult to control cost -> capping the budget does not work = limiting the team's ability & agility

- Every organization's dilemma = how to control cost



The current approaches are driven by financial goals.

Due to this financial motivation, there is no long-lasting technical influence in the organization, making the overall impact limited.

Just as serverless infrastructure is fundamental to the concept of ‘pay as you go’ cloud services, there is a need for a new paradigm based on the concept of ‘continuous optimization’

Edwards Deming

1986, Out of the Crisis

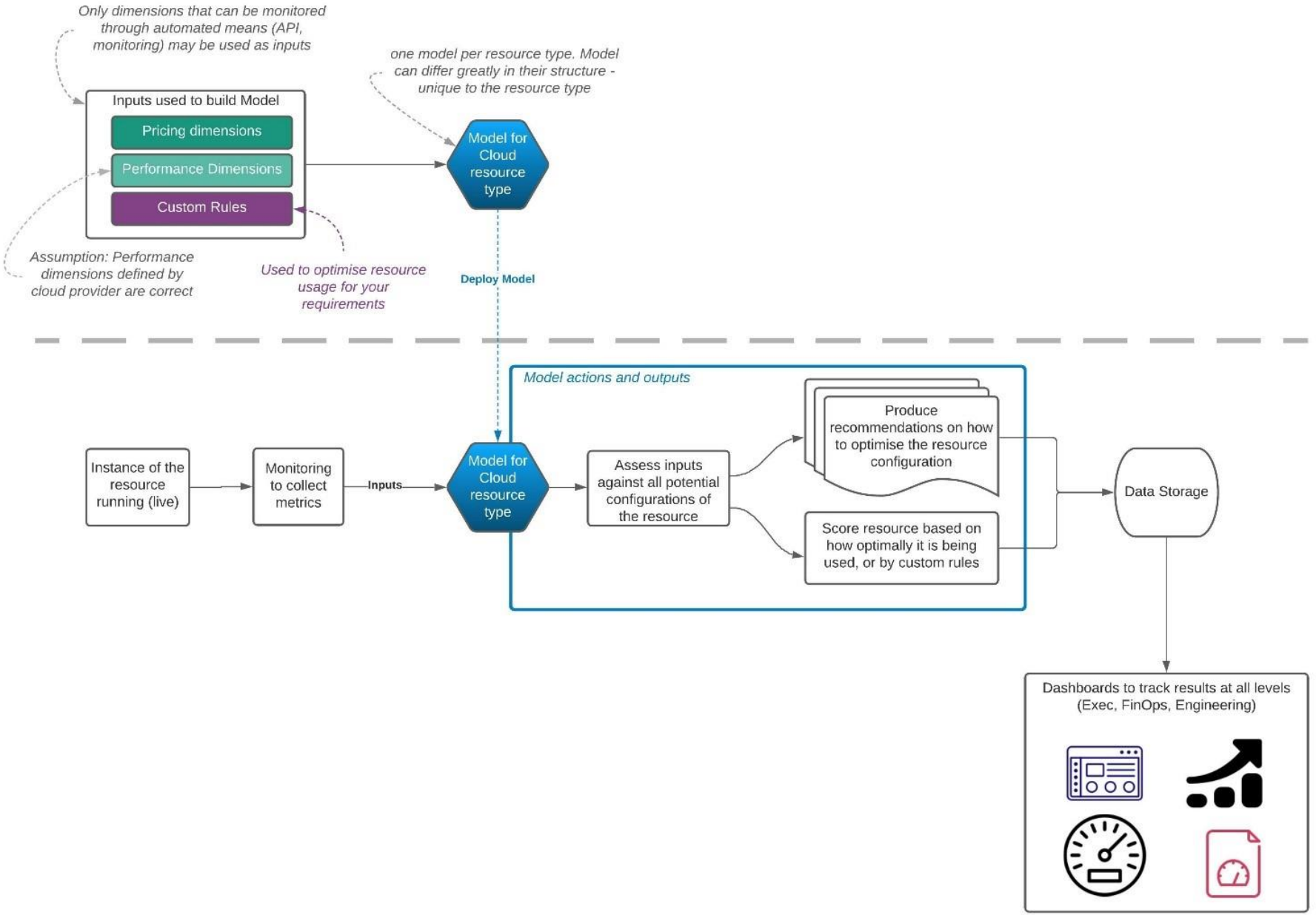
Workmanship pride

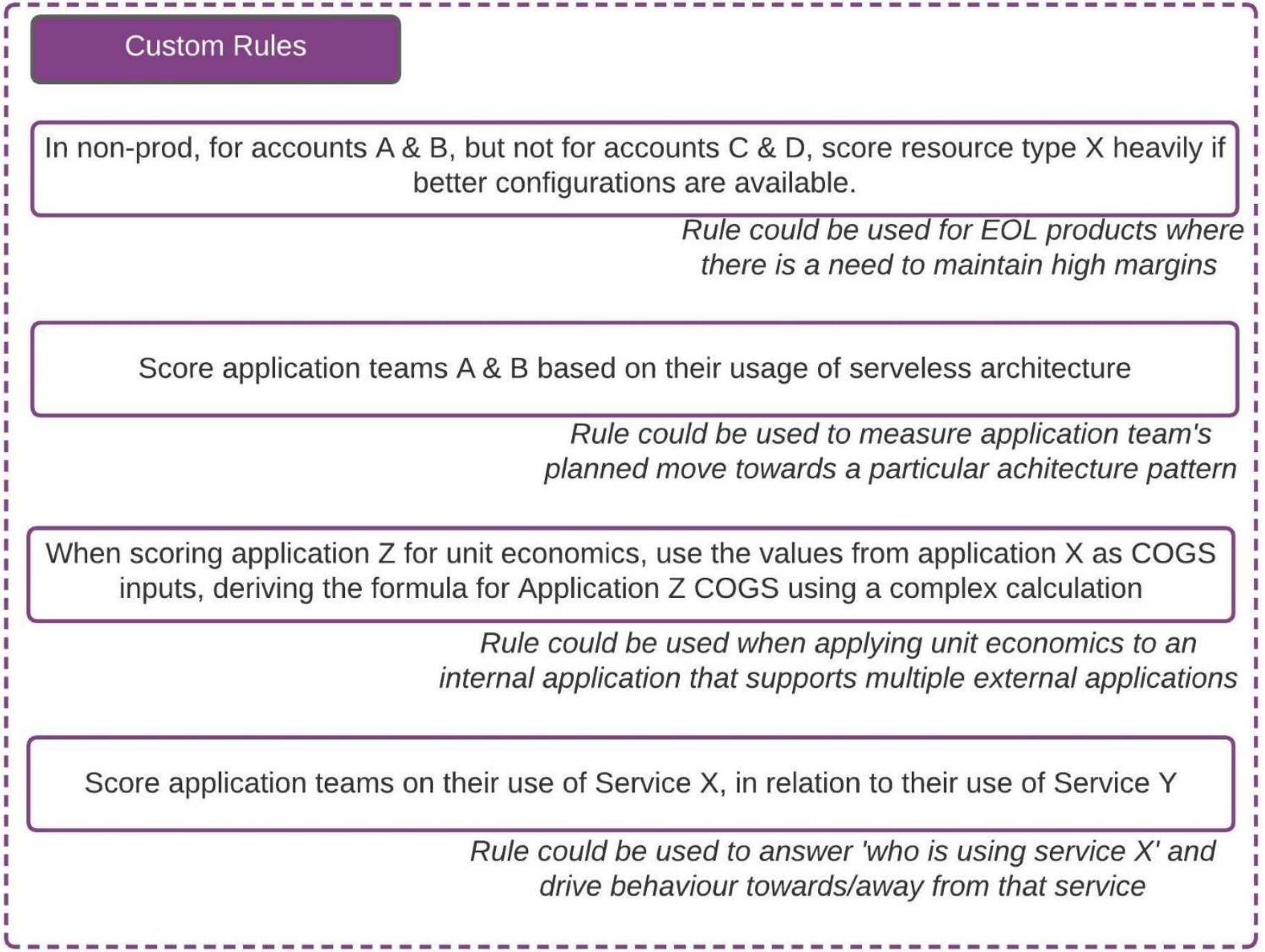
The proposed approach does not interfere directly with technical or financial aspects of this domain.

It treats an organization as a distributed system, affecting different subsystems to achieve their goals.

the proposed approach

- It builds on the existing system
- Chasing objectivity (constant positive feedback mechanism)
- Decentralizing FinOps
- Facilitates cultural change


Only dimensions that can be monitored through automated means (API, monitoring) may be used as inputs
one model per resource type. Model can differ greatly in their structure - unique to the resource type
Inputs used to build Model
Pricing dimensions
Performance Dimensions
Custom Rules
Model for Cloud resource type
Assumption: Performance dimensions defined by cloud provider are correct
Used to optimise resource usage for your requirements
Deploy Model
Model actions and outputs
Instance of the resource running (live)
Monitoring to collect metrics
Inputs
Model for Cloud resource type
Assess inputs against all potential configurations of the resource
Produce recommendations on how to optimise the resource configuration
Score resource based on how optimally it is being used, or by custom rules
Data Storage
Dashboards to track results at all levels (Exec, FinOps, Engineering)


Custom Rules
In non-prod, for accounts A & B, but not for accounts C & D, score resource type X heavily if better configurations are available.
Rule could be used for EOL products where there is a need to maintain high margins
Score application teams A & B based on their usage of serveless architecture
Rule could be used to measure application team's planned move towards a particular achitecture pattern
When scoring application Z for unit economics, use the values from application X as COGS inputs, deriving the formula for Application Z COGS using a complex calculation
Rule could be used when applying unit economics to an internal application that supports multiple external applications
Score application teams on their use of Service X, in relation to their use of Service Y
Rule could be used to answer 'who is using service X' and drive behaviour towards/away from that service

- Keep the cost under control
- Proof of Concepts usage
- Gaining competitive advantage

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Special thanks to Edwards for cameo appearance :)