# How to use this template

This document is a sample template designed to help you define the policy statements that drive the maturity of the [Five Disciplines of Cloud Governance](https://aka.ms/CAF/gov/discipline) within your organization. Although the example content below uses the Cost Management discipline as an example, the template can be used to support all five of the disciplines.

The following instructions will guide usage of this template:

* Update the template's title page with your author information, publish date and the governance discipline this document supports.
* Update this template to reflect risks, tolerance, indictors, toolchains, etc., that align to your business and technology needs.
* Update this template to reflect your policy statements.
* Update this template's executive summary to reflect your updated content.
* Before publication remove the “sample” watermark.
* Delete this page and update the table of contents before publishing your customized policy statements.

**Microsoft Cloud Adoption Framework for Azure**

**Cloud Governance**

Discipline Implementation

Policy Statements and Design Guidance

The document outlines the policy statements and design guidance required to support cost management during cloud adoption. Associated risks, tolerance, and mitigation strategies for each is included for reference.

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Contents

[How to use this template 1](#_Toc437305)

[Executive Summary 3](#_Toc437306)

[Policy Statements 3](#_Toc437307)

[Business Risks 4](#_Toc437308)

[Metrics and Indicators 4](#_Toc437309)

[Metrics 4](#_Toc437310)

[Indicators 4](#_Toc437311)

[Monitor and Enforce 5](#_Toc437312)

[Primary Process for Monitoring 5](#_Toc437313)

[Violation Triggers and Enforcement Actions 5](#_Toc437314)

[Toolchain 6](#_Toc437315)

[Azure Specific Tooling 6](#_Toc437316)

[Tooling for other Cloud Providers 6](#_Toc437317)

# Executive Summary

The cloud enables powerful new technical capabilities, such as Self-Service Deployment. These types of features promote business agility and innovation. However, they also introduce new risks related to the cost of technology that weren’t as prevalent in traditional, on-premises datacenters. This document identifies these risks, along with the business’s tolerance for said risks. It also outlines efforts to mitigate said risks. The result is a series of policy statements that should guide the architecture of any solutions deployed to the cloud.

This document has been developed in conjunction with the governance best practices documented in the [Microsoft Cloud Adoption Framework for Azure (CAF)](http://aka.ms/caf).

# Policy Statements

The following statements should guide your cloud adoption architecture decisions to ensure compliance with governance efforts related to this management discipline. For additional examples of relevant policy statements, see the [governance theory section of CAF](https://aka.ms/CAF/gov/theory).

**Future Proof:** To ensure current adoption efforts can be effectively governed in the future, all deployments must adhere to the best practices outlined in the [Actionable Journeys section of CAF](https://aka.ms/CAF/gov/journey).

**Budget Overrun:** Any assets deployed to the cloud must be aligned to a billing unit, with approved budget, and a mechanism for enforcing budgetary limits.

**Over Provisioned Assets:** All deployed assets must be registered with a solution that can monitor usage and report on any over provisioned resources.

# Business Risks

The following cost related business risks have been identified as concerns based on the current plans for cloud adoption. For additional examples of relevant business risks, see the [governance theory section of CAF](https://aka.ms/CAF/gov/theory).

|  |  |  |  |
| --- | --- | --- | --- |
| Risk | Description | Indicators | Resolution |
| Future Proof | Lack of standards will hinder future governance. | Current | Policy Statement enforced |
| Budget Overrun | Budget overruns are a potential risk in the future. | Next Major Release | Policy Statement drafted but not enforced |
| Over Allocation | Paying too much for unused resources is a potential future risk. | Monthly spend exceeds $1M USD | Policy Statement drafted but not enforced |

# Metrics and Indicators

The following are key metrics and indicators that will guide the resolution or mitigation of business risks. For additional examples of relevant metrics or indicators, see the [governance theory section of CAF](https://aka.ms/CAF/gov/theory).

## Metrics

This governance discipline attempts to govern and improve the following key metrics.

* Annual Spend: The total annual cost for services provided by a cloud provider.
* Monthly Spend: The total monthly cost for services provided by a cloud provider.
* Forecast vs Actuals Ratio: The ratio comparing forecasted and actual spend (Monthly or Annual).
* Pace of adoption (MOM) Ratio: The percentage of the delta in cloud costs from month to month.

## Indicators

The following indicators will trigger changes in policy statements based on changes in metrics and other conditions.

* Current: Current state of metrics. Any policy statements listed as current should be actively enforced.
* Release based indicator: Upon the next major release, there will be a sufficient risk of budget overrun to warrant budget controls.
* Monthly spend: When monthly spend exceeds $1M USD, new policy statements will go into effect to better control spending.

# Processes

The following section outlines the process for monitoring the metrics governed by this discipline. It also identifies situational triggers that would suggest deviation from current policy statement. For each, the actions to be taken to enforce policy are documented as well. For additional examples of relevant monitoring and enforcement processes, see the [governance theory section of CAF](https://aka.ms/CAF/gov/theory).

## Primary Process for Monitoring

Deployment Planning: Prior to deployment of any asset, establish a forecasted budget based on expected cloud allocation.

Annual Planning: On an annual basis, perform a roll up analysis on all deployed and to be deployed assets. Align budgets by business units, teams, or other appropriate divisions to empower self-service adoption. Ensure the leader of each billing unit is aware of the budget and how to track spend.

This could be a good point in time to make a pre-commitment or pre-purchase to maximize discounting. It could be wise to align annual budgeting with the cloud vendor's fiscal year to further capitalize on year end discount options.

Quarterly Planning: On a quarterly basis, review budgets with each billing unit leader to align forecast and actual spend. If there are changes to the plan or unexpected spending patterns, align and reallocate the budget.

Monthly Reporting: On a monthly basis, report actual spending against forecast.

## Violation Triggers and Enforcement Actions

Monthly Budget Deviations: Any deviations in monthly spend exceeding 20% Forecast vs Actuals ratio will be discussed with billing unit leader. Resolutions or changes in forecast will be recorded.

Pace of Adoption: Any deviation at a subscription level exceeding 20% will trigger a review with billing unit leader. Resolutions or changes in forecast will be recorded.

# Toolchain

The following cloud provider specific tools will be implemented to automate the policy statements in this document. For additional examples of relevant tooling specific to Azure, see the [governance theory section of CAF](https://aka.ms/CAF/gov/theory).

## Azure Specific Tooling

Budget Control: [Azure Cost Management](https://docs.microsoft.com/en-us/azure/cost-management/overview-cost-mgt)

Enforce spend controls across subscriptions: [Azure Policy](https://docs.microsoft.com/en-us/azure/governance/policy/overview)

Detect Over Provisioning: [Azure Advisor](https://docs.microsoft.com/en-us/azure/advisor/advisor-cost-recommendations)

## Tooling for other Cloud Providers

List similar tools for other cloud providers, as needed.