
AWS
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NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

ARC204

# Scaling AWS Well-Architected Reviews through the enterprise


Andrew Robinson (he/him)

Senior Manager, Solutions Architecture
AWS

Ray Siripan (he/him)

Global Enterprise Architect
TUI Group

Duncan Bell (he/him)

AWS Well-Architected Solutions Architect
AWS



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# Agenda

AWS Well-Architected Framework overview

TUI success story

Custom lens lifecycle

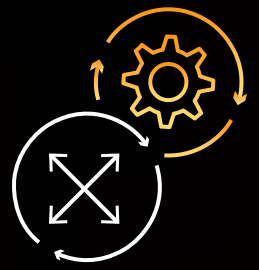
Reporting and analytics

Lessons learned

Call to action

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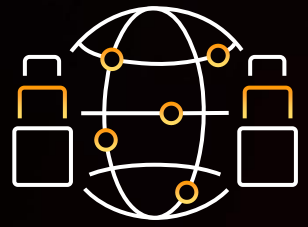
# AWS Well-Architected Framework



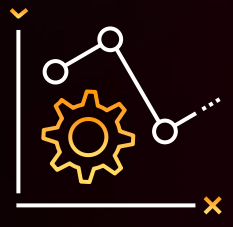
Operational excellence



Security



Reliability



Performance efficiency



Cost optimization



Sustainability

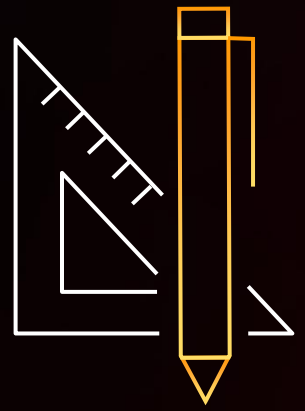
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# A mechanism for your cloud journey



Learn



Measure

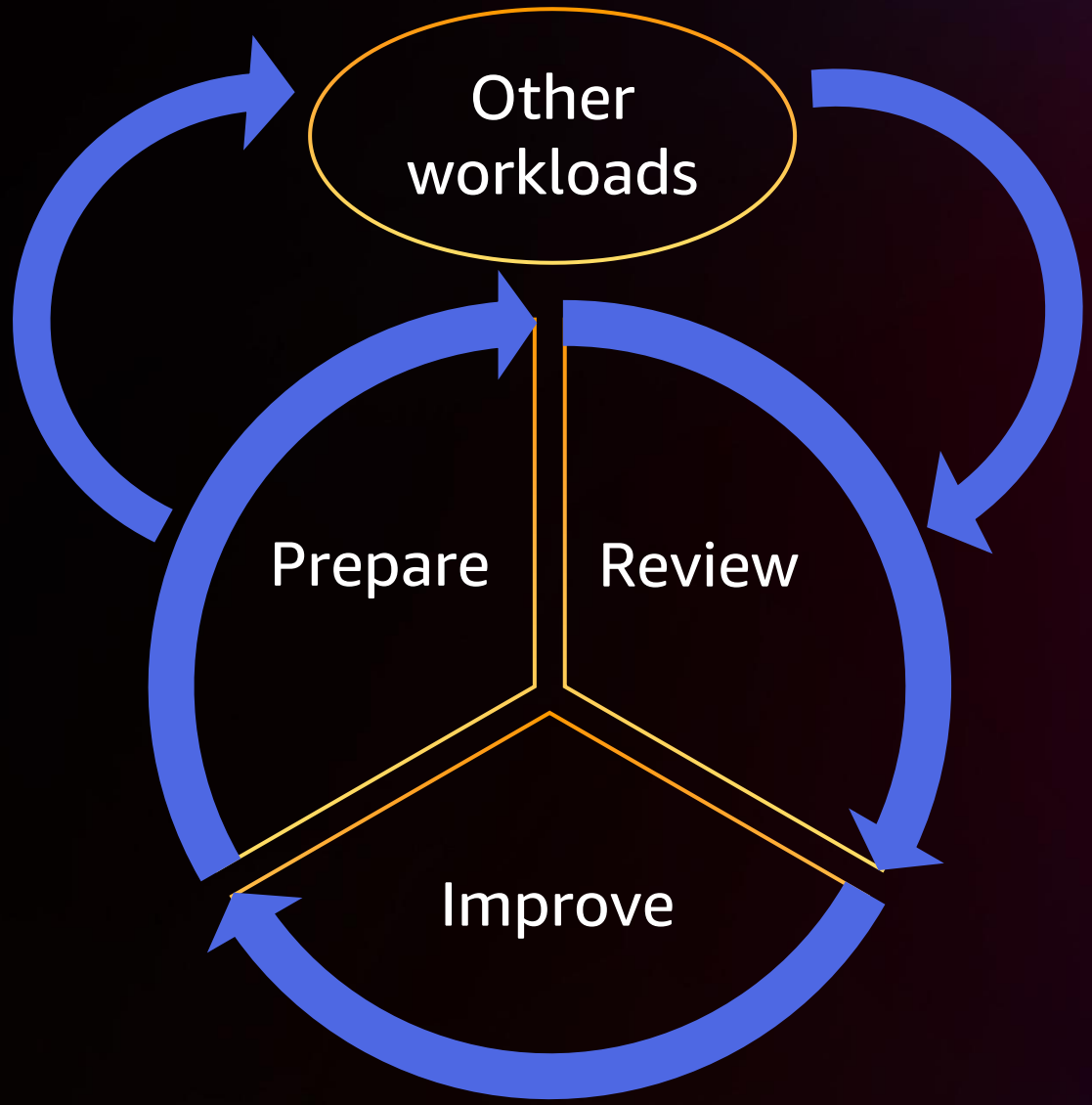


Improve

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# The AWS Well-Architected mechanism




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# Challenges as organizations grow

## Small startup



1 communication channel

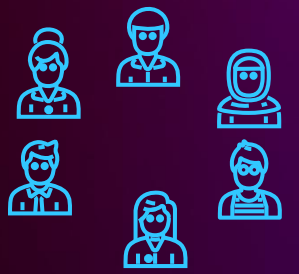
## Large enterprise business unit



App team 1



Security team



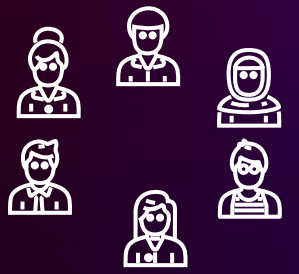
App team 2



Central platform



Kubernetes team



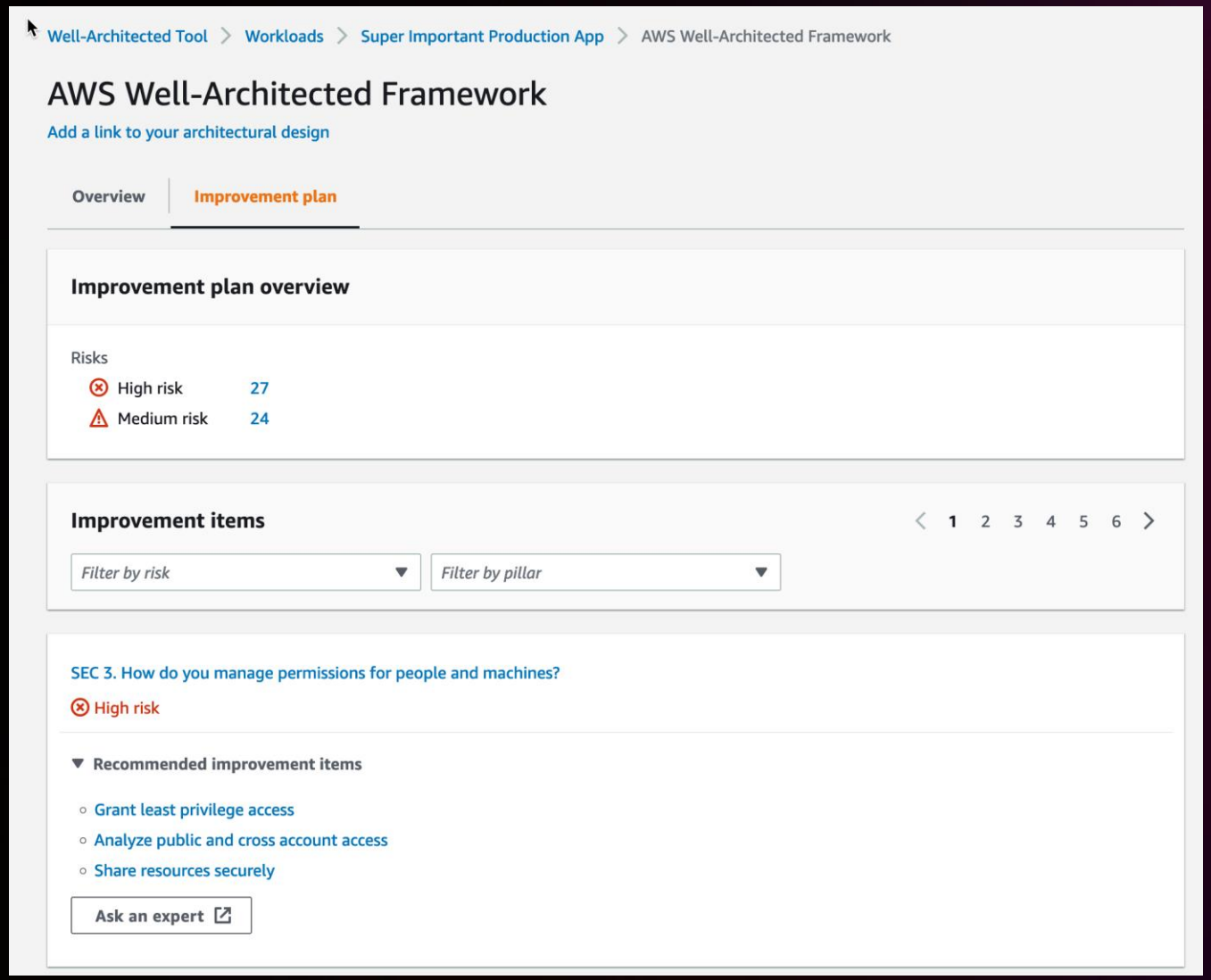
Architecture team

15 communication channels per team
630 communication channels per business unit

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# AWS Well-Architected Tool




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# Example question

## AWS Well-Architected Framework

Add a link to your architectural design

Question | Trusted Advisor checks

**COST 4. How do you decommission resources?** Info

Ask an expert

Implement change control and resource management from project inception to end-of-life. This ensures you shut down or terminate unused resources to reduce waste.

Question does not apply to this workload Info

Select from the following

- [ ] Track resources over their life time Info
- [ ] Implement a decommissioning process Info
- [ ] Decommission resources Info
- [ ] Decommission resources automatically Info
- [ ] None of these Info

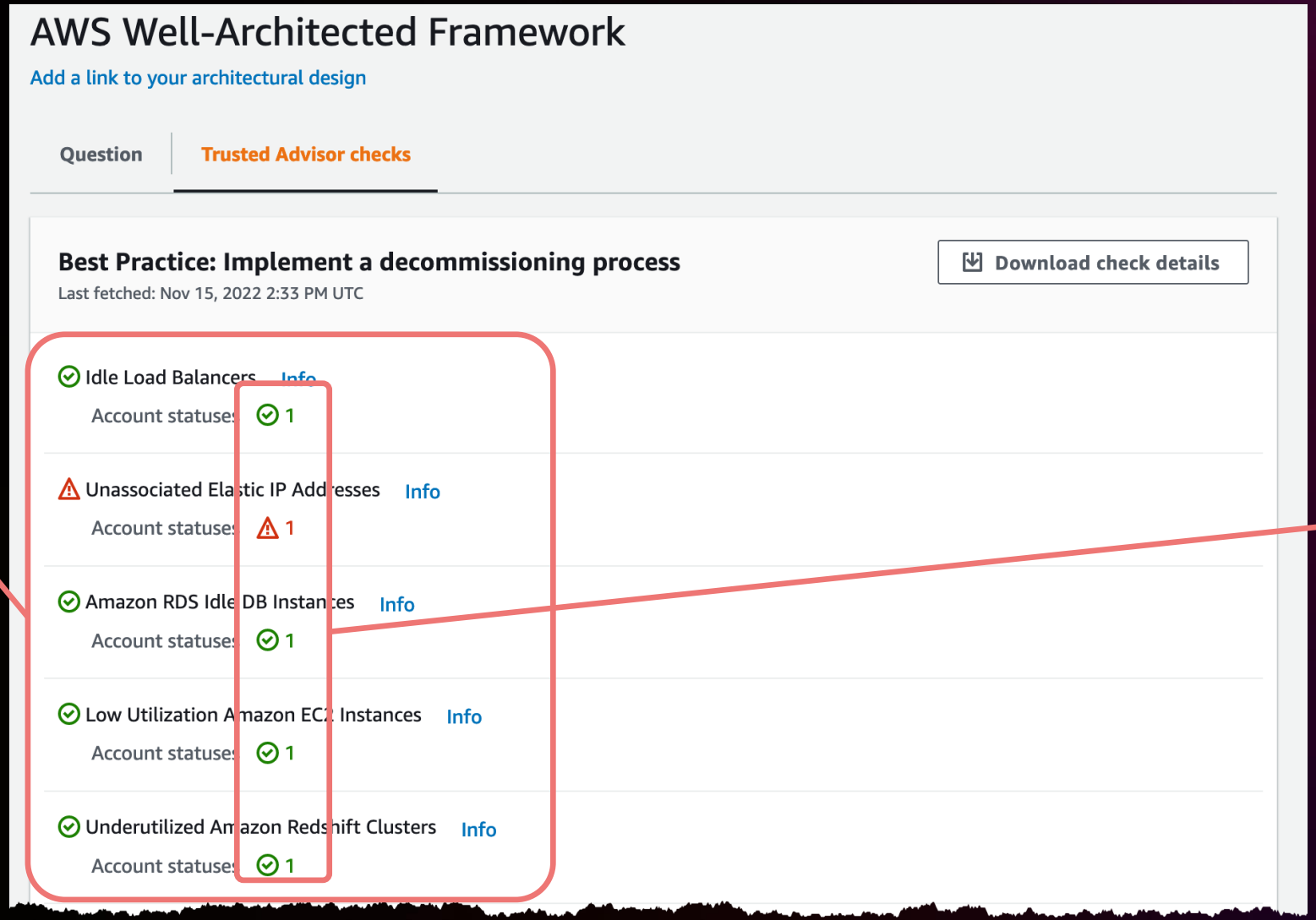
Question

Description

Best practices

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# Example question






Trusted Advisor Checks



Status

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# AWS Well-Architected hierarchy



AWS Well-Architected Framework
General workload best practices



AWS Well-Architected lenses
Industry, domain, and technology specific



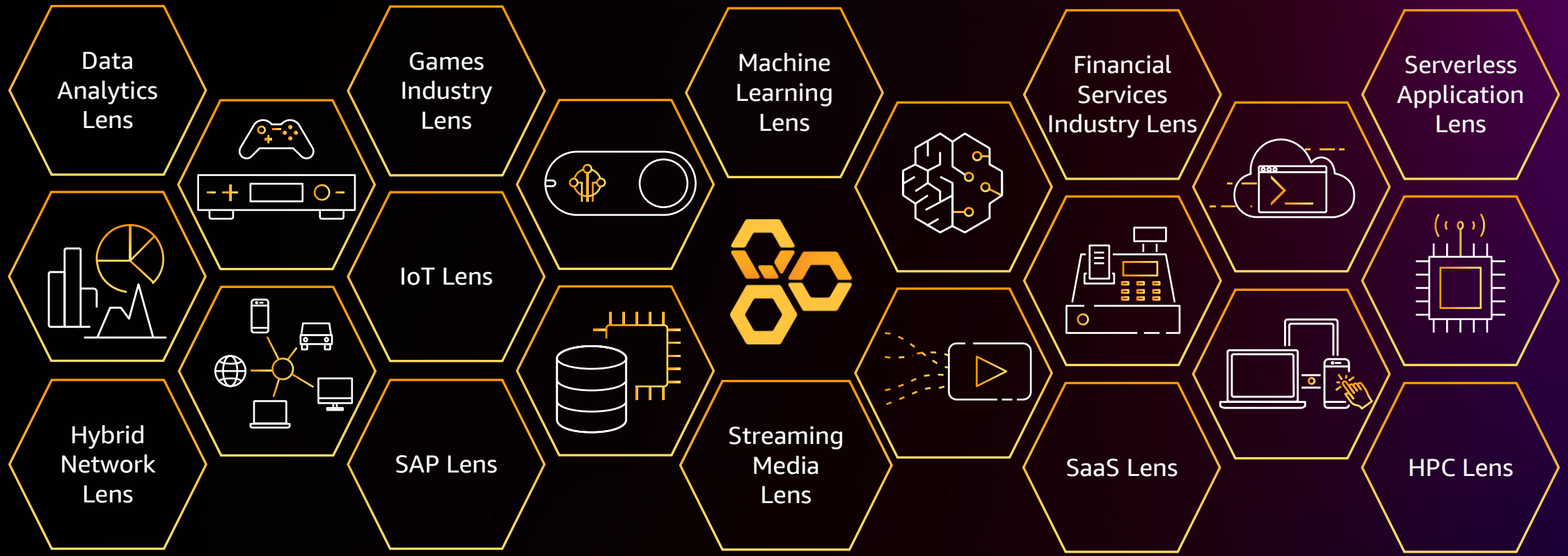

Well-Architected custom lenses
Organization-specific best practices

More general

More specific

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# AWS Well-Architected lenses




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TUI
Live Happy

1,600

Retail stores in Europe

140

Destinations

16

TUI cruise ships

400+

TUI hotels

130

TUI aircraft



**21** million customers per year

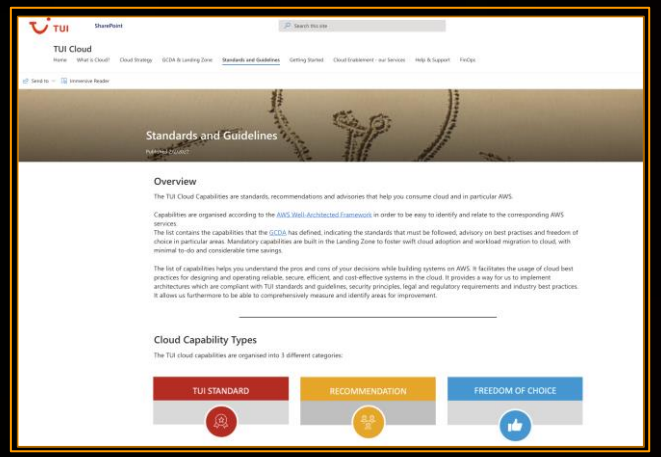
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# Scaling AWS Well-Architected to the enterprise

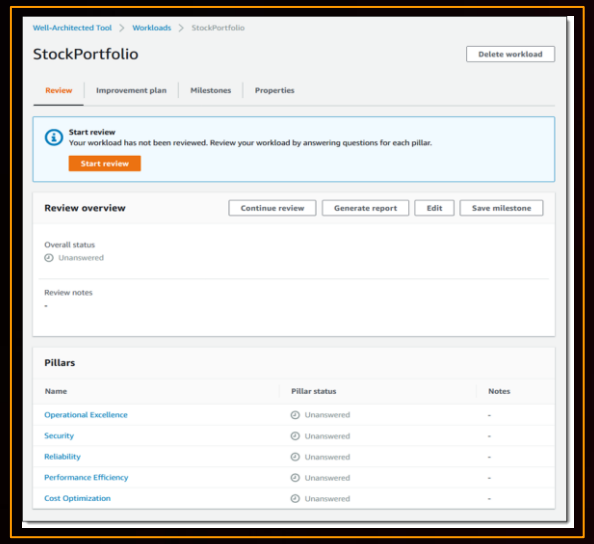
## TUI cloud policy

TUI policy + AWS Well-Architected



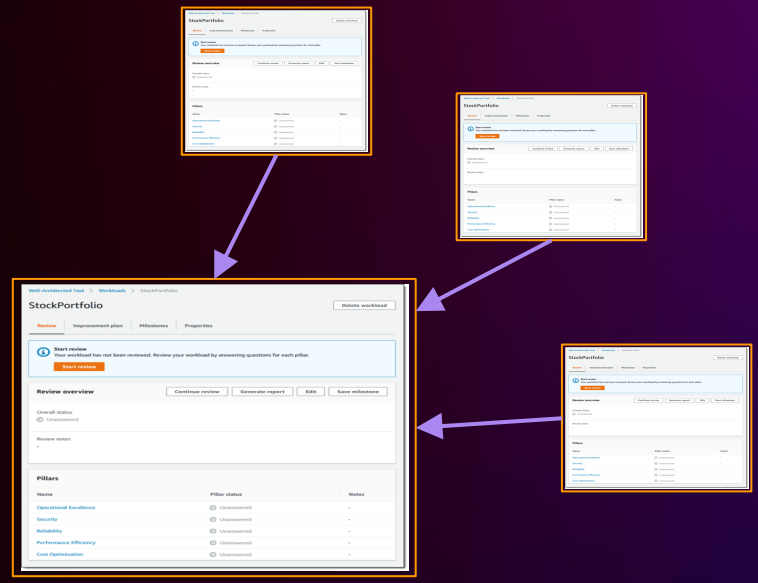

## Adopted AWS Well-Architected Tool

TUI policy + AWS Well-Architected




## Scaling AWS Well-Architected

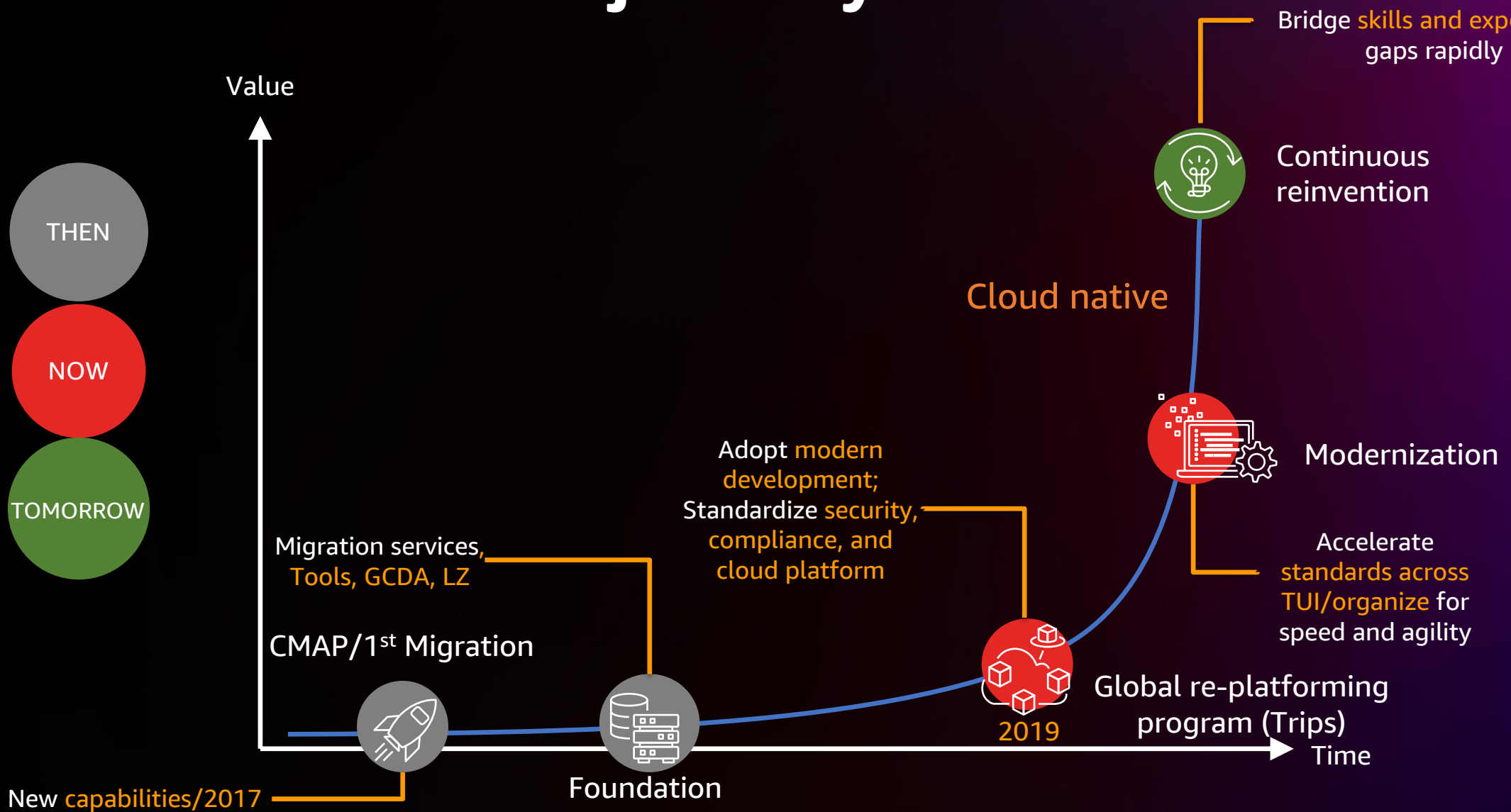
Scale out + central view



2017 — 2018 — 2019

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# Our transformation journey




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# Scaling AWS Well-Architected to the enterprise



7 Master domains
across
24 domains

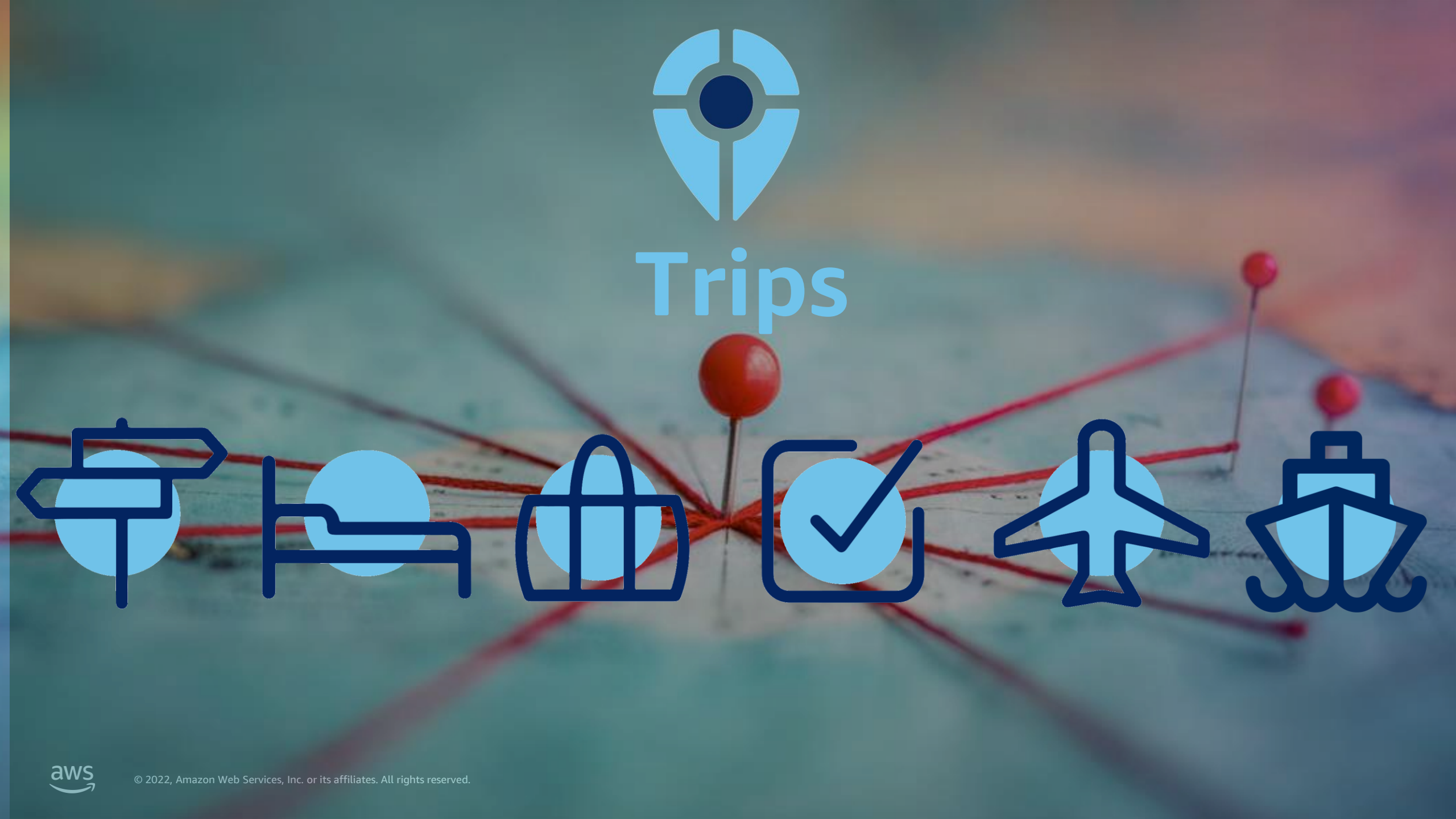


15 Business services
across
12 countries



700 AWS accounts
with
1500+ IT colleagues

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# Trips



Pricing



Sourcing



Selling



Payment



Customer service



Customer communication



Yield

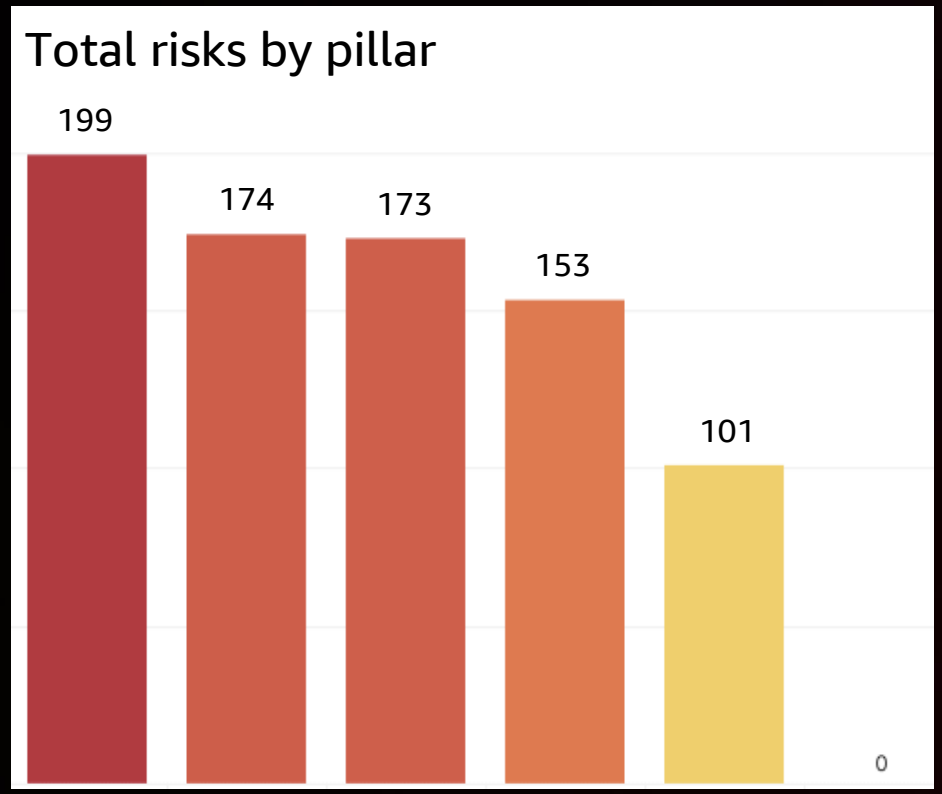
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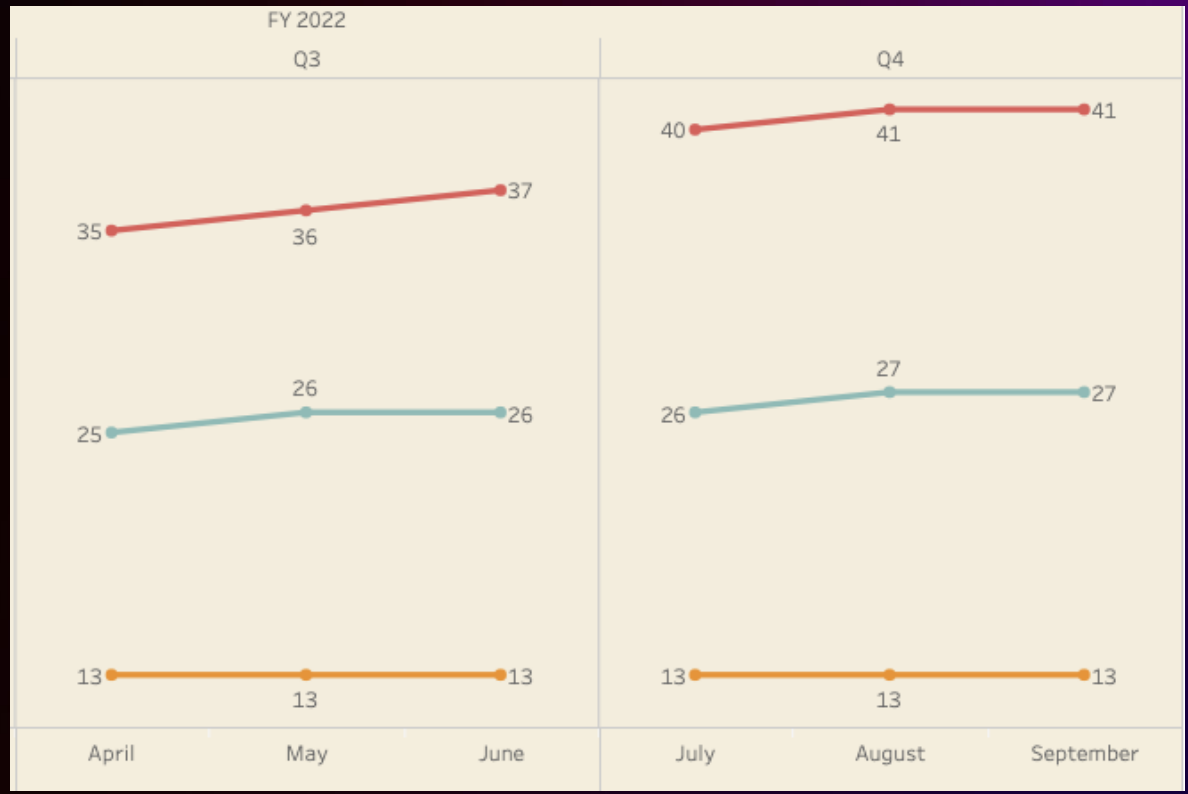
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# Measuring AWS Well-Architected at scale

TUI global reporting tool *(Tableau)*
KPI and trends

Gain faster, deeper insights with analytics




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# Measuring AWS Well-Architected at scale

TUI global reporting tool *(Tableau)*
KPI and trends



Gain faster, deeper insights with analytics

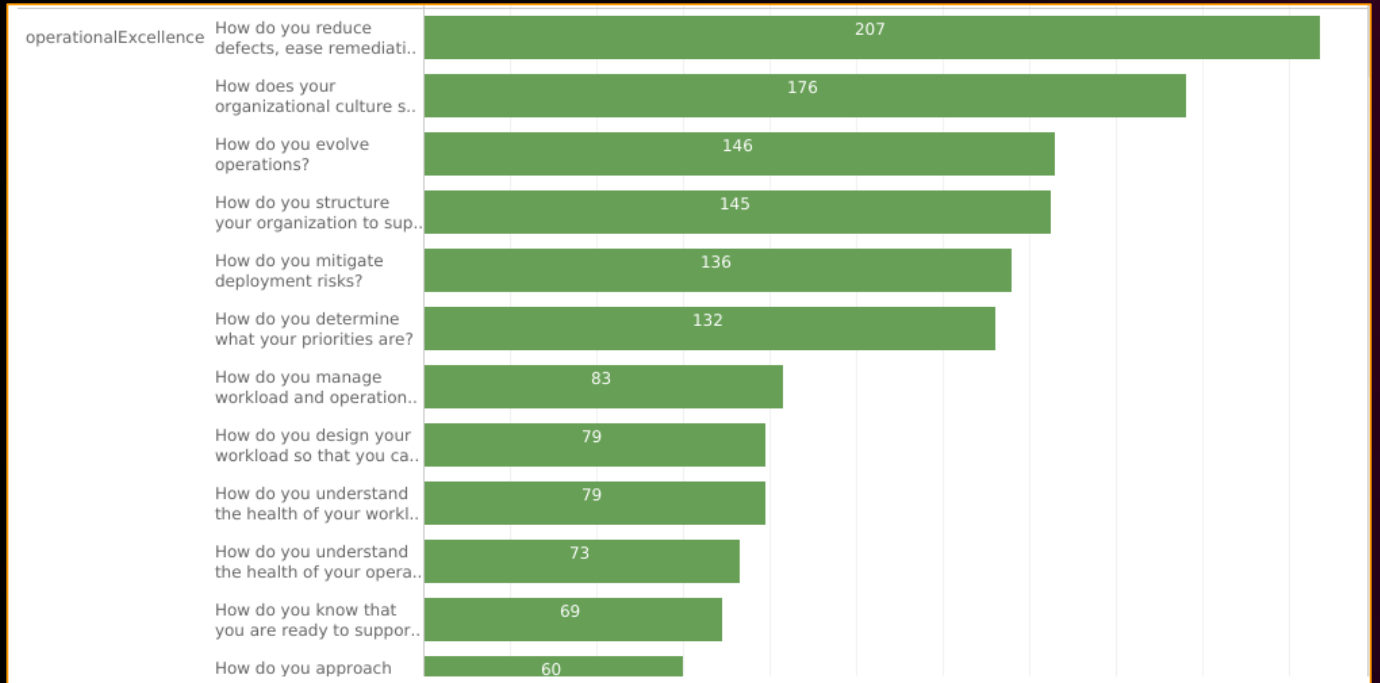



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# Measuring AWS Well-Architected at scale

## TUI Global Reporting Tool *(Tableau)*

Choice analysis




Unselected Answers in Well Architected Review

| | | | |
|---|---|---|---|
| Accomodation Sourcing | costOptimization | Null | |
| | | How do you decommission resources? | Decommission resources |
| | | | Decommission resources automatically |
| | | | Decommission resources in an unplanned manner |
| | | | Implement a decommissioning process |
| | | | None of these |
| | | | Track resources over their life time |
| | | How do you evaluate cost when you select services? | Analyze all components of this workload |
| | | | Identify organization requirements for cost |



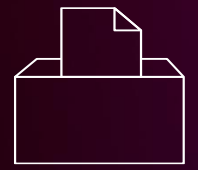
Gain faster, deeper insights with analytics

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# Consistency at scale and how we get it done

## Benefits

- Improved flexibility and ability when cooperating with other services and domains
- A standard way of securing our services across the entire Trips platform
- Reusing existing patterns and codes
- Sustainable cost
- Reduced deployment time of service



Organize for speed and agility

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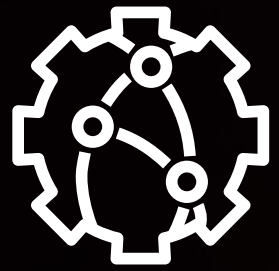
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# Consistency at scale and how we get it done



AWS infrastructure

- AWS Region
- AWS Availability Zone
- AWS tagging
- TUI Cloud DNS



Integration, analytics, and content delivery

- Amazon SNS
- Amazon Kinesis
- Amazon MSK
- TUI API for Trips



Security

- AWS Identity and Access Management (IAM)
- Security guardrails
- Data protection
- Logging and monitoring



Sustainability

- AWS Well-Architected
- Carbon footprint tool

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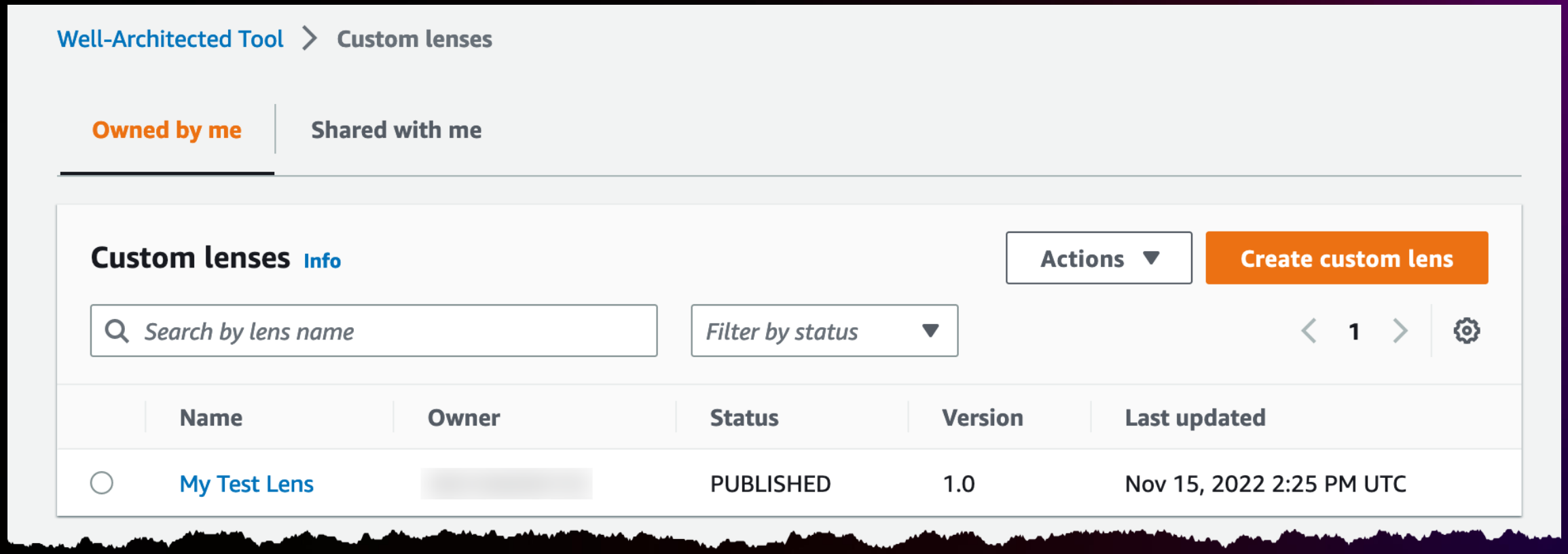

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# AWS Well-Architected: Next Steps

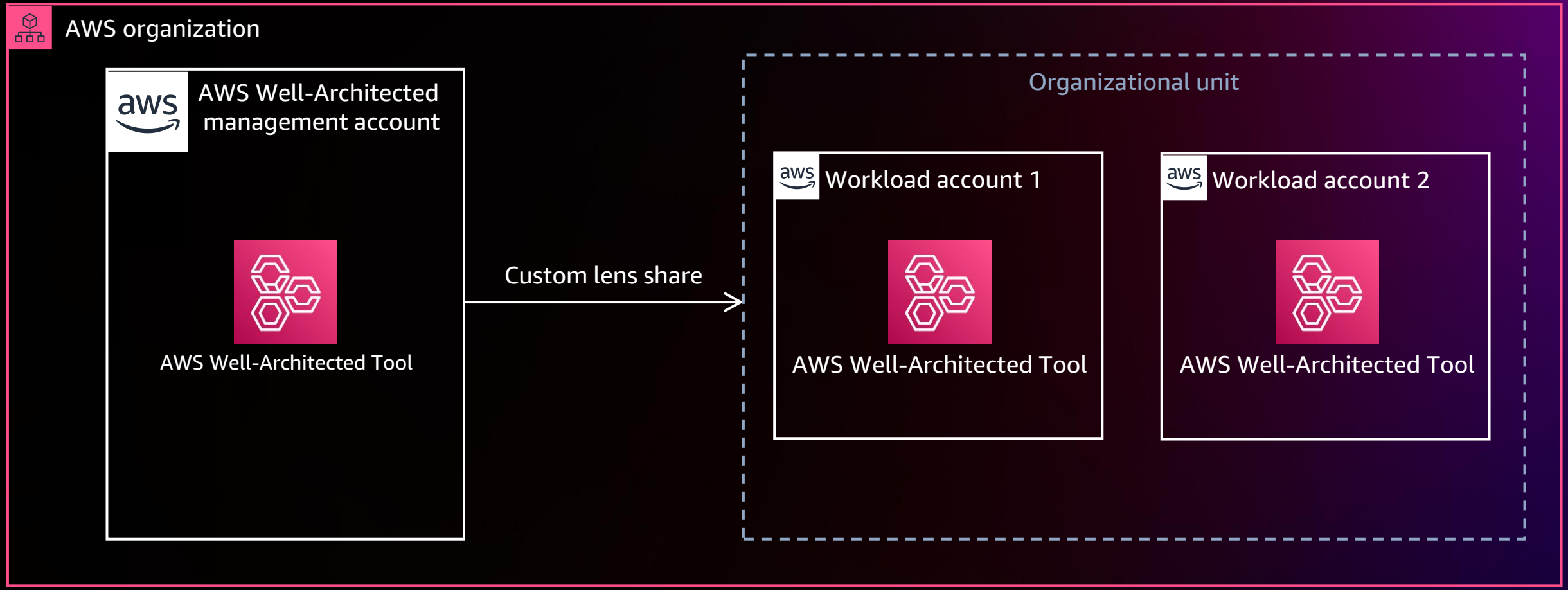
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# AWS Well-Architected custom lenses



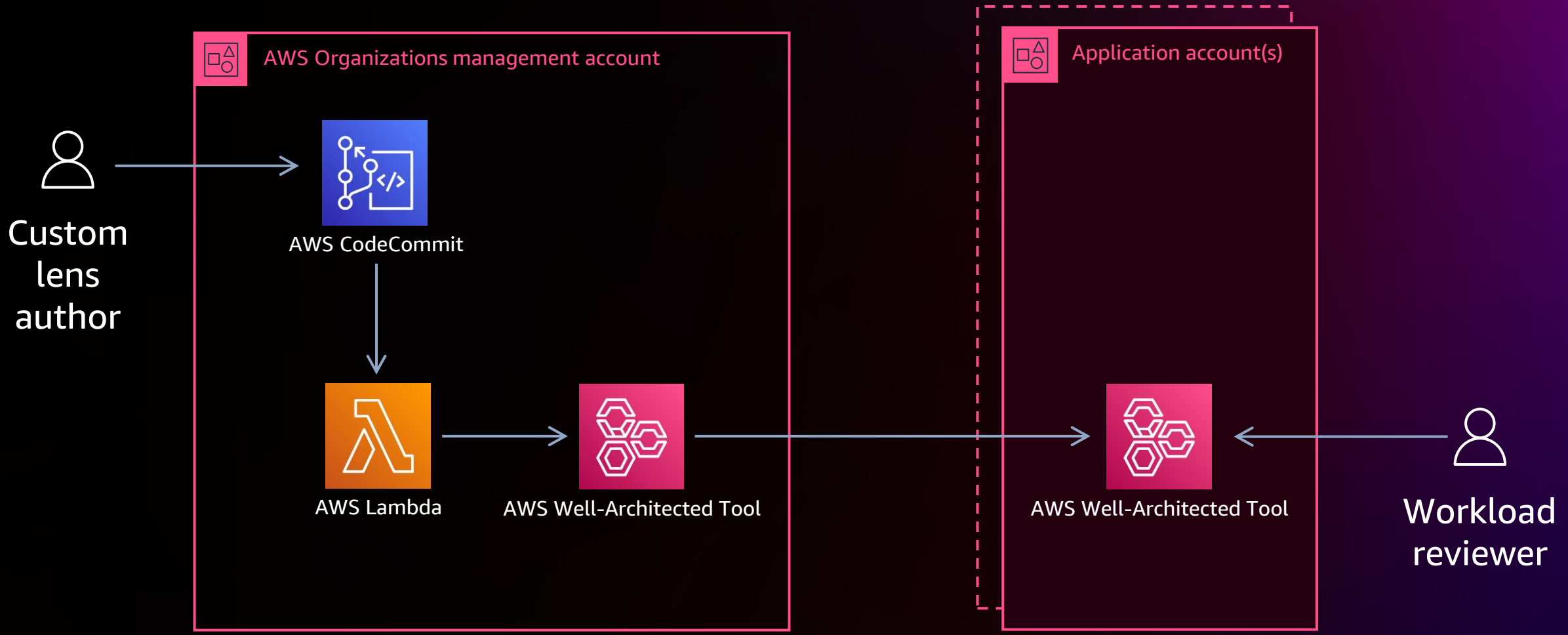

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# Sharing custom lenses



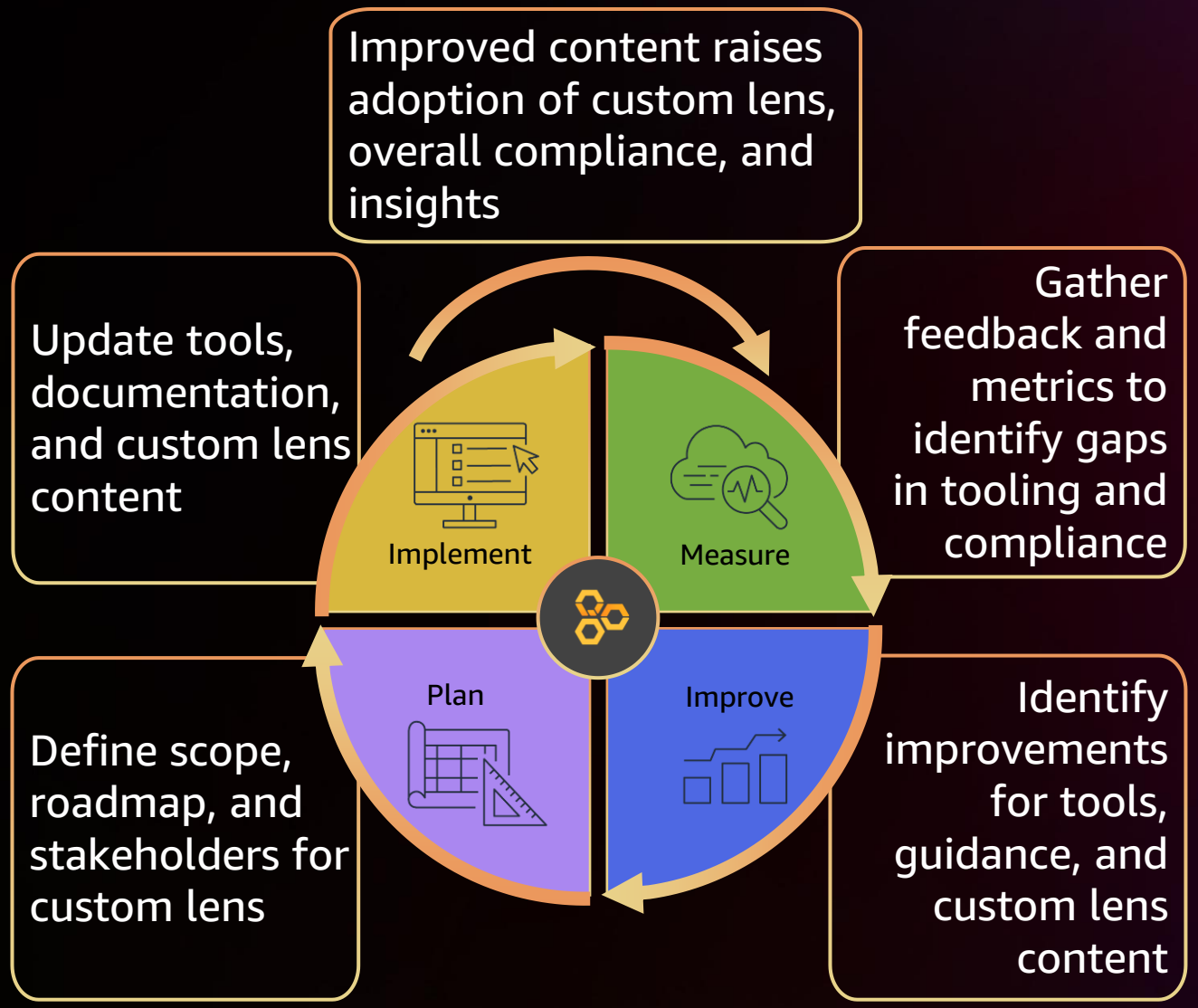

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# Sharing custom lenses



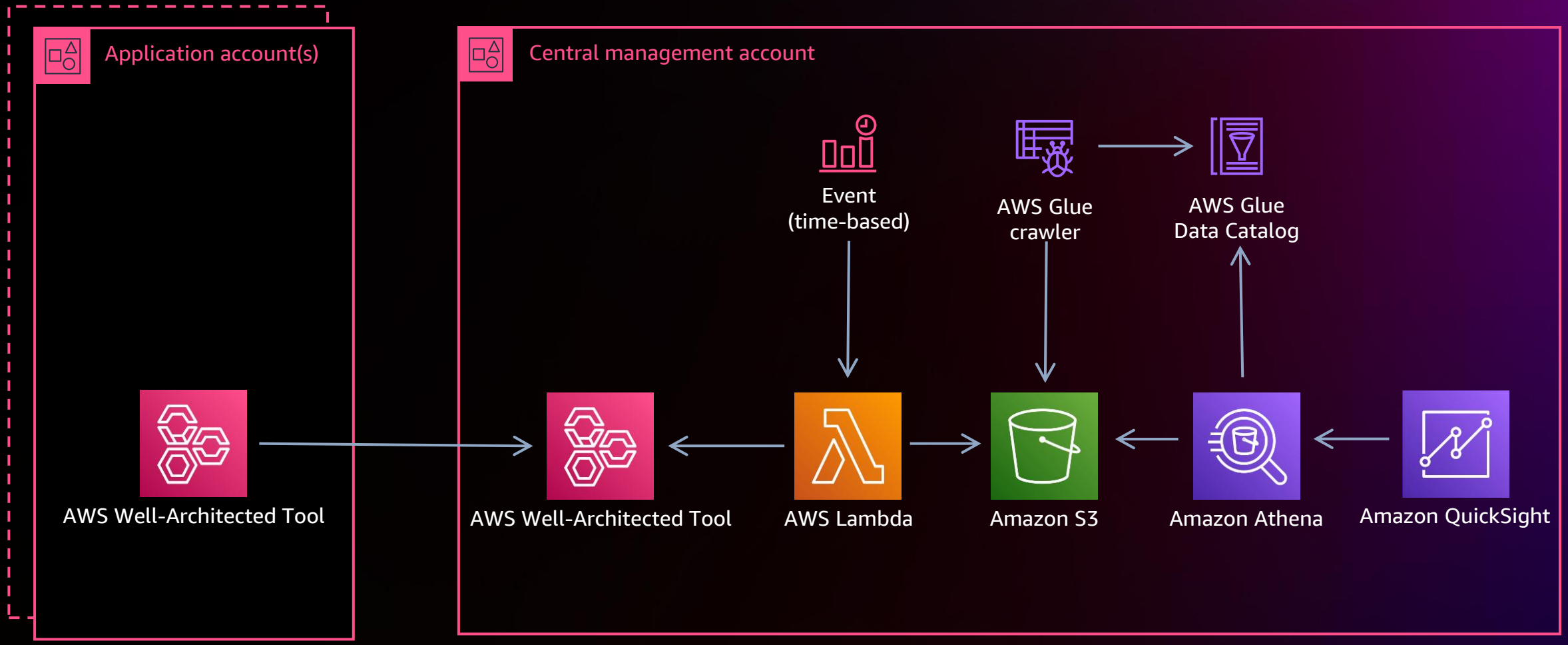

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# Custom lens lifecycle



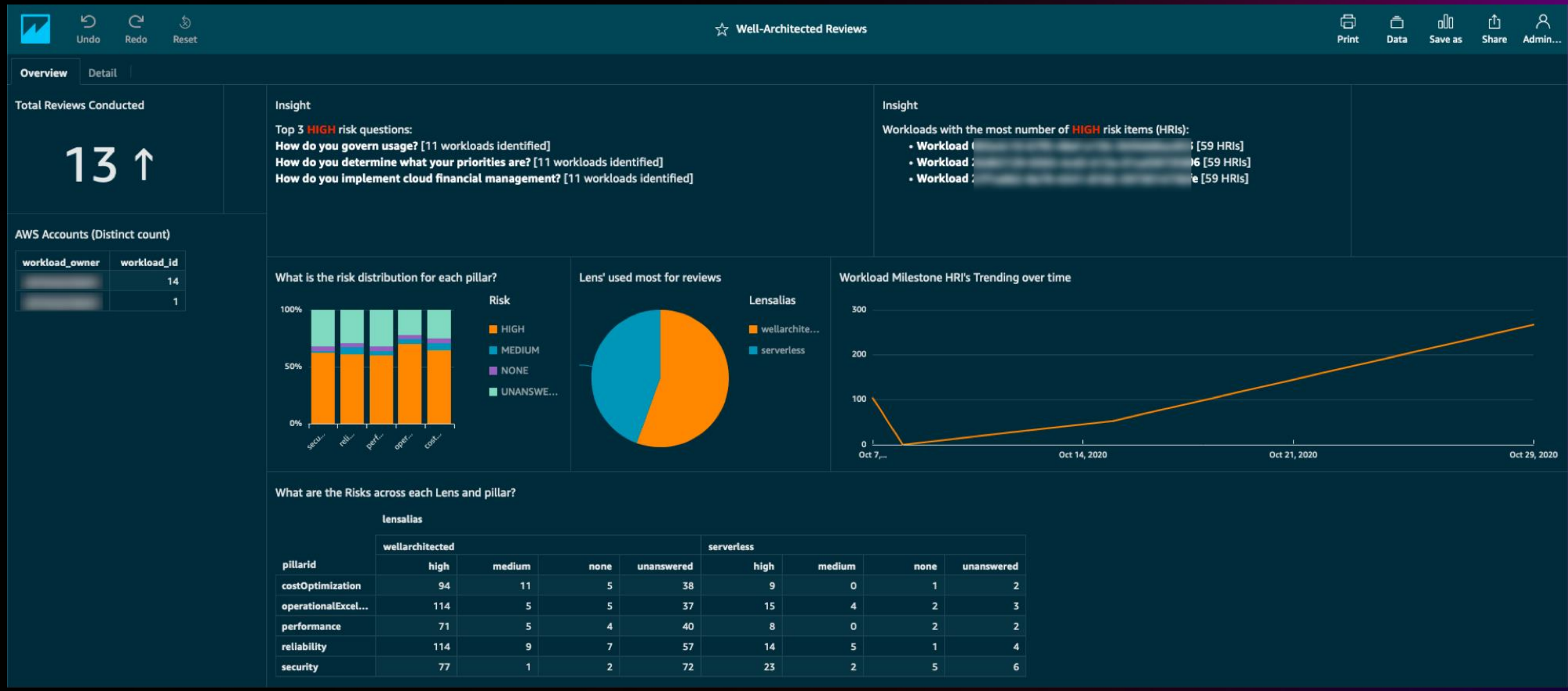

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# AWS Well-Architected reporting




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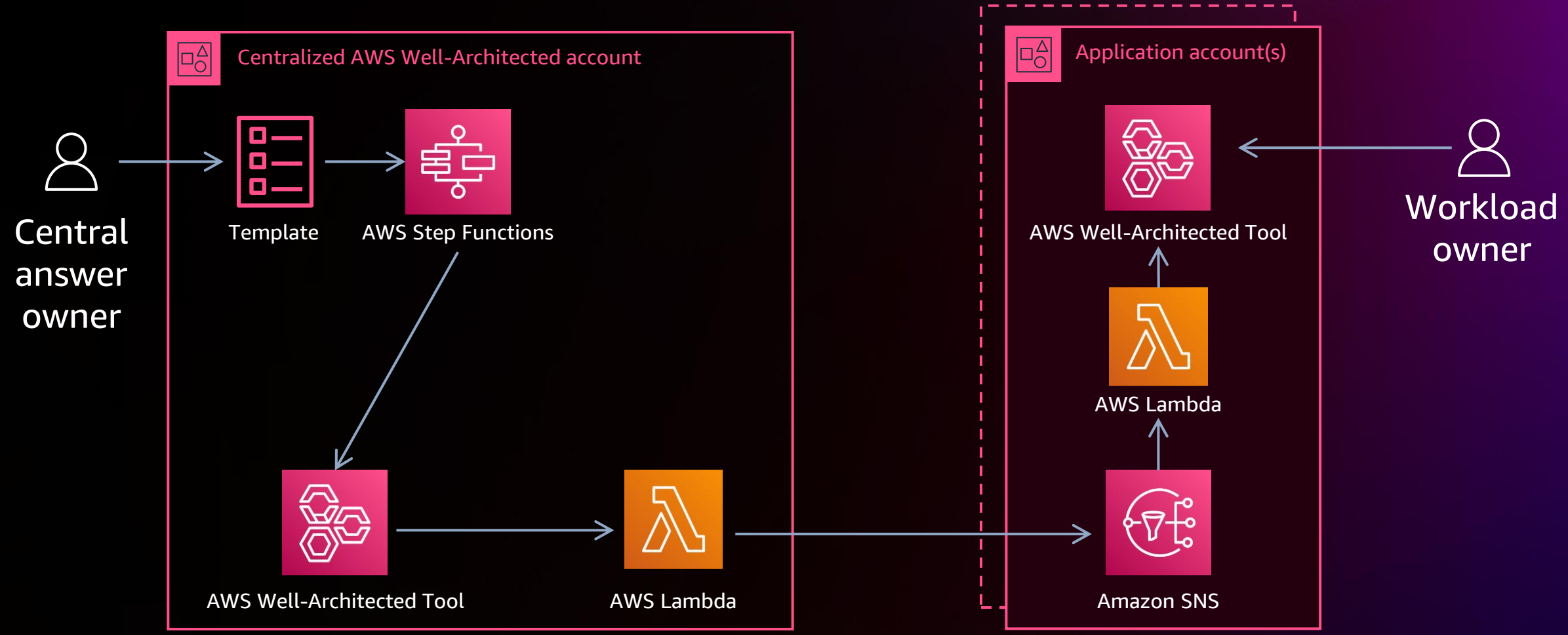
# AWS Well-Architected reporting




| | lensalias | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | wellarchitected | | | | serverless | | | |
| pillarid | high | medium | none | unanswered | high | medium | none | unanswered |
| costOptimization | 94 | 11 | 5 | 38 | 9 | 0 | 1 | 2 |
| operationalExcel... | 114 | 5 | 5 | 37 | 15 | 4 | 2 | 3 |
| performance | 71 | 5 | 4 | 40 | 8 | 0 | 2 | 2 |
| reliability | 114 | 9 | 7 | 57 | 14 | 5 | 1 | 4 |
| security | 77 | 1 | 2 | 72 | 23 | 2 | 5 | 6 |

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# AWS Well-Architected templated answers




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# Call to action



[Getting started with the AWS Well-Architected tool]



[Implementing AWS Well-Architected custom lens lifecycle]



[Building custom reports of AWS Well-Architected reviews]



[Using templated answers to perform AWS Well-Architected reviews at scale]

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