
AWS
re:Invent

ENT212

Improve strategic IT planning

Doug Gallagher

Business Development Manager, Cloud Economics
AWS

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Agenda

- Running IT like a business
- Investment planning
- Benchmarking
- Forecasting
- Demonstrating IT value



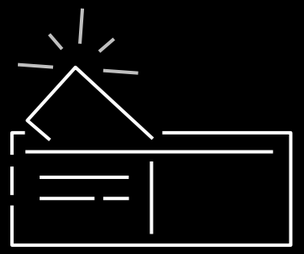
© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Challenges I’ve faced

1. What I’m getting for all these expenses
2. Discretionary vs. nondiscretionary budgets flipped over time
3. Lack of standard framework for investment proposals
4. Inability to plan and forecast beyond once a year or once a quarter
5. Top-down expense reduction targets

Running IT like a business

BREAKING DOWN THE COMPONENTS OF WHAT IT MEANS TO RUN IT AS A BUSINESS



Investment planning

Shift costs from run to grow / transform

Brainstorm new ideas

Revisit ideas not developed

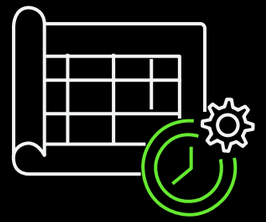


Benchmarking

Assess performance vs. industry peers and best in class

Discuss variances

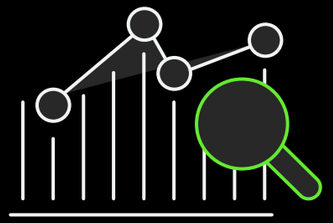
Develop go-forward strategy



Forecasting

Accountability for forecast accuracy

Dynamic / rolling forecast using machine learning and event-driven approaches



Demonstrating value

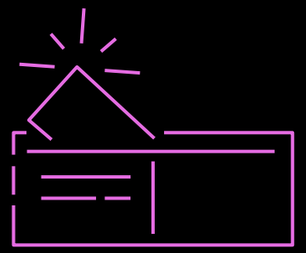
IT strategies aligned to business goals

Transparency beyond cost

Cost optimization / prioritization vs. cost cutting

Investment planning

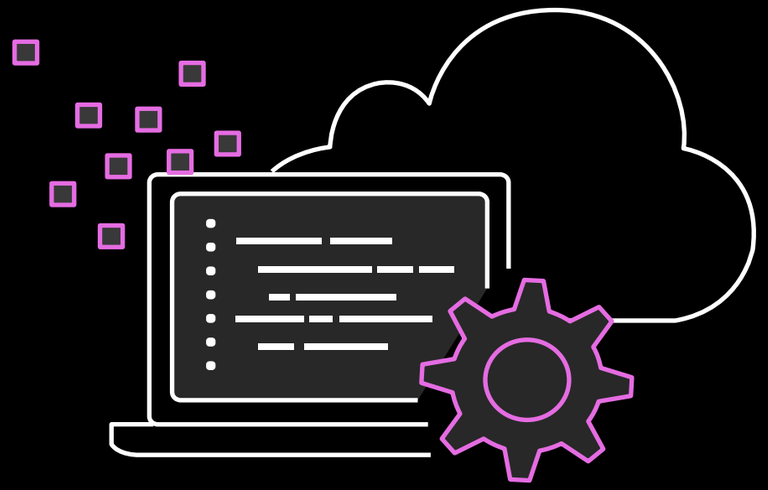
DRIVING DECISION MAKING WITH AUTOMATED DATA DISCOVERY AND BUSINESS KPIS



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Analytics drive smarter migrations



AWS Migration Evaluator quickly delivers an optimized business case for migration

- Determine the most cost-effective path to cloud
- Maximize Microsoft licenses for even bigger savings

Business case KPI examples

PROJECT SCORECARD

Project	ROI	Cost reduction ($ / transaction)	Reduction in downtime	Time to market improvement
1.	44%	15%	50%	60%
2.	60%	10%	20%	10%
3.	35%	30%	40%	50%
4.	20%	20%	15%	20%
5.	70%	40%	45%	50%

Project prioritization case study

TELCO COMPANY EXAMPLE – PROJECT SCORING MATRIX

Project score example

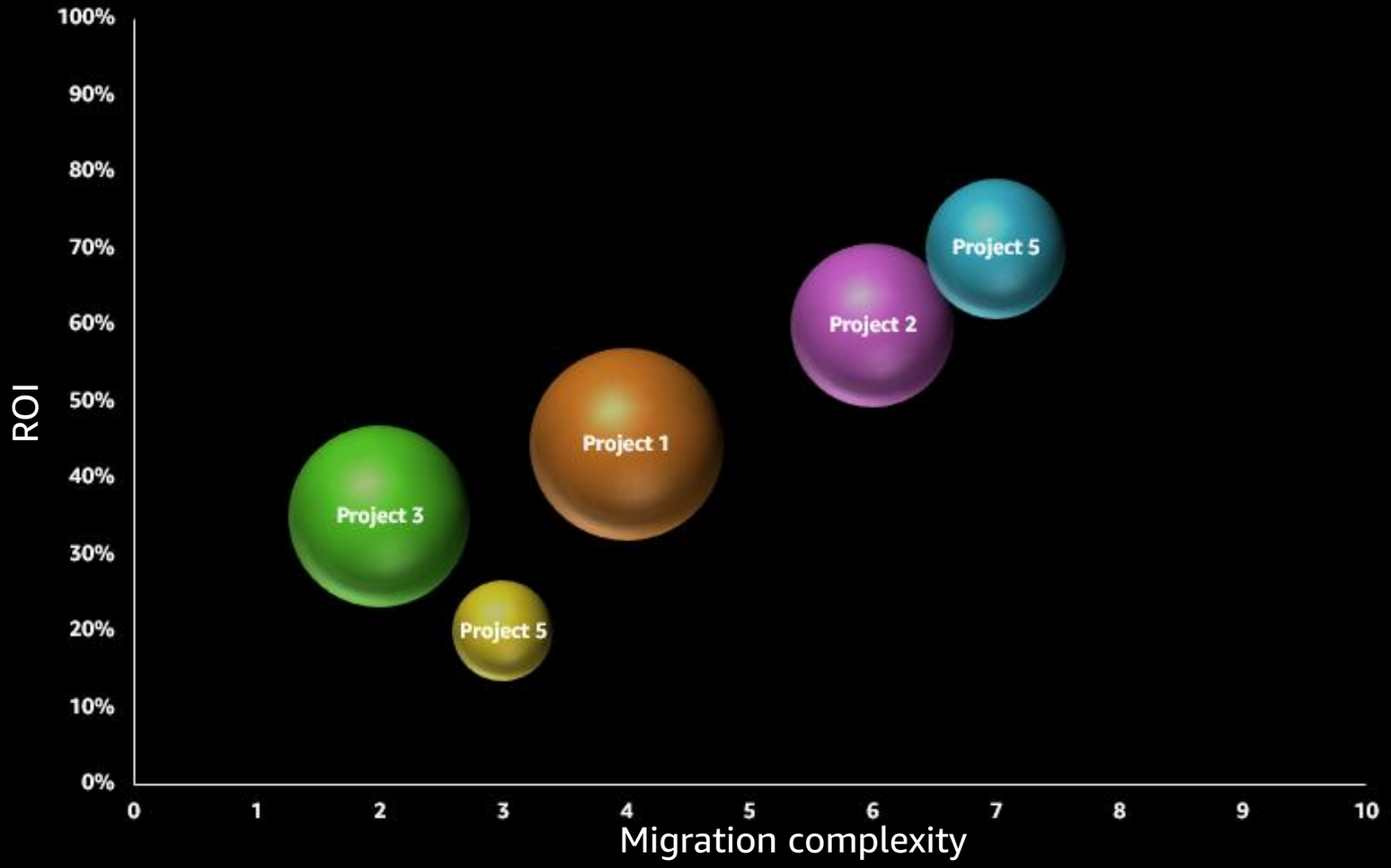
1. Three score components; cost to run in cloud, migration complexity and business value
2. Each component of the score has a matrix aligning from 0-10 with 10 being the most favorable (e.g. low cost of investment)
3. These are weighted based on customer objectives
4. The average of these components become the business value score for evaluation

Cost				Business Value							
AW Cost	Score	Migration	Score	Cost Savings	Score	Staff Productivity	Score	Operational Resilience	Score	Business Agility	Score
0-$1M	10	0-$1M	10	0-10%	1	0-10%	1	0-10%	1	0-10%	1
$1M-$2M	9	$1M-$2M	9	10%-20%	2	10%-20%	2	10%-20%	2	10%-20%	2
$2M-$3M	8	$2M-$3M	8	20%-30%	3	20%-30%	3	20%-30%	3	20%-30%	3
$3M-$4M	7	$3M-$4M	7	30%-40%	4	30%-40%	4	30%-40%	4	30%-40%	4
$4M-$5M	6	$4M-$5M	6	40%-50%	5	40%-50%	5	40%-50%	5	40%-50%	5
$5M-$6M	5	$5M-$6M	5	50%-60%	6	50%-60%	6	50%-60%	6	50%-60%	6
$6M-$7M	4	$6M-$7M	4	60%-70%	7	60%-70%	7	60%-70%	7	60%-70%	7
$7M-$8M	3	$7M-$8M	3	70%-80%	8	70%-80%	8	70%-80%	8	70%-80%	8
$8M-$9M	2	$8M-$9M	2	80%-90%	9	80%-90%	9	80%-90%	9	80%-90%	9
>$10M	1	>$10M	1	>90%	10	>90%	10	>90%	10	>90%	10

		Weighting	100%	100%	100%	100%	75%	50%	
			Score						
Project	Business Value (Bubble Size)		Cost	Migration Complexity	Cost Savings	Staff Productivity	Operational Resilience	Business Agility	Business Value Score
Project 3	45%		4	4	6	6	5	6	4.46

Project prioritization case study (continued)

TELCO COMPANY EXAMPLE – PROJECT SCORING MATRIX



Above: Size of bubble represents aggregate score, which is plotted against complexity and ROI

Benchmarking

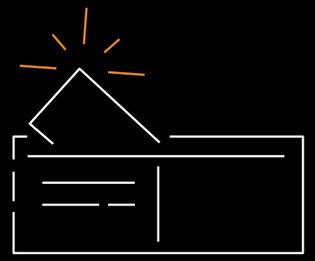
ESTABLISH TARGETS TO MEASURE AND TRACK PERFORMANCE



AWS re:Invent

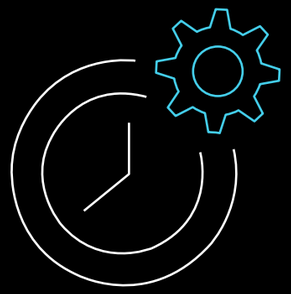
© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Cloud value benchmarking: Telco example



Cost savings (TCO)

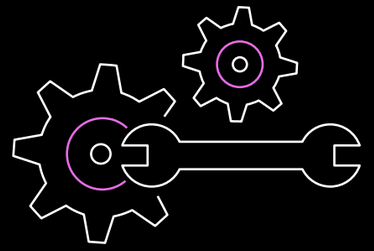
38.2%
Reduction in
cost per user



Staff productivity

50.8%
Increase in
VMs per admin

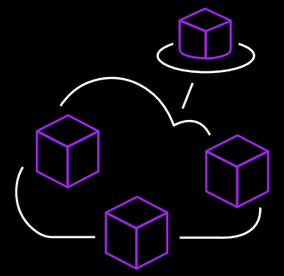
24.8%
Increase in
TBs per admin



Operational resilience

35.2%
Decrease in
incidents per month

28.3%
Decrease in
mean time to resolution



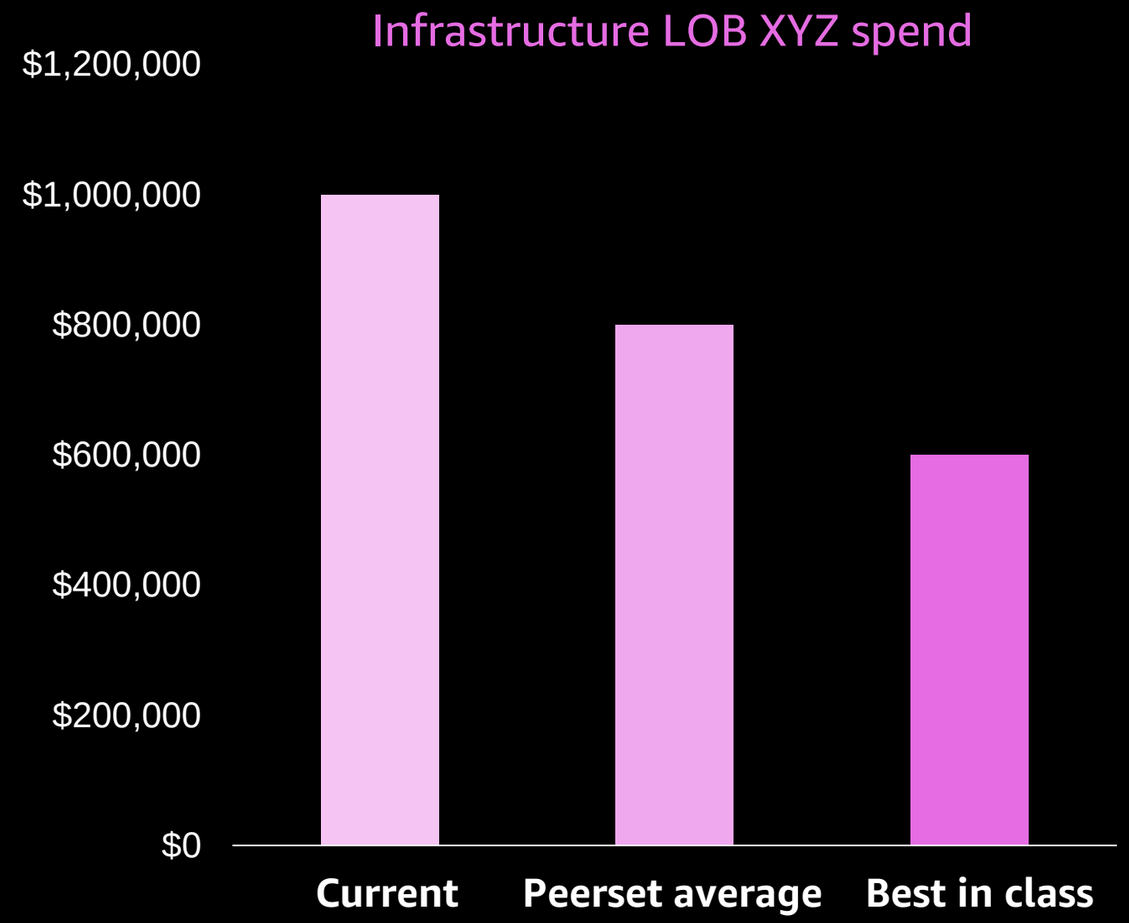
Business agility

41.7%
Reduction in
time to market

139.6%
Increase in
code deploy frequency

Benchmarking best in class

WORKING BACKWARD FROM BEST IN CLASS TO IMPROVE PLANNING AND PERFORMANCE



- *Best in class* refers to those organizations that have been recognized as the best in an industry, based on some criterion
- The objective of best in class is to provide a basis for *continual improvement*

Using benchmarks to quantify risk reduction

CASE STUDY – INSURANCE COMPANY

Reduce cost of downtime – KPI improvement

1.	Monthly critical incidents	32%
2.	Monthly security incidents	34%
3.	Annual prod downtime (min)	65%
4.	Mean time to resolution (min)	17%

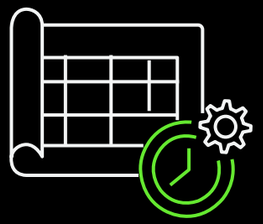
Articulate the value associated with a reduction in downtime from moving critical applications from on premises to AWS

Business value estimate

1.	Average hours of downtime	48
2.	Number of minutes	2,880
3.	Cost per minute of downtime	$8,851
4.	Improvement	32%
5.	Risk reduction	$8,157,082

Forecasting

AWS AND PARTNER TOOLS TO IMPROVE
FORECAST ACCURACY AND CONTROL BUDGET



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

Components of an IT Forecast

BREAKING DOWN DRIVERS OF YOUR IT FORECAST

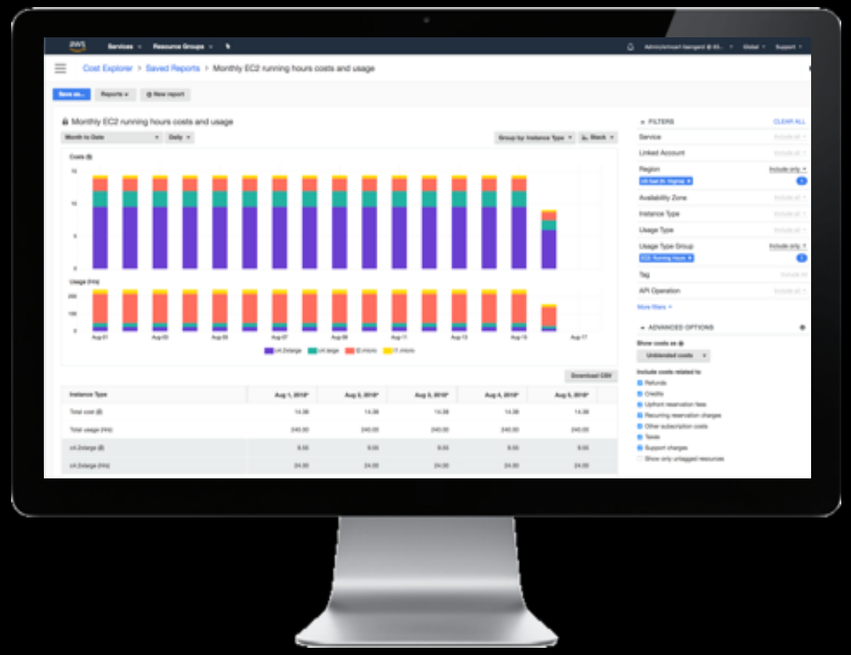
Business demand	IT infrastructure	Tech dev	Other
Transactions	Resource plan	Resource plan	Middle office
Volumes	Cloud	Software	Other
	Other	Other	

Best practices

- Trend based
- Event driven
- Resource controls

Trend-based forecasting: AWS Cost Explorer

MACHINE LEARNING ALGORITHMS USING HISTORICAL TRENDS TO IMPROVE FORECASTING ACCURACY



Automated trend analysis

Identify anomalous cost and usage events across your account(s), based on historical patterns

User-friendly experience and programmatic access

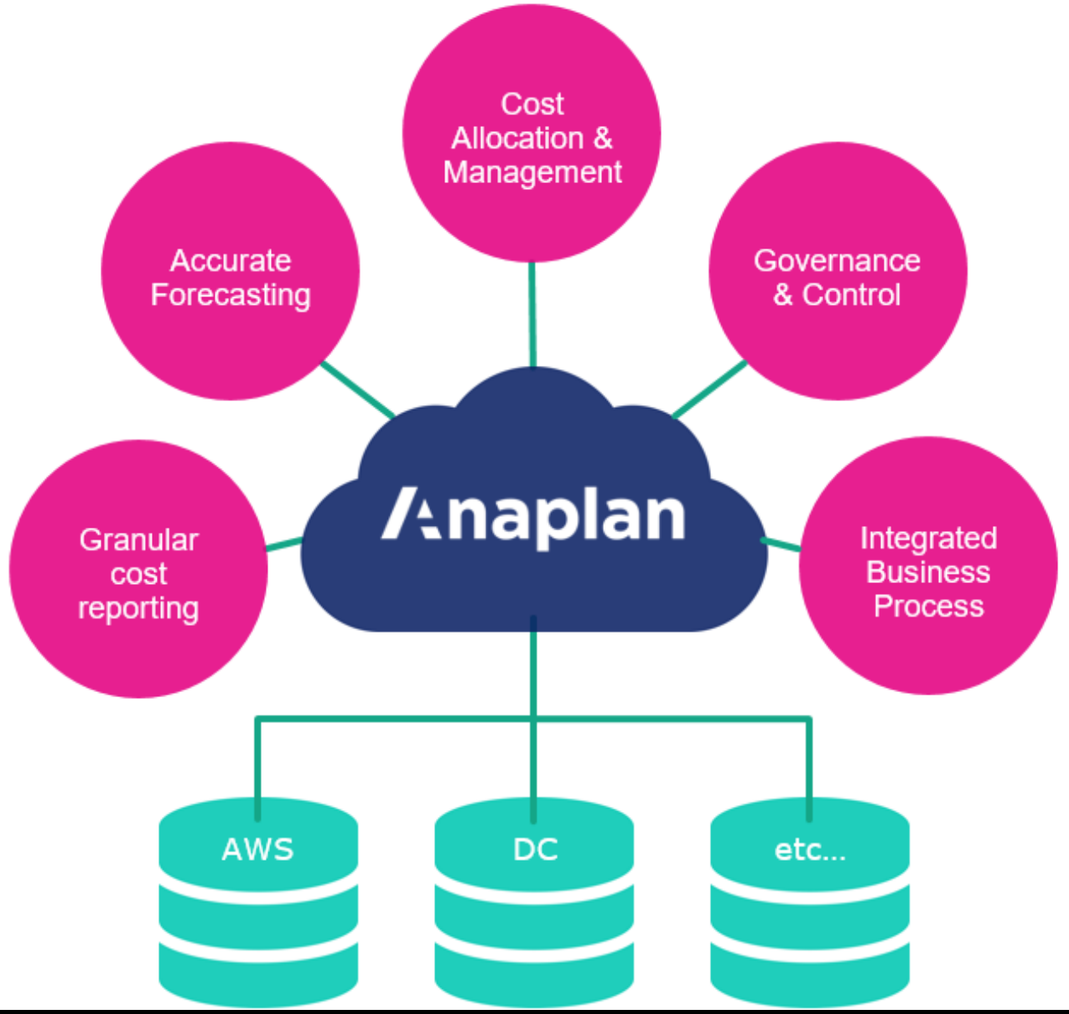
User-friendly interface for users of all expertise levels, and Cost Explorer API available for custom application to address specific cost management needs

Comprehensive dashboards

View month-to-date costs, month-end forecasted costs, and saved reports

Event-driven forecasting: Anaplan

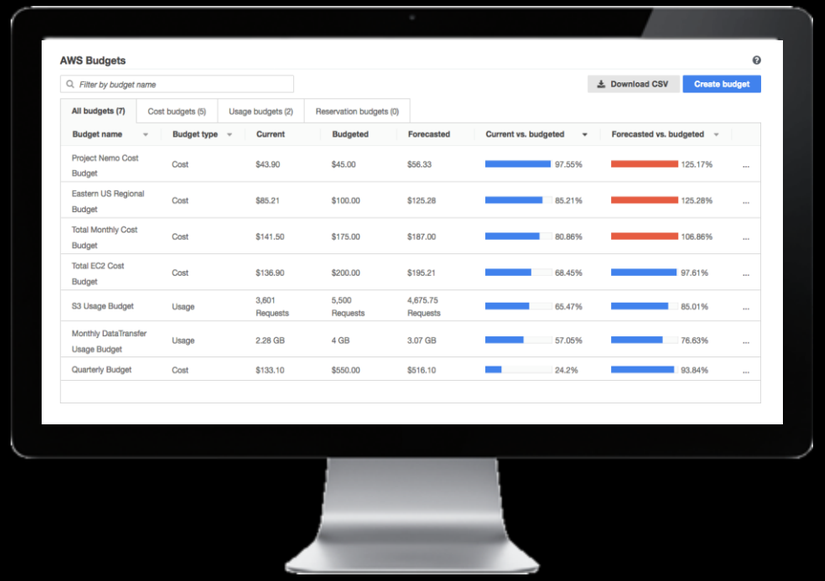
COMBINING ACTUALS AND FUTURE PLANNED INITIATIVES FOR A COMPREHENSIVE FORECAST



- ✓ Embedded intelligent forecasting capabilities
- ✓ Rapid time to value and ROI
- ✓ Increased operating margins
- ✓ Increased cross-functional collaboration
- ✓ Detailed cross charge allocations
- ✓ Decreased plan cycle time
- ✓ Connected Finance + IT planning

Resource controls: AWS Budgets

SET EXPECTATIONS AROUND CLOUD COSTS FOR PROJECTS, APPLICATIONS, AND MORE



Various budget types

Set custom budgets (daily, monthly, quarterly, annually) for your cost and usage thresholds, as well as utilization and coverage targets for your reservation

Customizable budgets

Refine your budgets using filters and variable budget amounts

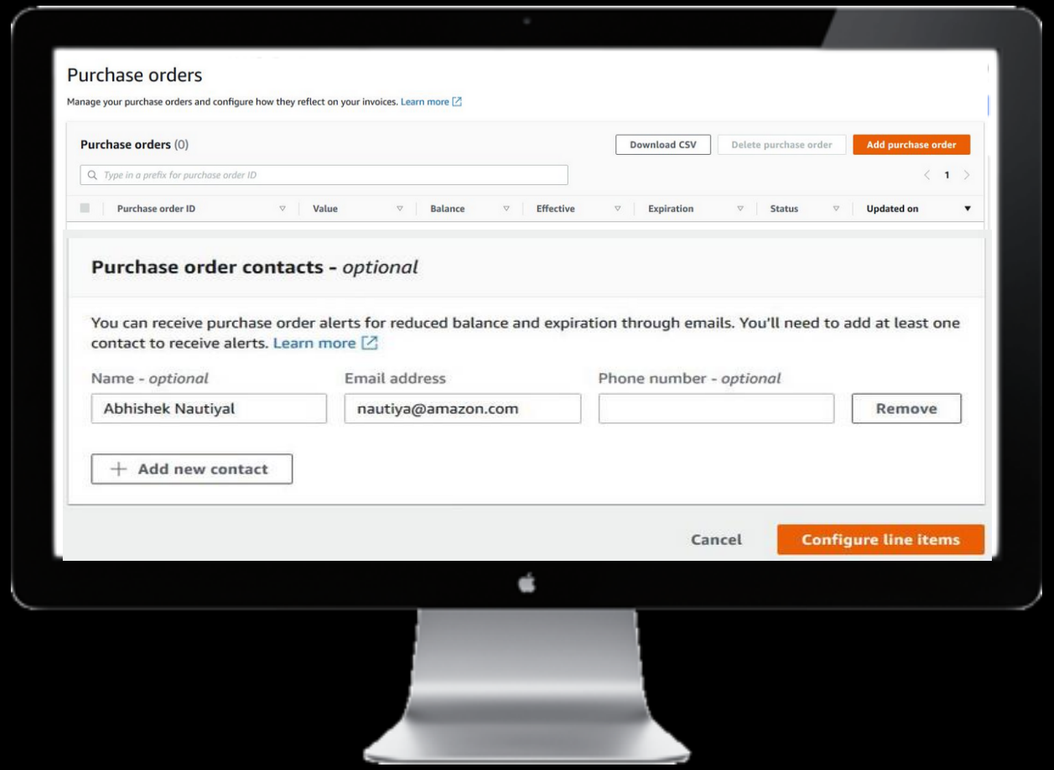
Ongoing monitoring and alert notification

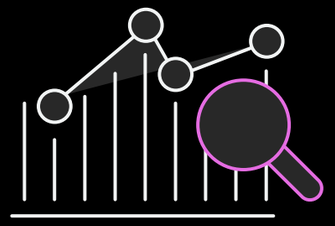
Receive regular budget reports; be alerted when your cost and usage exceed (or are forecasted to exceed) your budgeted amount, or when your Reserved Instances or Savings Plans' utilization or coverage drops below your custom thresholds

Resource controls: AWS Purchase Order Management

MANAGING, CONFIGURING, AND TRACKING PURCHASE ORDERS

- Single pane of glass to view and manage all purchase orders
- Define mapping of purchase orders to invoices through line item configurations
- Manage PO status, track PO balance and expiration, and configure contacts to receive email notifications for PO expiration and balance depletion





Demonstrating IT value

SHIFTING MINDSETS AWAY FROM COST REDUCTION AND TOWARD VALUE CREATION

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.

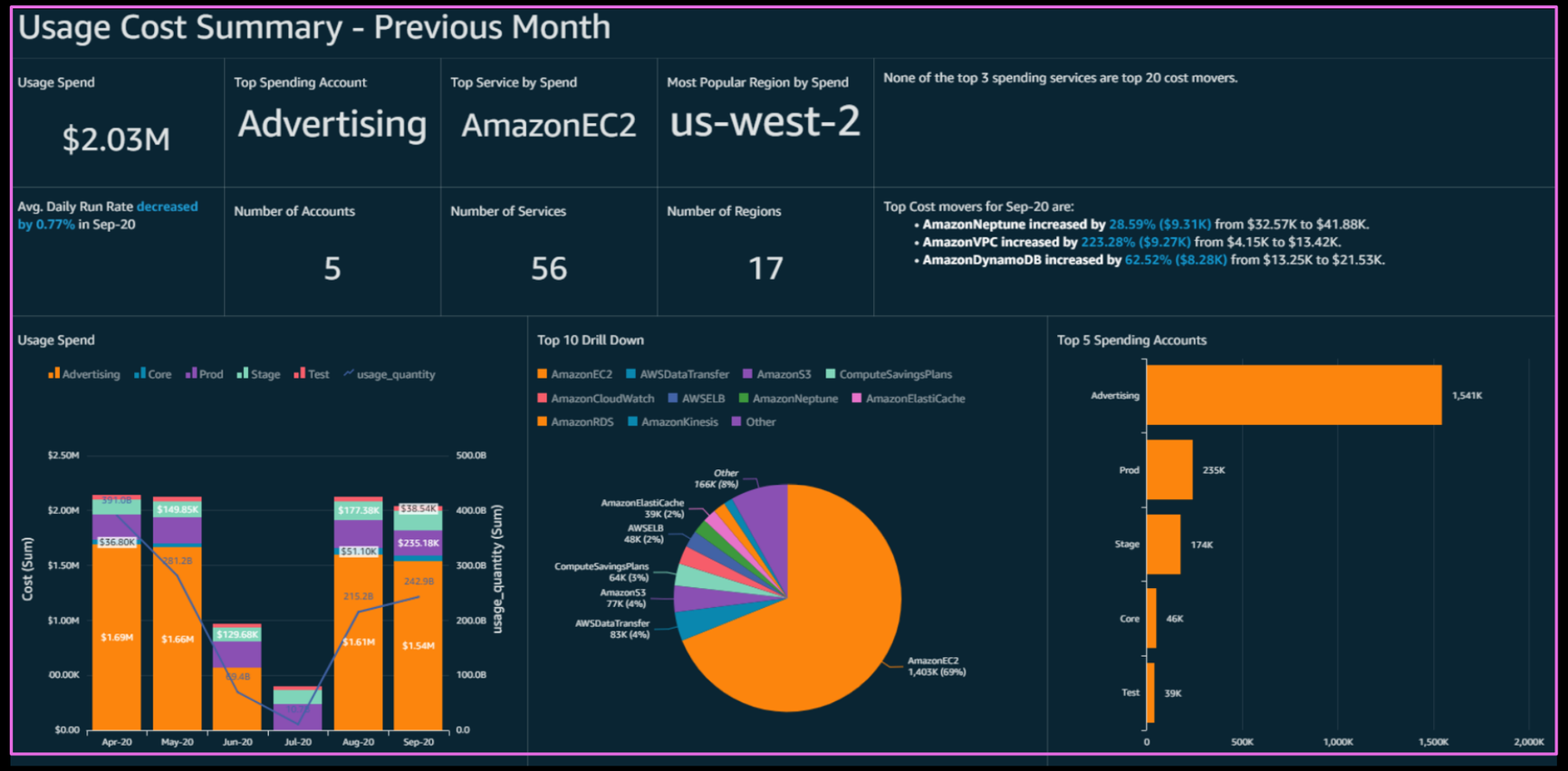
Reporting IT costs: Just the numbers

NUMBERS ON THEIR OWN DON'T ALWAYS SHOW THE FULL PICTURE AND CAN BE MISLEADING

Project	YTD actuals	YTD budget	YTD variance	FY forecast	FY budget	FY variance
1.	2,800	3,200	400	10,200	10,200	-
3.	5,600	4,800	(800)	20,000	13,500	(6,500)
5.	400	420	20	8,000	9,000	1,000

Visualizing IT costs and usage

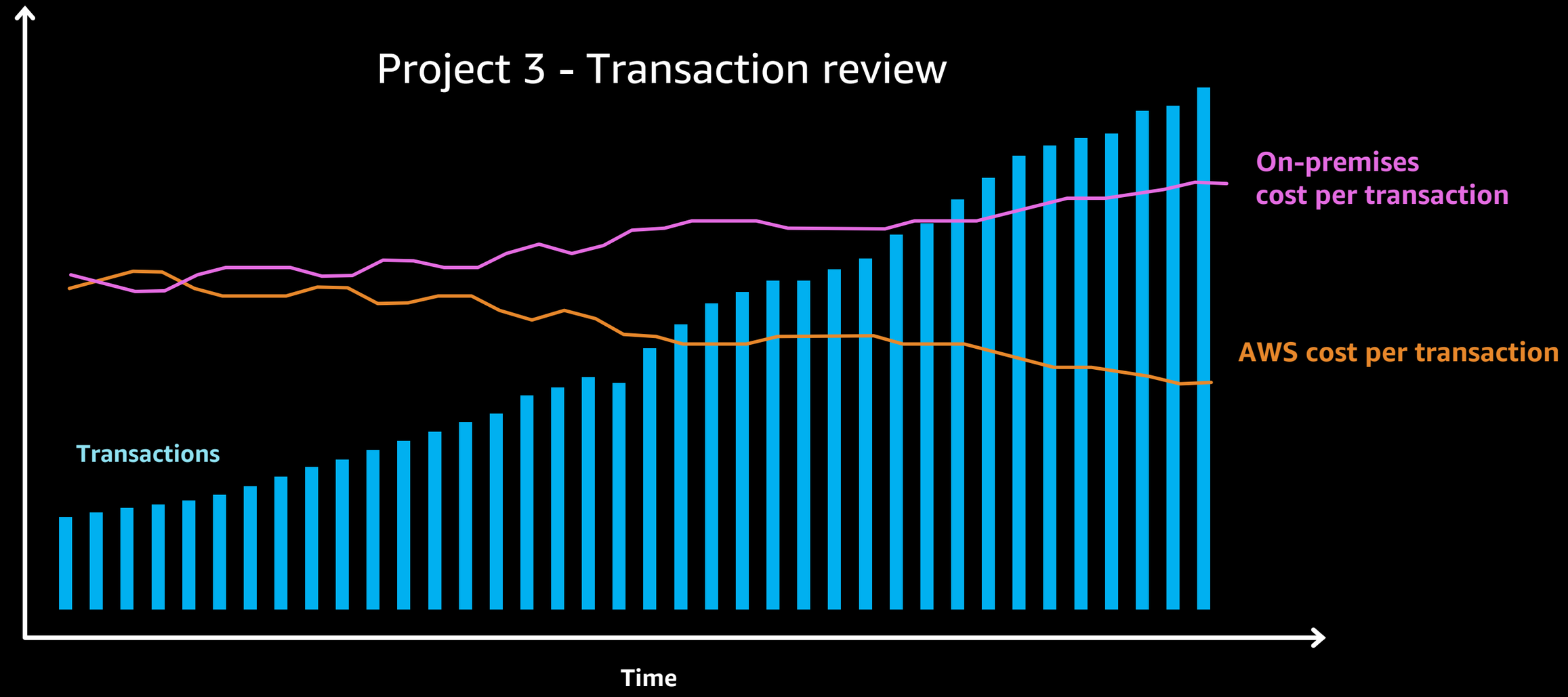
AWS Cost and Usage reports can be analyzed and visualized using Amazon Athena and Amazon QuickSight, providing the ability to visualize and dive deep on costs at the provider and receiver levels



For more: https://aws.amazon.com/blogs/big-data/query-and-visualize-aws-cost-and-usage-data-using-amazon-athena-and-amazon-quicksight/

Broadening the IT story

TRACKING VALUE DRIVERS TO CONTEXTUALIZE COSTS

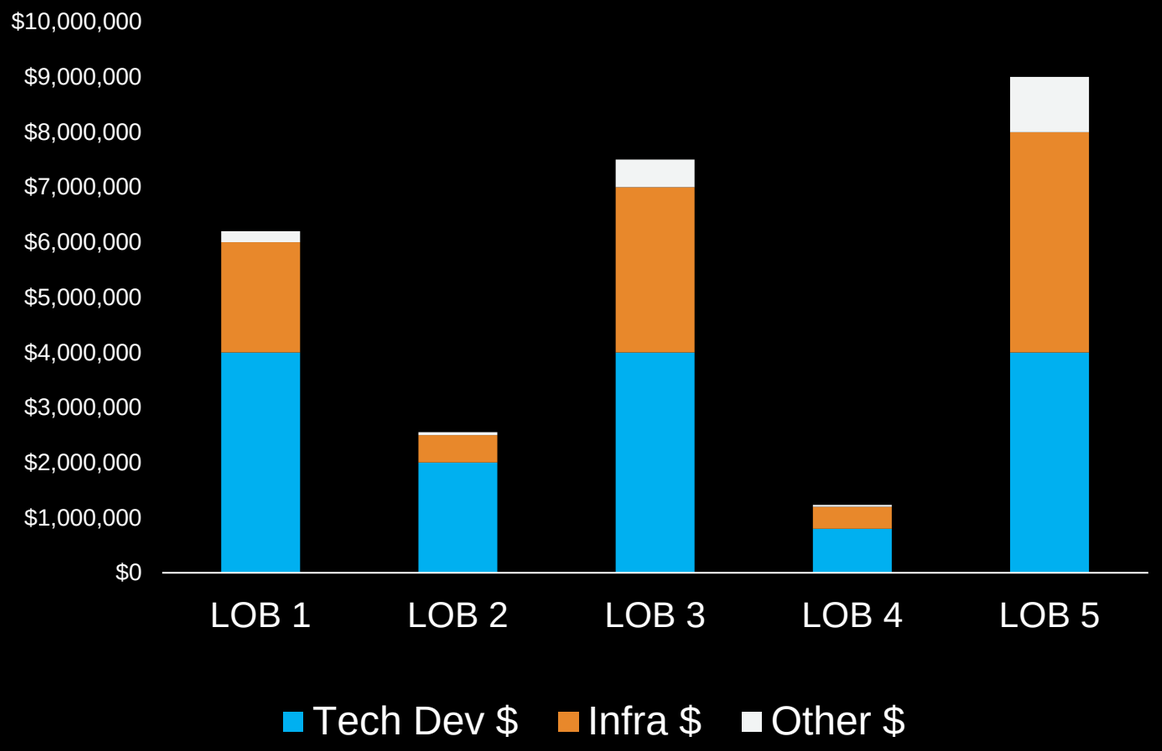


Above: Incorporating KPIs (e.g., transactions) to understand variances and track value, not just cost

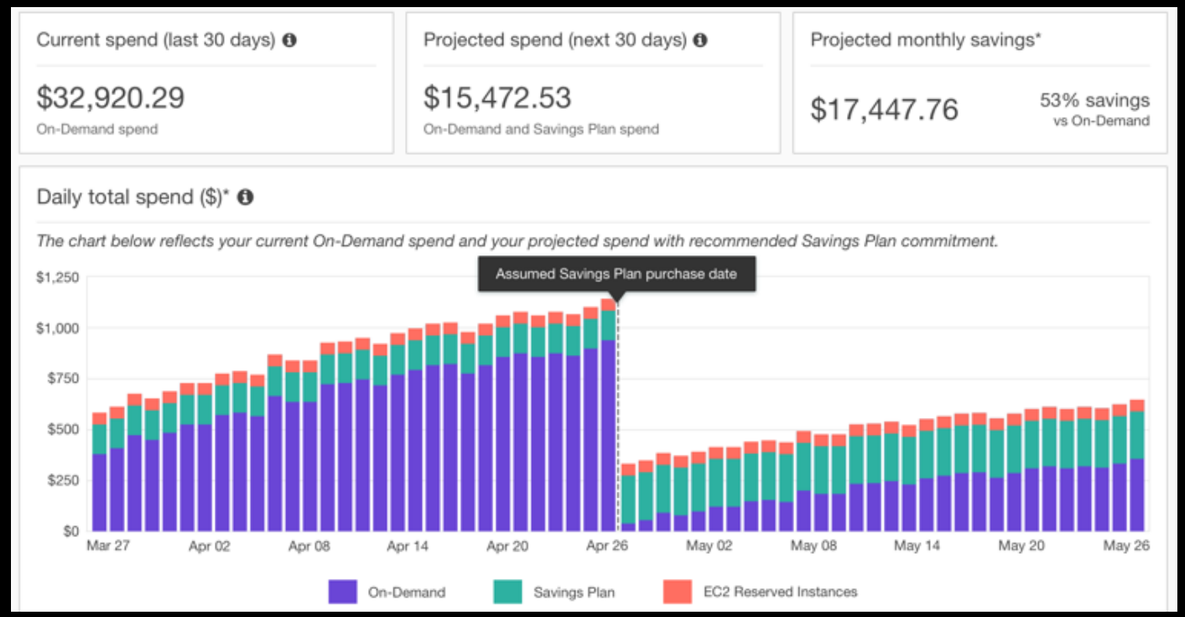
IT optimization vs. cost cutting

PROACTIVELY IDENTIFY OPTIMIZATION OPPORTUNITIES WITH AWS COST MANAGEMENT TOOLS

Top-down cost view



Optimization mechanism



Getting started

1.	Migration Evaluator	aws.amazon.com/migration-evaluator/getting-started/
2.	Cloud Economics Center	aws.amazon.com/economics/
3.	Cloud Financial Management solutions	aws.amazon.com/aws-cost-management/
4.	AWS Cost Management blog	aws.amazon.com/about-aws/whats-new/aws-cost-management/
5.	Contact us	Ask your account manager about Cloud Economics

Thank you!



AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.



Please complete the session survey

AWS re:Invent

© 2020, Amazon Web Services, Inc. or its affiliates. All rights reserved.