
AWS
re:Invent
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BSI207

Get clarity on your data in seconds with Amazon QuickSight Q

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Language is complex.
One small change can change everything.

It’s time to eat, Mike!

It’s time to eat Mike!

show us sales in north america

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What will you learn?

What are the benefits of Amazon QuickSight Q?

How can you leverage its power?

What are real-world examples at Nasdaq?

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Amazon QuickSight benefits



Unified BI for all needs

Interactive dashboards, Q, embedded analytics, and paginated reports from the same source of truth



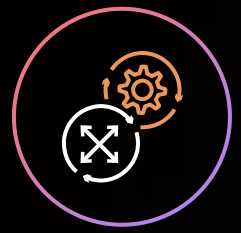
Insights anywhere

Embed easily with extensive APIs, look-n-feel customizations for seamless data experiences in any app or portal



Augmented analytics

Ask questions in natural language with Q—explore forecasts, anomalies, narratives with built-in ML



Auto-scaling

Scale effortlessly to 100k's of users with no servers to manage; scale to 1B+ row datasets with SPICE in-memory data engine



Policy-based governance, security

Share securely with row & column-level security, role-based access control, with automated user provisioning



Get more with less

Reduce costs with pay-per-use pricing—no long-term contracts or hidden costs for scaling

Over 100,000 customers use QuickSight

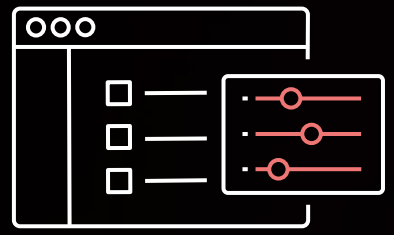
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What is Amazon QuickSight Q?

Q enables anyone to ask questions about their data in natural language and receive accurate answers with relevant visualizations.

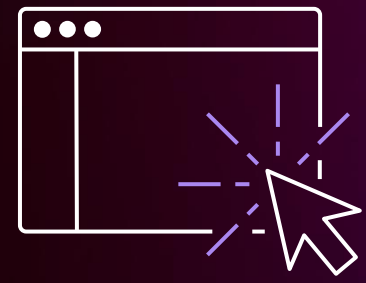
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INSTEAD OF THIS

Put millions of filters on thousands of dashboards

DO THIS

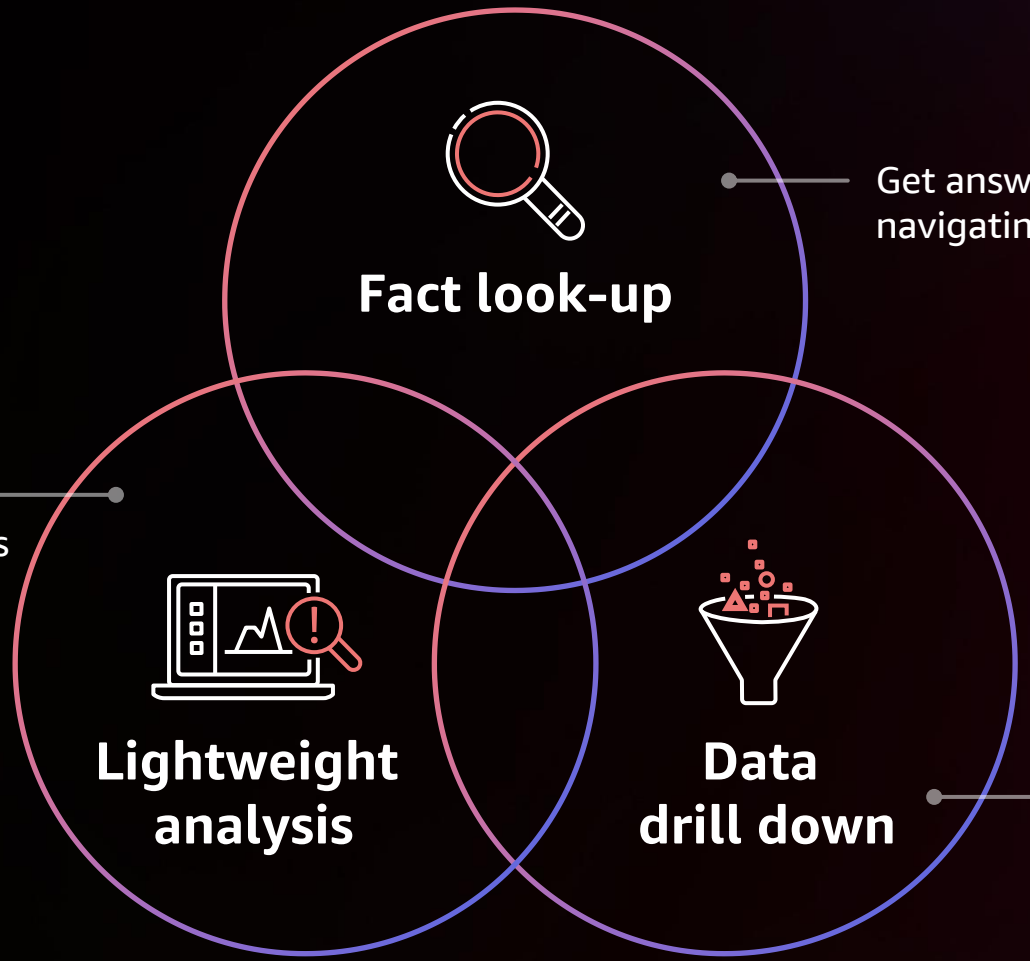


Design simple, focused dashboards and let Q dig through the long-tail use cases

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Common uses for QuickSight Q



Get answers quickly, without navigating dashboard filters

Generate new insights on-the-fly, without spawning new dashboards

Pinpoint data specific to an aspect of the business, without modifying the dashboard

Q solves all 3 tasks without requiring the help of an analyst

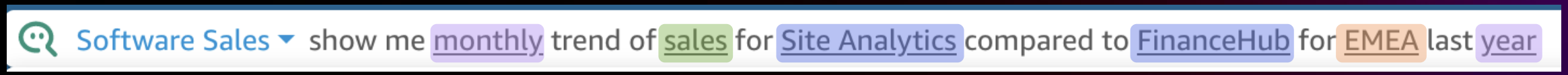
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How it works

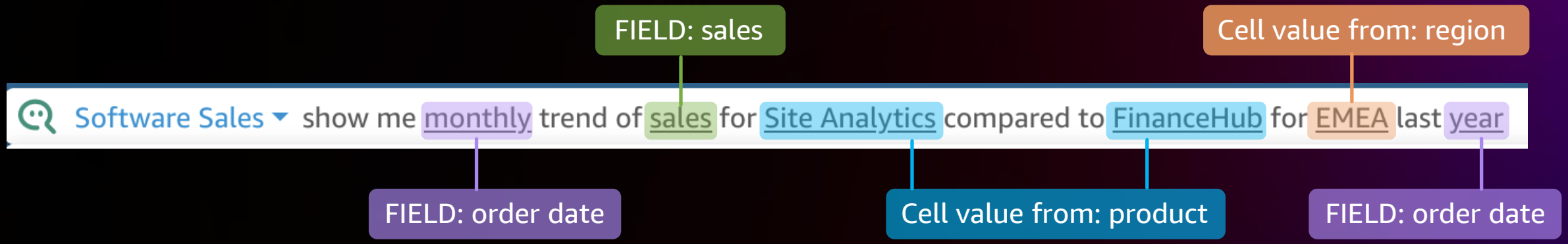
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Recognize entities



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Link to data



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Interpret intent



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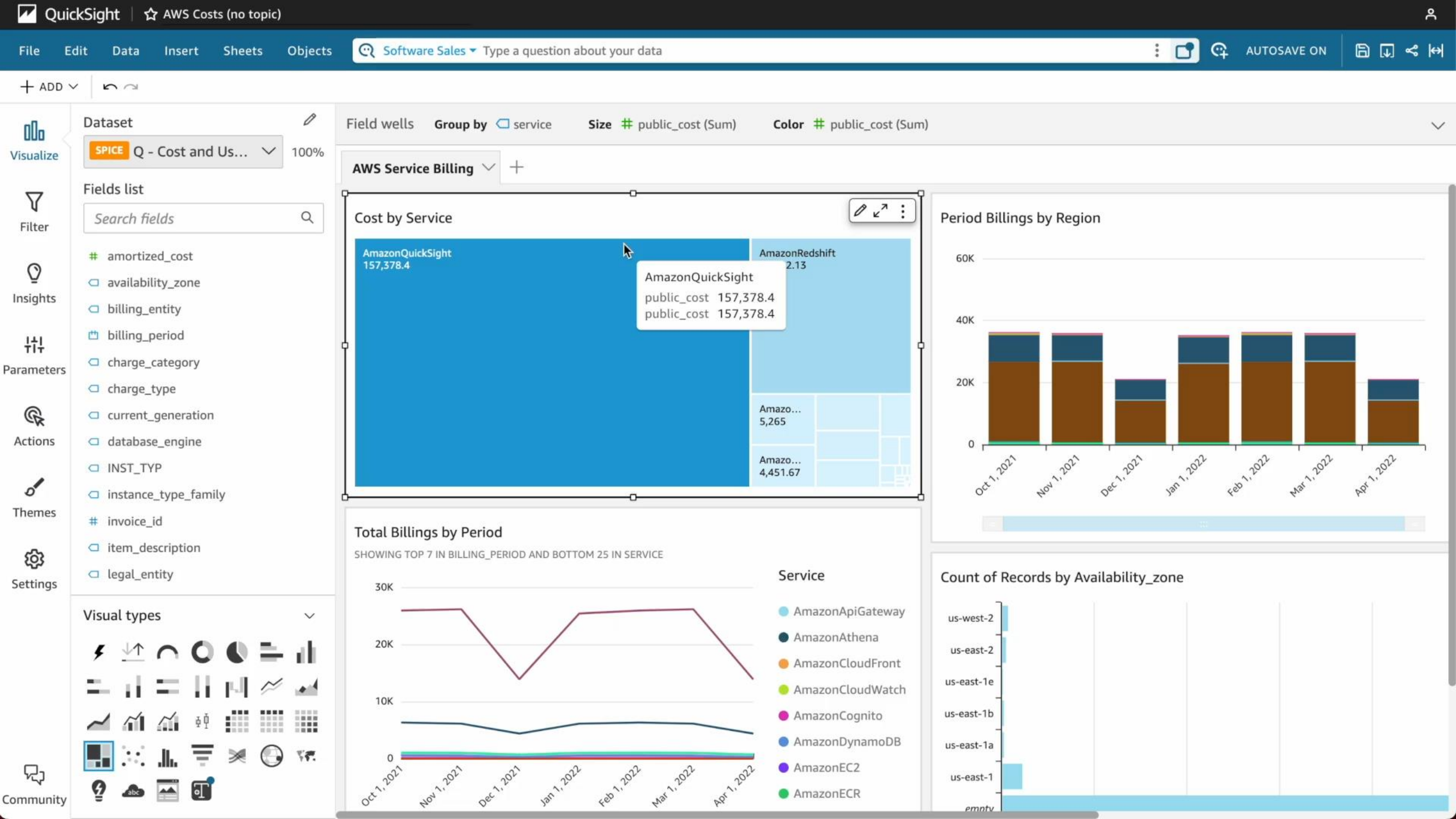
Topics are the foundation of Q

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What is a topic?

A collection of data and business rules that align with a subject area that your business users can ask questions about.

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QuickSight
AWS Costs (no topic)
File
Edit
Data
Insert
Sheets
Objects
Software Sales
Type a question about your data
AUTOSAVE ON
ADD
Visualize
Filter
Insights
Parameters
Actions
Themes
Settings
Community
Dataset
SPICE Q - Cost and Us...
100%
Fields list
Search fields
amortized_cost
availability_zone
billing_entity
billing_period
charge_category
charge_type
current_generation
database_engine
INST_TYP
instance_type_family
invoice_id
item_description
legal_entity
Visual types
Field wells
Group by service
Size public_cost (Sum)
Color public_cost (Sum)
AWS Service Billing
Cost by Service
AmazonQuickSight
157,378.4
AmazonRedshift
2.13
AmazonQuickSight
public_cost 157,378.4
public_cost 157,378.4
Amazo...
5,265
Amazo...
4,451.67
Period Billings by Region
60K
40K
20K
0
Oct 1, 2021
Nov 1, 2021
Dec 1, 2021
Jan 1, 2022
Feb 1, 2022
Mar 1, 2022
Apr 1, 2022
Total Billings by Period
SHOWING TOP 7 IN BILLING_PERIOD AND BOTTOM 25 IN SERVICE
30K
20K
10K
0
Oct 1, 2021
Nov 1, 2021
Dec 1, 2021
Jan 1, 2022
Feb 1, 2022
Mar 1, 2022
Apr 1, 2022
Service
AmazonApiGateway
AmazonAthena
AmazonCloudFront
AmazonCloudWatch
AmazonCognito
AmazonDynamoDB
AmazonEC2
AmazonECR
Count of Records by Availability_zone
us-west-2
us-east-2
us-east-1e
us-east-1b
us-east-1a
us-east-1
empty

QuickSight | AWS Cost Demo Future

File Edit Data Insert Sheets Objects | AWS Cost Demo Future | which service do we use the most? | AUTOSAVE ON

ADD

Visualize
Filter
Insights
Parameters
Actions
Themes
Settings
Community

Dataset
SPICE Q - Cost and Us... 100%

Fields list
Search fields

- amortized_cost
- availability_zone
- billing_entity
- billing_period
- charge_category
- charge_type
- current_generation
- database_engine
- INST_TYP
- instance_type_family
- invoice_id
- item_description
- legal_entity

Visual types

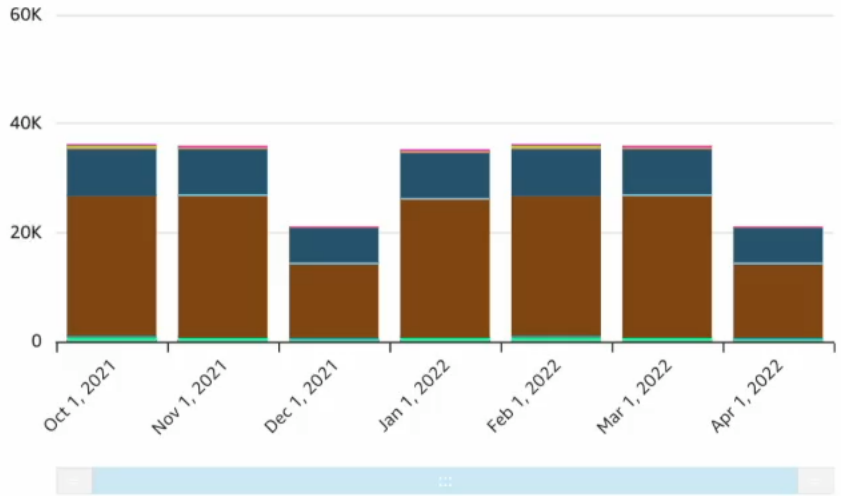
Field wells | X axis billing_period | Value public_cost (Sum) | Group/Color region | Small multiples

AWS Service Billing

Cost by Service

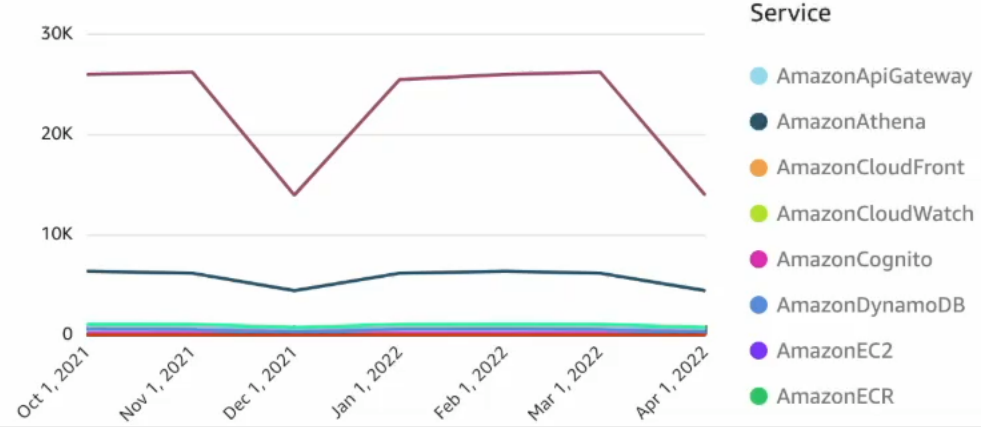


Period Billings by Region



Total Billings by Period

SHOWING TOP 7 IN BILLING_PERIOD AND BOTTOM 25 IN SERVICE



Service
- AmazonApiGateway
- AmazonAthena
- AmazonCloudFront
- AmazonCloudWatch
- AmazonCognito
- AmazonDynamoDB
- AmazonEC2
- AmazonECR

Count of Records by Availability_zone



Features for developers



Embed questions as text

Submit questions on click without requiring users to manually type the question, enabling questions as widgets



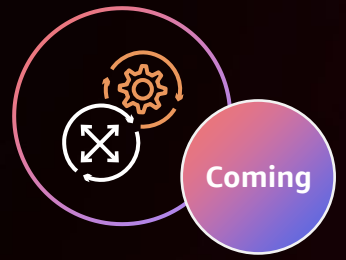
Anonymous access

Easily embed the Q bar into web applications, wikis or portals without having to set up, manage infrastructure or provision users



RLS and tag-based rules

Personalize and control access to data for specific sessions by creating topics that use access controlled datasets



API for topic migration

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Nasdaq: A Customer Journey

Who we are

The problem we need to solve

How we have done that

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Nasdaq

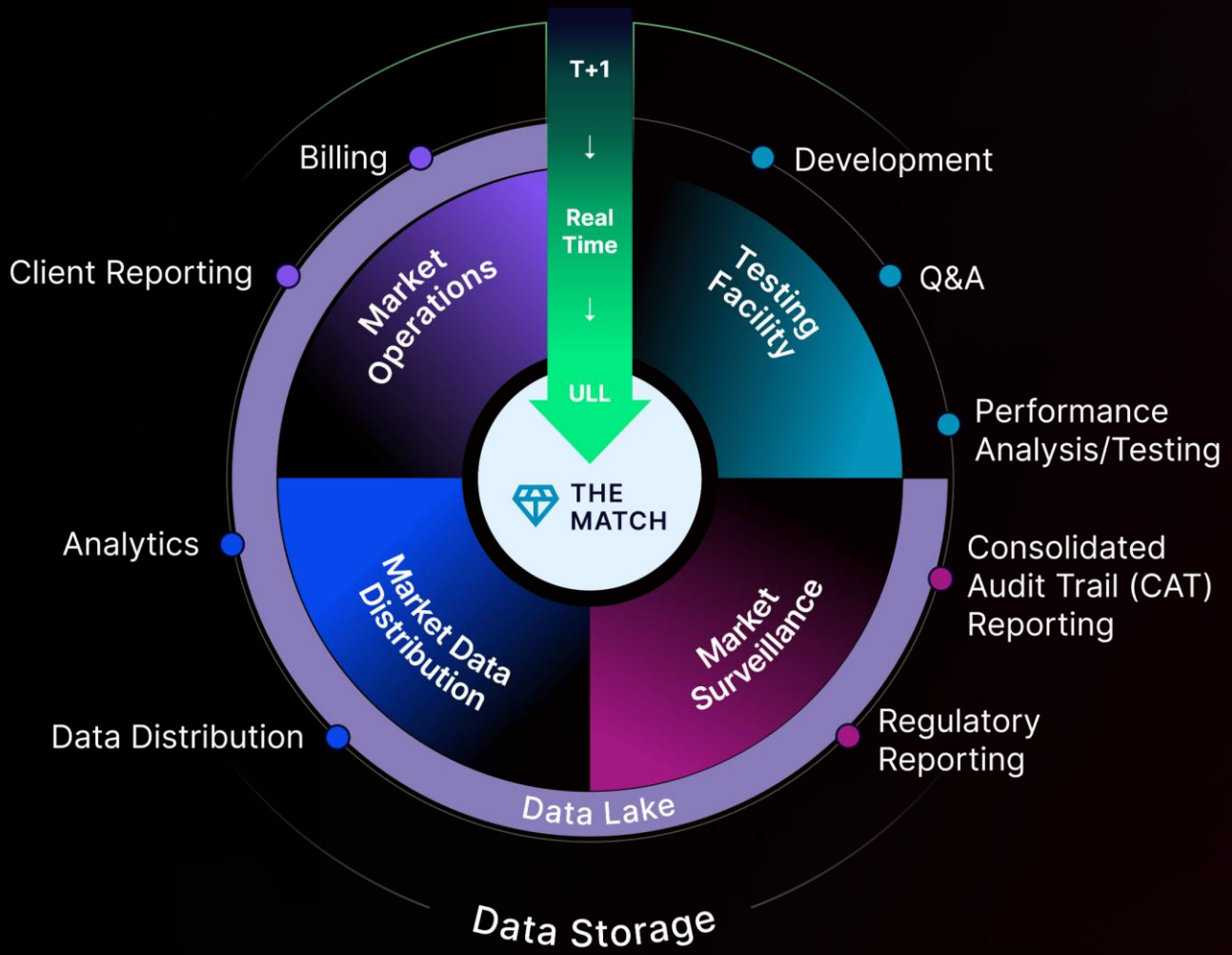
- First Electronic Exchange
- We operate 30+ exchanges for stocks, bonds, options & derivatives in North America and the Nordics
- Home of technology: 73% of all tech listings in the U.S. and to the top 4 largest tech companies by market capitalization
- Technology Provider to:
  - Over 130 marketplaces globally
  - 2,200+ financial institutions
  - Over 6,000 corporates
  - Listing venue for 4,150 public companies globally



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Systematic Move to AWS



Pre-2020: Foundational Data & Systems

2020-21: Testing our Strategy

2022: Building the Next-Generation of Capital Markets

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Our challenges



Complex and large



Older tools and approaches



Inflexible and slow to adjust

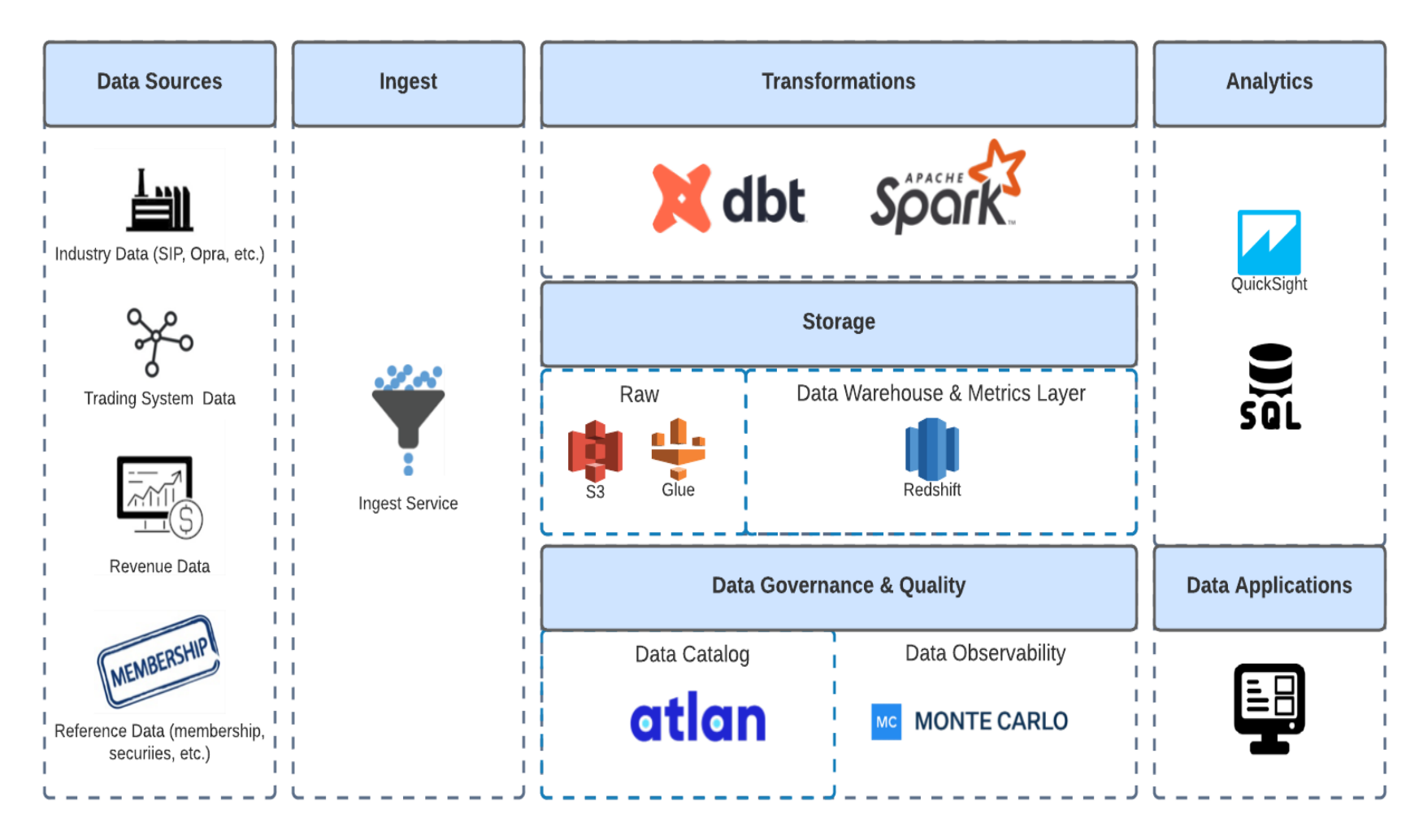


Communication gaps and confusion

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A New Approach to the Data Stack



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Why QuickSight?

- What were we looking for in a BI Tool?
  - SaaS solution that integrated easily with AWS
  - Embedding
  - Support for multi-tenancy
  - Cost
  - Solid Security & logging
  - Easy for users to use
  - Row level security

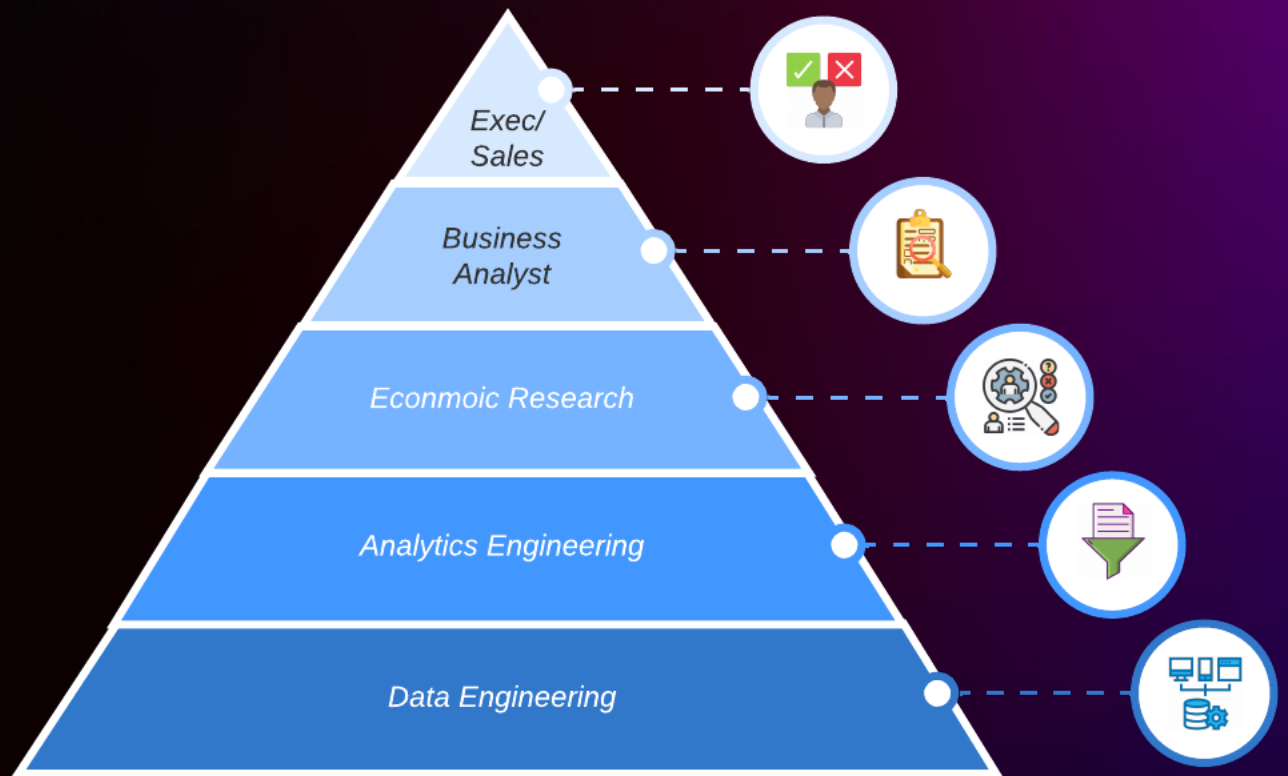
Quicksight Checks all the Boxes!

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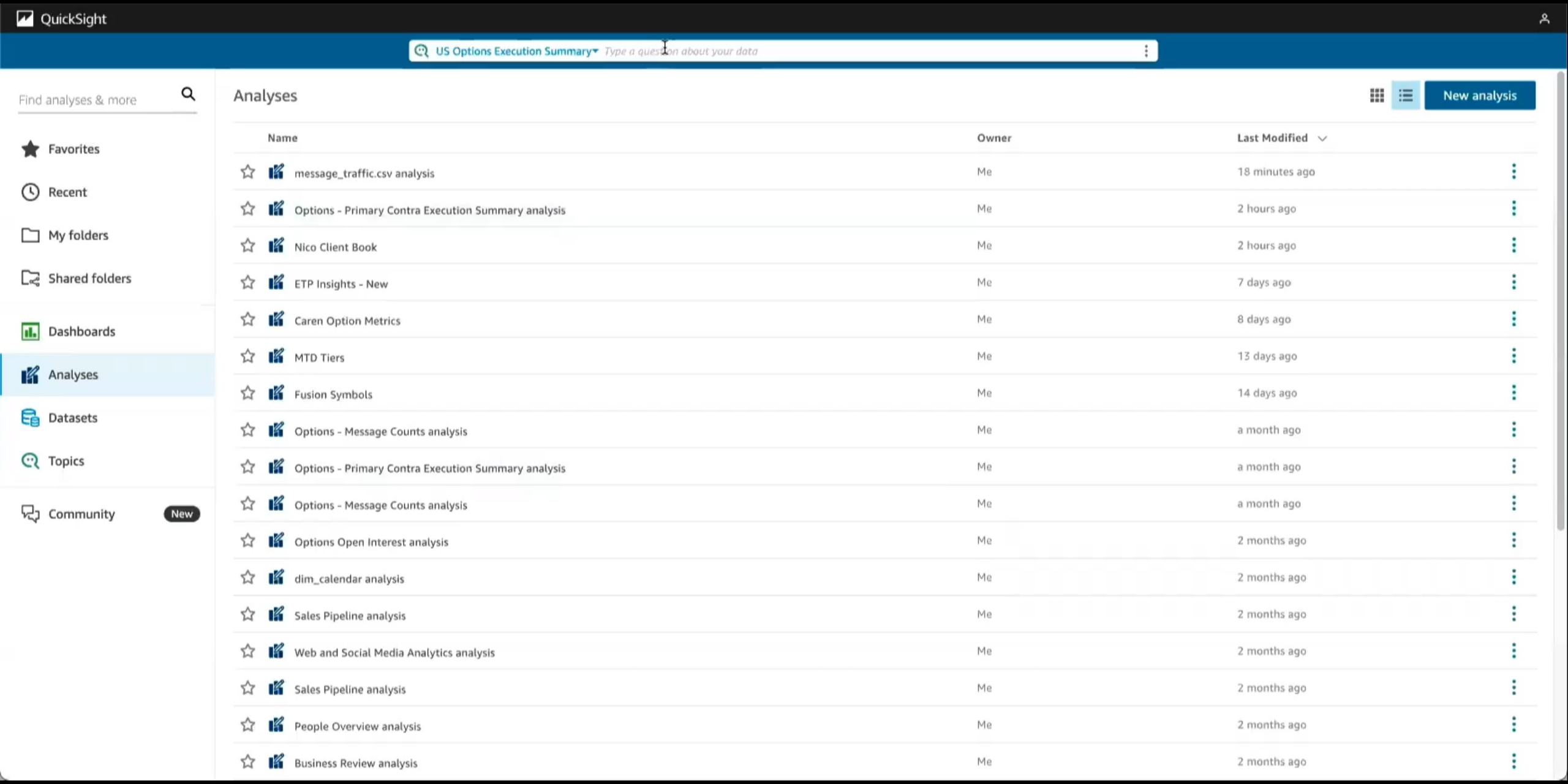
What QuickSight Q Offers

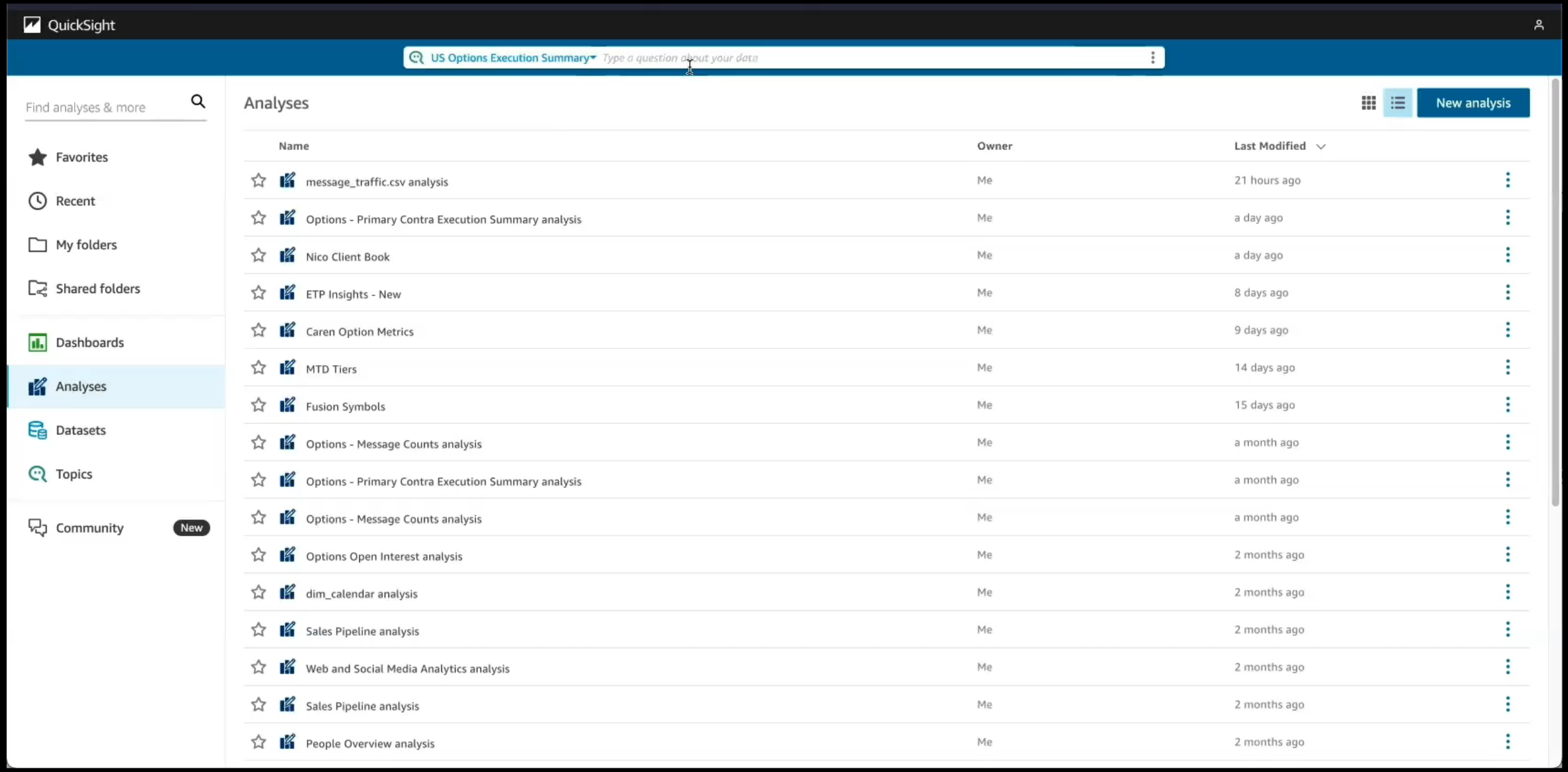
- Enables everyone
- Insights quickly
- Build confidence in results

QuickSight Q can benefit the entire data team!



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QuickSight
US Options Execution Summary
Type a question about your data
Find analyses & more
Favorites
Recent
My folders
Shared folders
Dashboards
Analyses
Datasets
Topics
Community
New
Analyses
New analysis
Name
Owner
Last Modified
message_traffic.csv analysis
Me
18 minutes ago
Options - Primary Contra Execution Summary analysis
Me
2 hours ago
Nico Client Book
Me
2 hours ago
ETP Insights - New
Me
7 days ago
Caren Option Metrics
Me
8 days ago
MTD Tiers
Me
13 days ago
Fusion Symbols
Me
14 days ago
Options - Message Counts analysis
Me
a month ago
Options - Primary Contra Execution Summary analysis
Me
a month ago
Options - Message Counts analysis
Me
a month ago
Options Open Interest analysis
Me
2 months ago
dim_calendar analysis
Me
2 months ago
Sales Pipeline analysis
Me
2 months ago
Web and Social Media Analytics analysis
Me
2 months ago
Sales Pipeline analysis
Me
2 months ago
People Overview analysis
Me
2 months ago
Business Review analysis
Me
2 months ago


QuickSight
US Options Execution Summary
Type a question about your data
Find analyses & more
Favorites
Recent
My folders
Shared folders
Dashboards
Analyses
Datasets
Topics
Community
New
Analyses
New analysis
Name
Owner
Last Modified
message_traffic.csv analysis
Me
21 hours ago
Options - Primary Contra Execution Summary analysis
Me
a day ago
Nico Client Book
Me
a day ago
ETP Insights - New
Me
8 days ago
Caren Option Metrics
Me
9 days ago
MTD Tiers
Me
14 days ago
Fusion Symbols
Me
15 days ago
Options - Message Counts analysis
Me
a month ago
Options - Primary Contra Execution Summary analysis
Me
a month ago
Options - Message Counts analysis
Me
a month ago
Options Open Interest analysis
Me
2 months ago
dim_calendar analysis
Me
2 months ago
Sales Pipeline analysis
Me
2 months ago
Web and Social Media Analytics analysis
Me
2 months ago
Sales Pipeline analysis
Me
2 months ago
People Overview analysis
Me
2 months ago

Results so far

- Options business has a couple datasets on the new platform including Q
- Equities quickly adding data
- Working to migrate additional legacy dashboards

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Tips & tricks

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3 tips for creating useful topics

1

Start with the problem you want to solve and work backwards

2

Write target questions before you build

3

Expect to onboard your end users, encourage feedback, and engage often

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Recap

Amazon QuickSight Q is a fast, simple way to expand your data audience.

Its powerful AI speeds time to value.

NLQ helps organizations get data at the right time to inform a decision.

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Q&A

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Amazon QuickSight @ re:Invent

Monday, 11/28

Workshop
10:45AM | @WYN
Build stunning customized dashboards with Amazon QuickSight

Chalk Talk
12:15PM | @MGM
Insightful dashboards through advanced calculations with QuickSight

Tuesday, 11/29

Chalk Talk
11:45AM | @WYN
Deploy your BI assets at scale to thousands with Amazon QuickSight

Leadership Breakout
2:00PM | @MND
Reinvent how you derive value from your data with Amazon QuickSight

Chalk Talk
2:45PM | @CSR
Architecting multi-tenancy for your apps with Amazon QuickSight

Wednesday, 11/30

Breakout
2:30PM | @WYN
Migrate to cloud-native business analytics with Amazon QuickSight

Breakout
4:45PM | @MGM
Get clarity on your data in seconds with Amazon QuickSight Q

Workshop
5:30PM | @WYN
Seamlessly embed analytics into your apps with Amazon QuickSight

Chalk Talk (repeat)
7:45PM | @WYN
Architecting multi-tenancy for your apps with Amazon QuickSight

Thursday, 12/1

Workshop (repeat)
11:45PM | @CSR
Build stunning customized dashboards with Amazon QuickSight

Breakout
12:30PM | @CSR
Differentiate your apps with Amazon QuickSight embedded analytics

Breakout
3:30PM | @Encore
Optimize your AWS cost and usage with Cloud Intelligence Dashboards

Visit the business intelligence kiosk in the AWS village to speak with QuickSight experts + free swag

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Ask questions. Learn together. Get QuickSight re:Invent updates!

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Thank you!

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