Generative BI in Amazon QuickSight

KILKENNY | SEPT 27TH 2023

NEAL CAULEY

Sr Manager, WW GTM QuickSight
AWS

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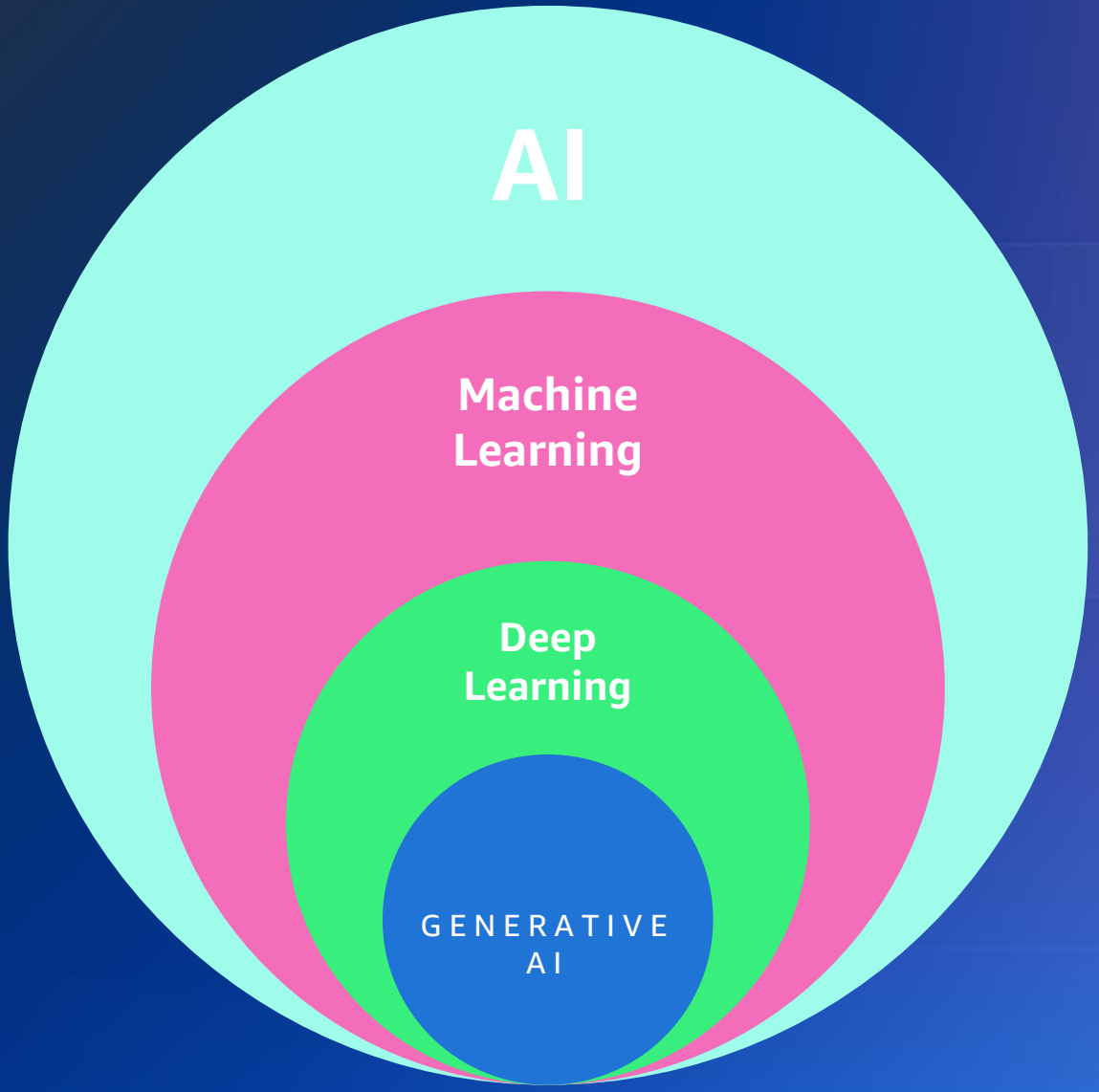

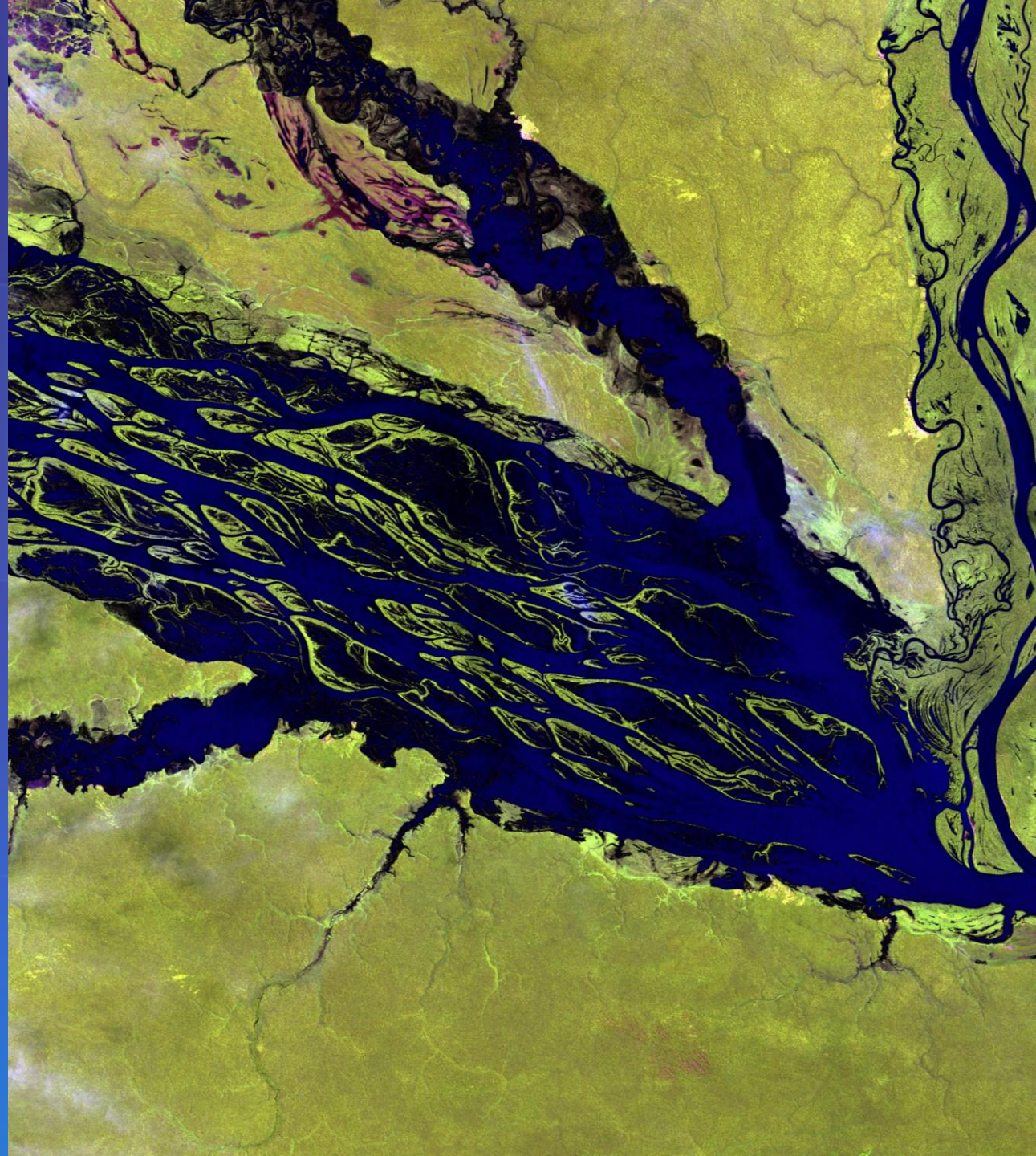

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Amazon QuickSight

UNIFIED BI SERVICE AT HYPERSCALE

Unified BI for all your analytics needs

Lower costs with consumption-based pricing

Consistent high performance with auto scaling

AI-powered BI

Governance and security

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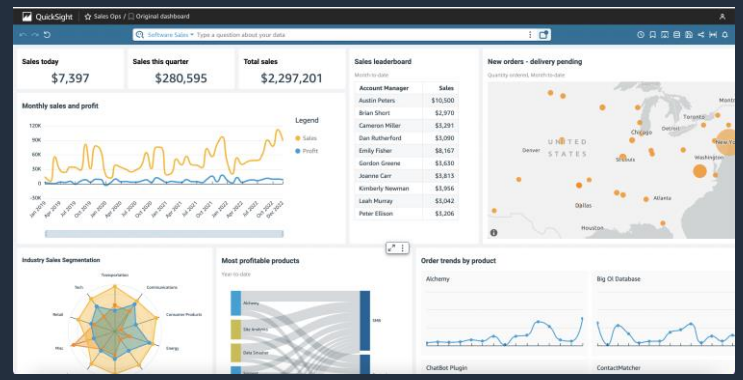
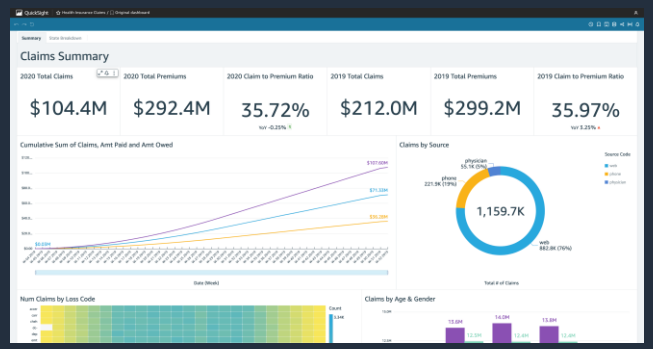
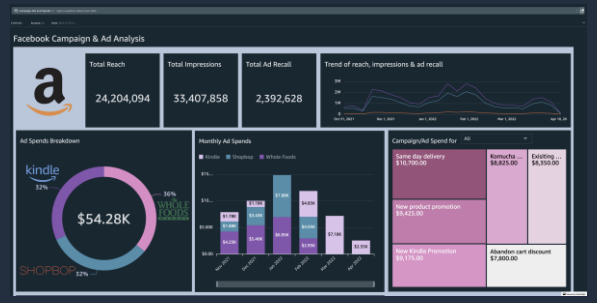
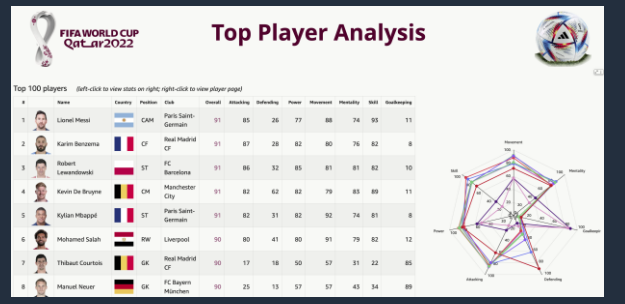
Create Beautiful, Interactive Dashboards

- Add rich interactivity like filters, drill downs, zooming, and more
- Blazing fast navigation
- Accessible on any device
- Data Refresh
- Publish to everyone with a click









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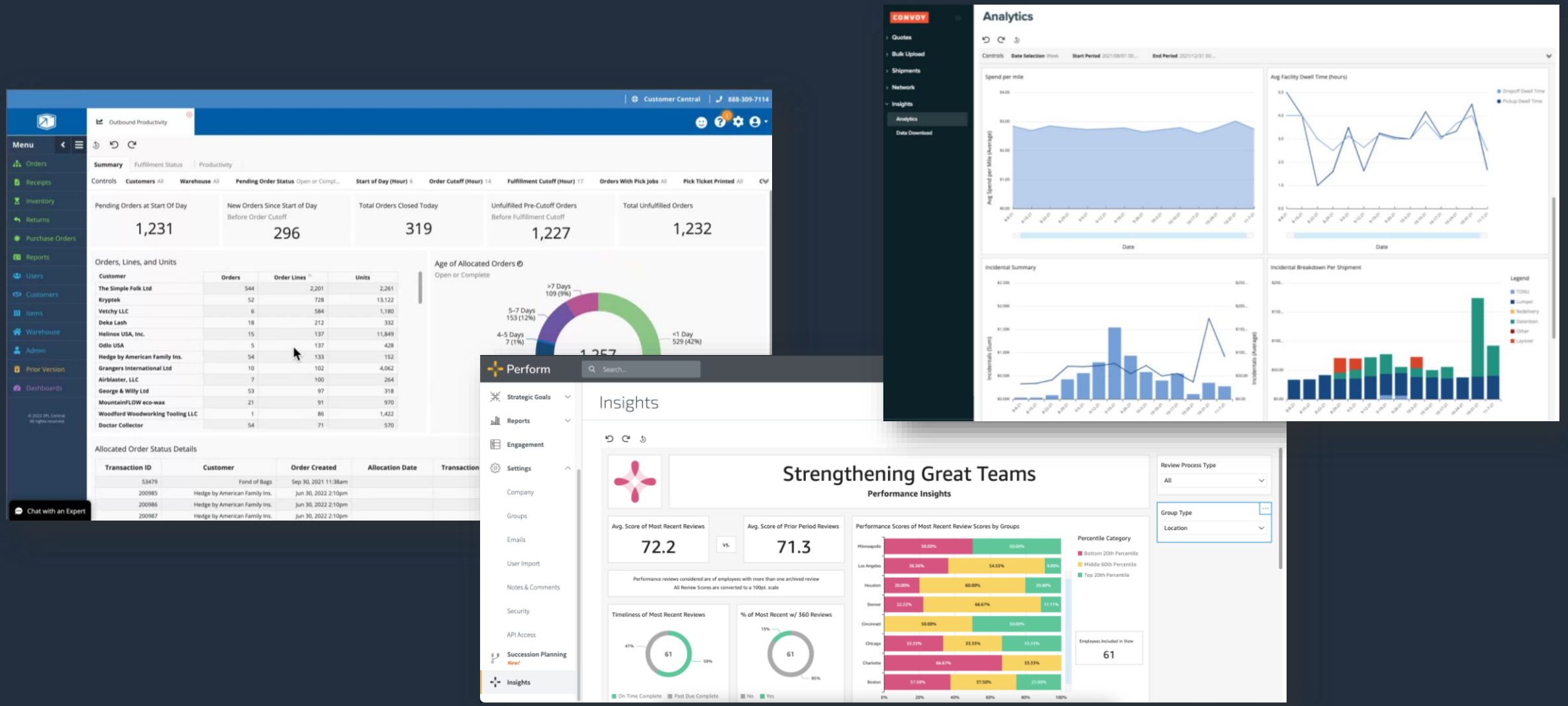
QuickSight powers 1,000s of apps



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Paginated Reporting in the cloud

CONSOLIDATE DASHBOARD AND REPORTING USE CASES COST EFFECTIVELY

Highly formatted, printable reports

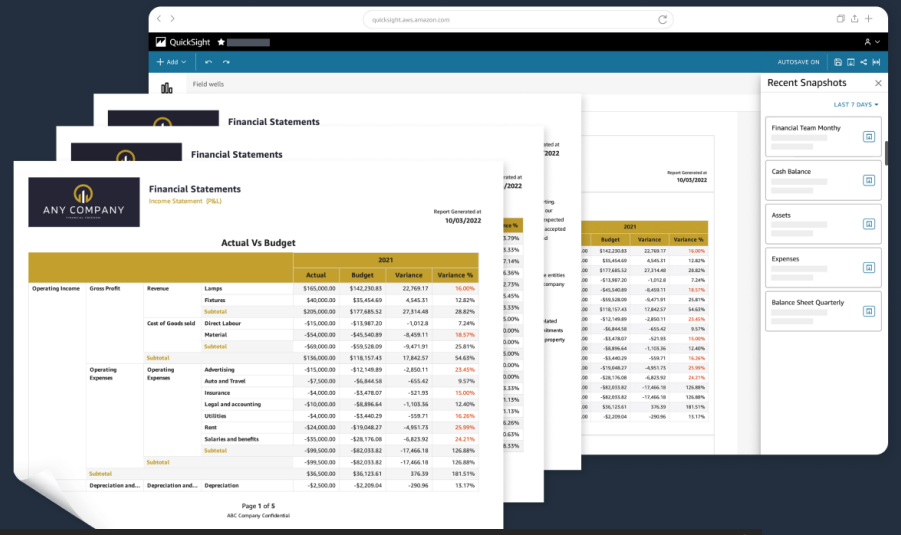
- Multi-page PDF reports with rich visuals and images
- Scheduled delivery for PDFs and CSV exports

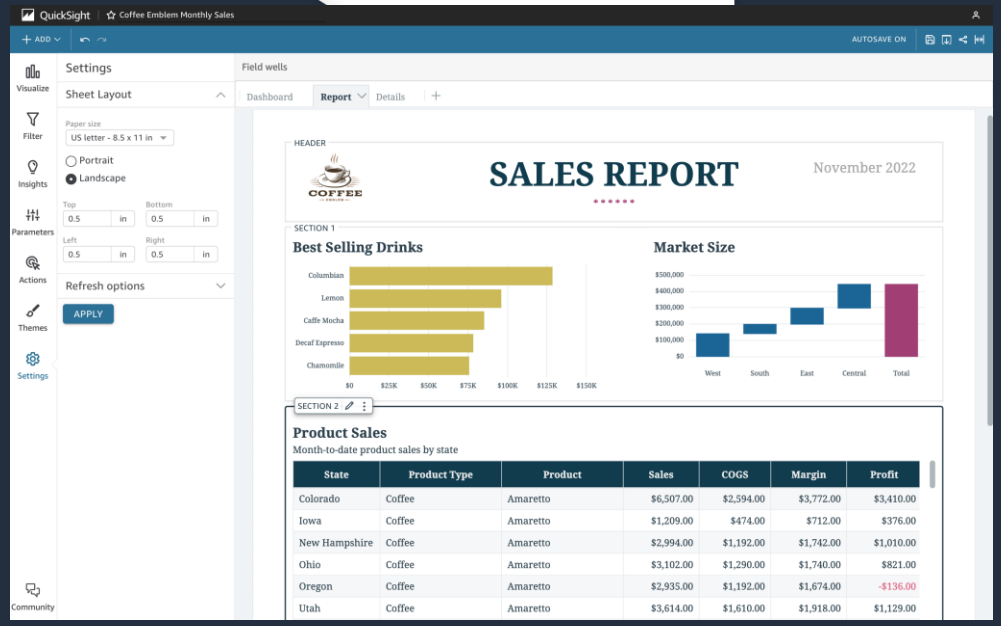
Unified authoring & consumption

- Same governed data sets between dashboards and reports
- No new learning with familiar interface

Serverless, auto scales to meet demand

- No infrastructure or software management
- Pay-for-usage with consumption-based pricing





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Over 100,000 customers use QuickSight

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Learn more: quicksight.aws/customers

What happens when Generative AI meets BI?

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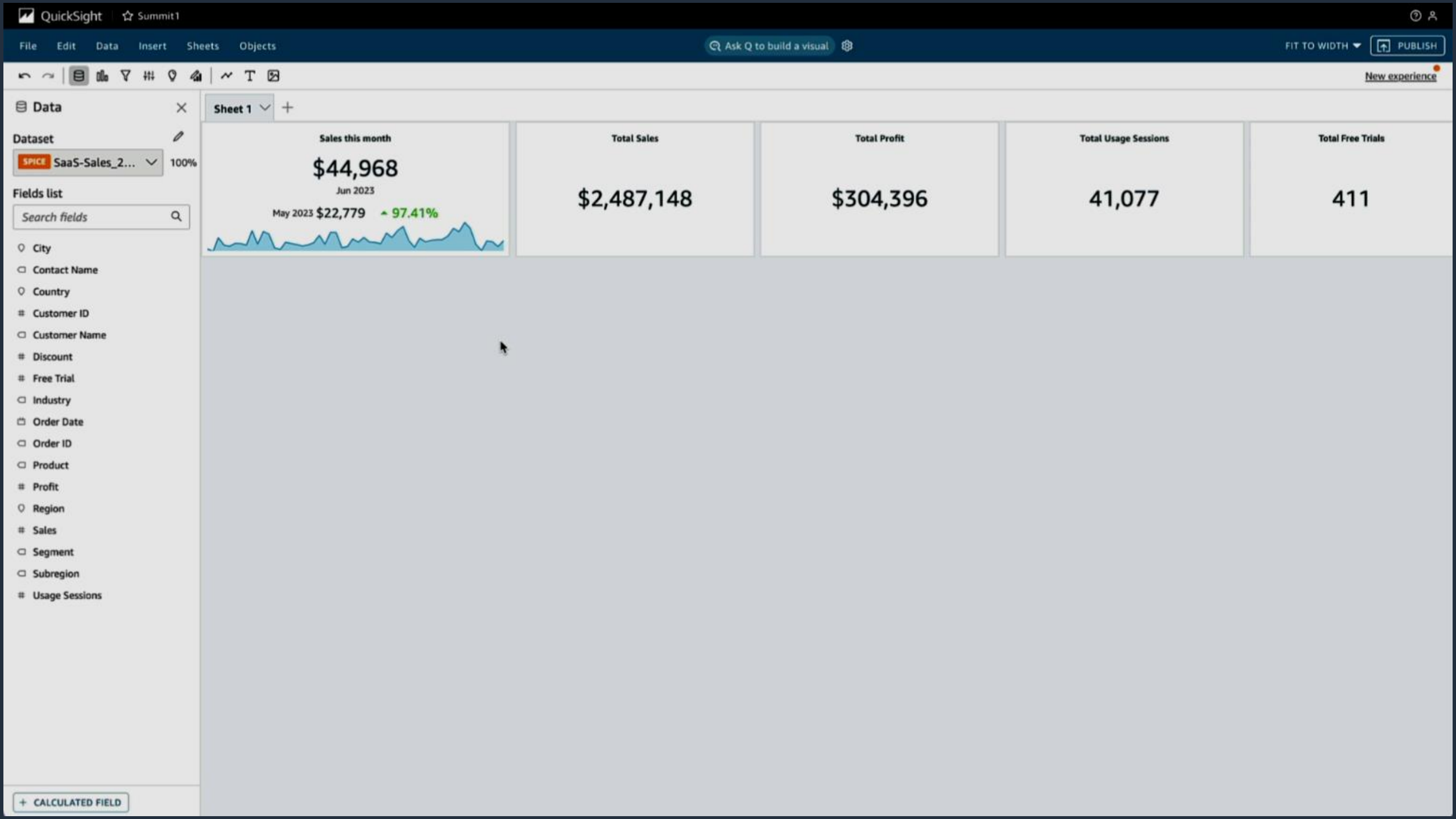
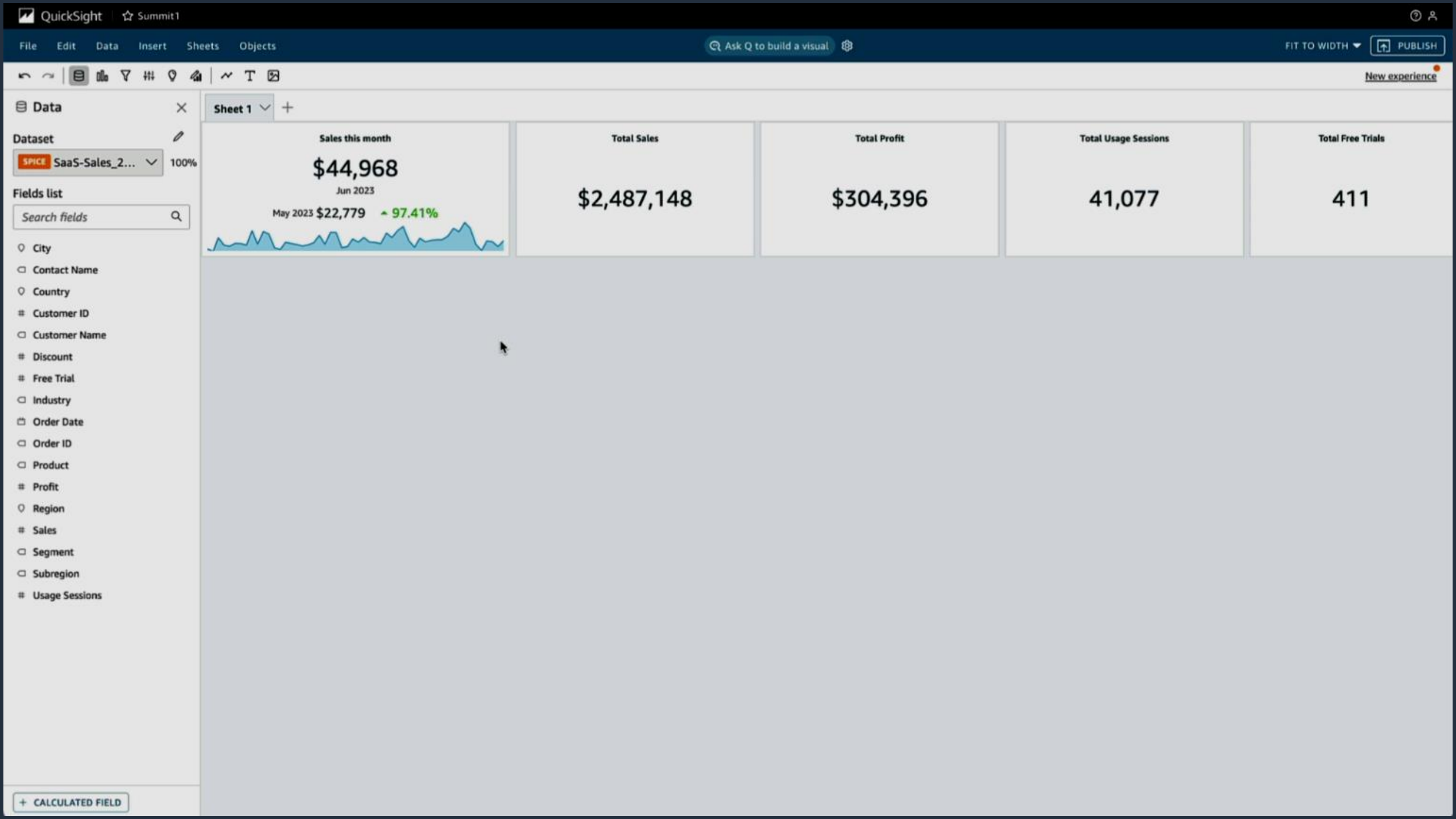

QuickSight
Summit1
File
Edit
Data
Insert
Sheets
Objects
Ask Q to build a visual
FIT TO WIDTH
PUBLISH
New experience
Data
Dataset
SPICE SaaS-Sales_2...
100%
Fields list
Search fields
City
Contact Name
Country
Customer ID
Customer Name
Discount
Free Trial
Industry
Order Date
Order ID
Product
Profit
Region
Sales
Segment
Subregion
Usage Sessions
+ CALCULATED FIELD
Sheet 1
Sales this month
$44,968
Jun 2023
May 2023 $22,779
97.41%
Total Sales
$2,487,148
Total Profit
$304,396
Total Usage Sessions
41,077
Total Free Trials
411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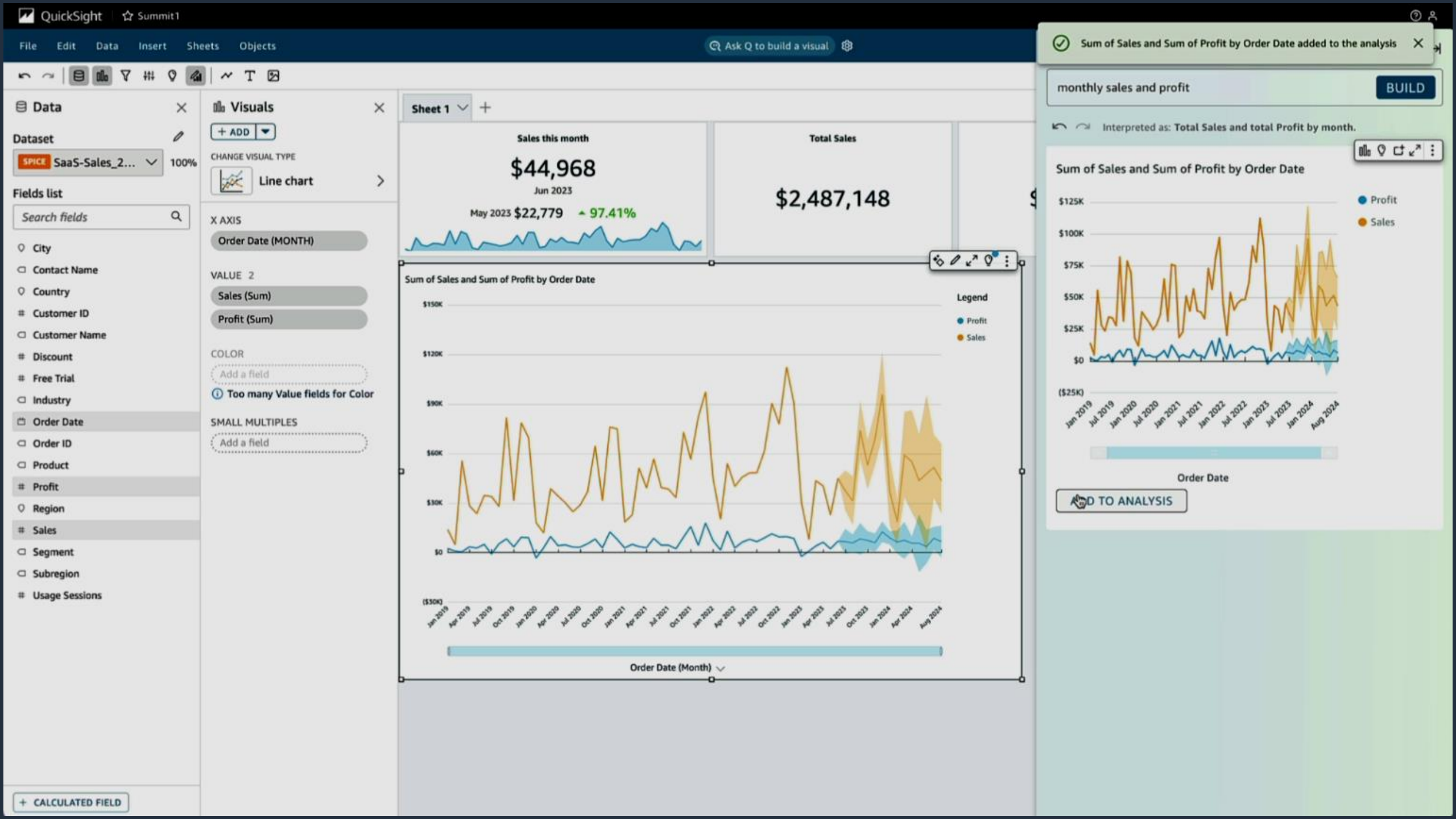

QuickSight
Summit1
File
Edit
Data
Insert
Sheets
Objects
Ask Q to build a visual
Sum of Sales and Sum of Profit by Order Date added to the analysis
Data
Dataset
SPICE SaaS-Sales_2...
100%
Fields list
Search fields
City
Contact Name
Country
Customer ID
Customer Name
Discount
Free Trial
Industry
Order Date
Order ID
Product
Profit
Region
Sales
Segment
Subregion
Usage Sessions
CALCULATED FIELD
Visuals
ADD
CHANGE VISUAL TYPE
Line chart
X AXIS
Order Date (MONTH)
VALUE 2
Sales (Sum)
Profit (Sum)
COLOR
Add a field
Too many Value fields for Color
SMALL MULTIPLES
Add a field
Sheet 1
Sales this month
$44,968
Jun 2023
May 2023 $22,779
97.41%
Total Sales
$2,487,148
Sum of Sales and Sum of Profit by Order Date
Legend
Profit
Sales
$150K
$120K
$90K
$60K
$30K
$0
($30K)
Order Date (Month)
monthly sales and profit
BUILD
Interpreted as: Total Sales and total Profit by month.
Sum of Sales and Sum of Profit by Order Date
$125K
$100K
$75K
$50K
$25K
$0
($25K)
Order Date
ADD TO ANALYSIS

QuickSight | Summit1

File Edit Data Insert Sheets Objects | Ask Q to build a visual | FIT TO WIDTH | PUBLISH

New experience

Data

Dataset

SPICE SaaS-Sales_2... 100%

Fields list

Search fields

- City
- Contact Name
- Country
- Customer ID
- Customer Name
- Discount
- Free Trial
- Industry
- Order Date
- Order ID
- Product
- Profit
- Region
- Sales
- Segment
- Subregion
- Usage Sessions

+ CALCULATED FIELD

Visuals

+ ADD

Select or add a visual

Sheet 1

$44,968
Jun 2023
May 2023 $22,779 ▲ 97.41%

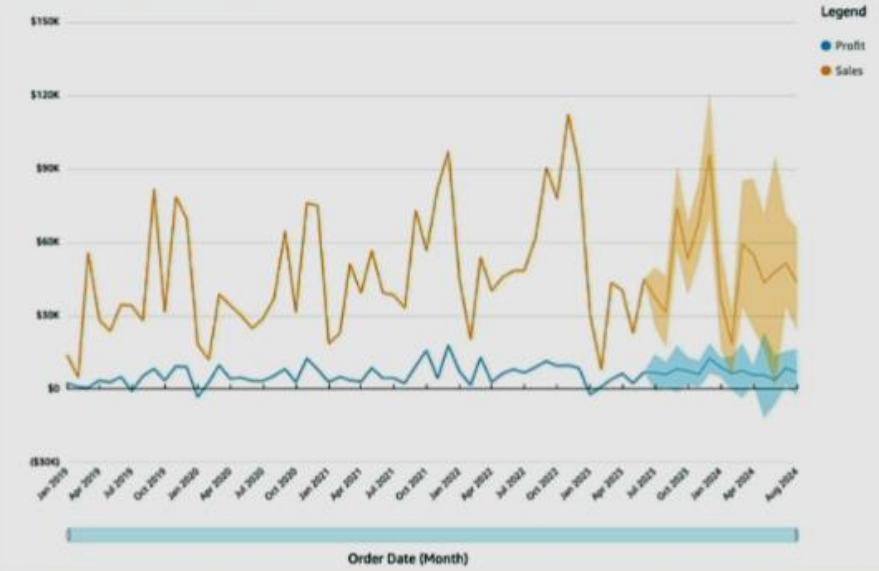
$2,487,148

$304,396

41,077

411

Sum of Sales and Sum of Profit by Order Date



Sum of Sales by City and Product

SHOWING TOP 262 IN CITY AND TOP 14 IN PRODUCT

Sum of Sales by Region and Segment

Add calculated field

MoM % change in free trials

Cancel Save

Build for me

Describe the calculation you want to build

CLOSE BUILD

```
1 // (AI generated) month over month free trial % change by date
2 periodOverPeriodPercentDifference(sum({Free Trial}), {Order Date}, MONTH, 1)
```

Fields

Parameters

Functions

Search functions

All

- abs
- addDateTime
- addWorkDays
- avg
- avgIf
- avgOver
- ceil
- coalesce
- concat
- contains
- count
- countIf

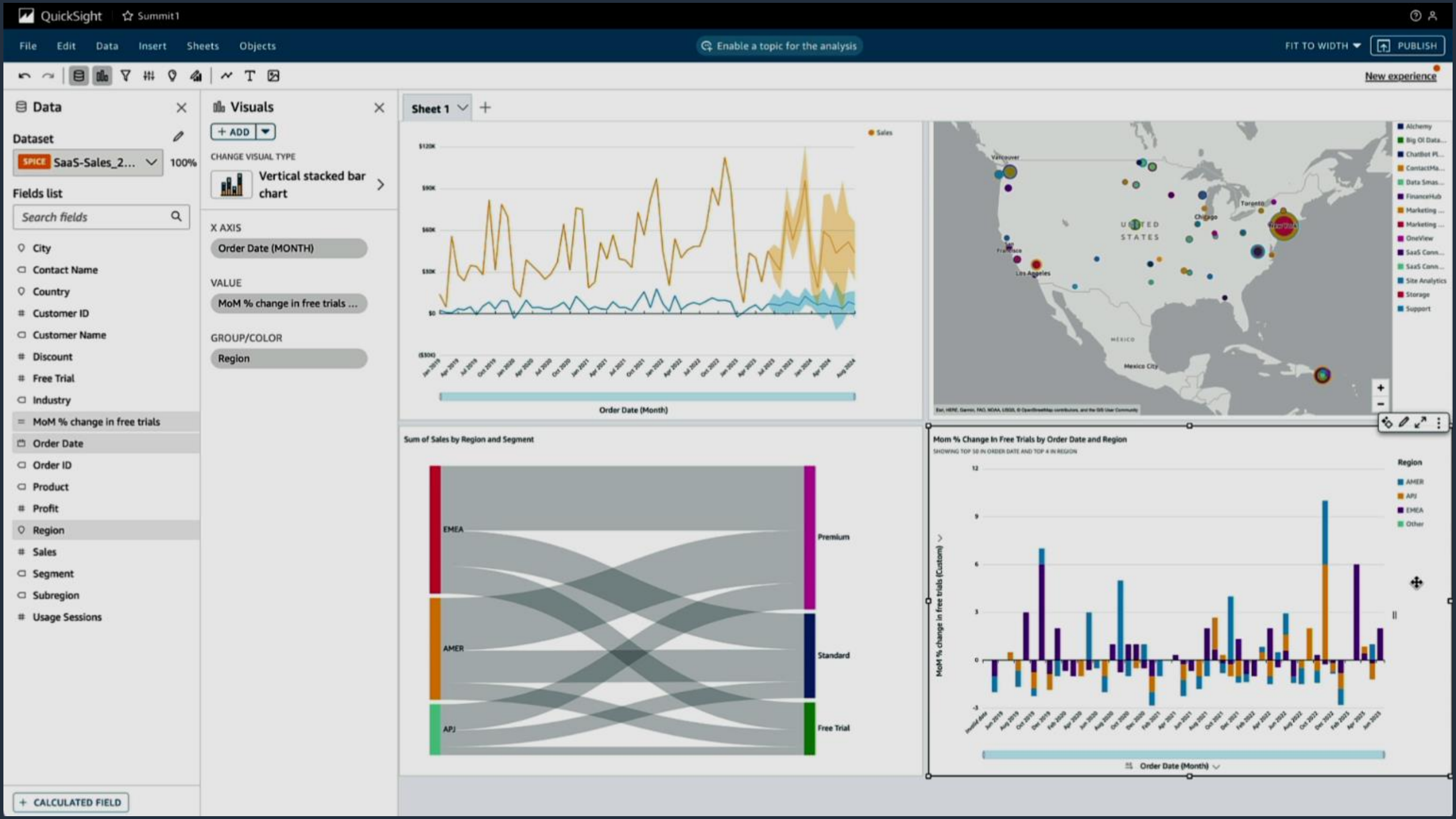
abs

Returns the absolute value of a given expression.

SYNTAX

`abs(expression)`

Learn more


QuickSight
Summit1
File
Edit
Data
Insert
Sheets
Objects
Enable a topic for the analysis
FIT TO WIDTH
PUBLISH
New experience
Data
Dataset
SPICE SaaS-Sales_2...
100%
Fields list
Search fields
City
Contact Name
Country
Customer ID
Customer Name
Discount
Free Trial
Industry
MoM % change in free trials
Order Date
Order ID
Product
Profit
Region
Sales
Segment
Subregion
Usage Sessions
CALCULATED FIELD
Visuals
ADD
CHANGE VISUAL TYPE
Vertical stacked bar chart
X AXIS
Order Date (MONTH)
VALUE
MoM % change in free trials ...
GROUP/COLOR
Region
Sheet 1
Sales
Order Date (Month)
Sum of Sales by Region and Segment
EMEA
AMER
APJ
Premium
Standard
Free Trial
Mom % Change In Free Trials by Order Date and Region
SHOWING TOP 50 IN ORDER DATE AND TOP 4 IN REGION
Region
AMER
APJ
EMEA
Other
MoM % change in free trials (Custom)
Order Date (Month)
Vancouver
Toronto
Chicago
Los Angeles
Mexico City
UNITED STATES
MÉXICO

Sales this month

$44,968

Jun 2023

May 2023 $22,779 ▲ 97.41%

Total Sales

$2,487,148

Total Profit

$304,396

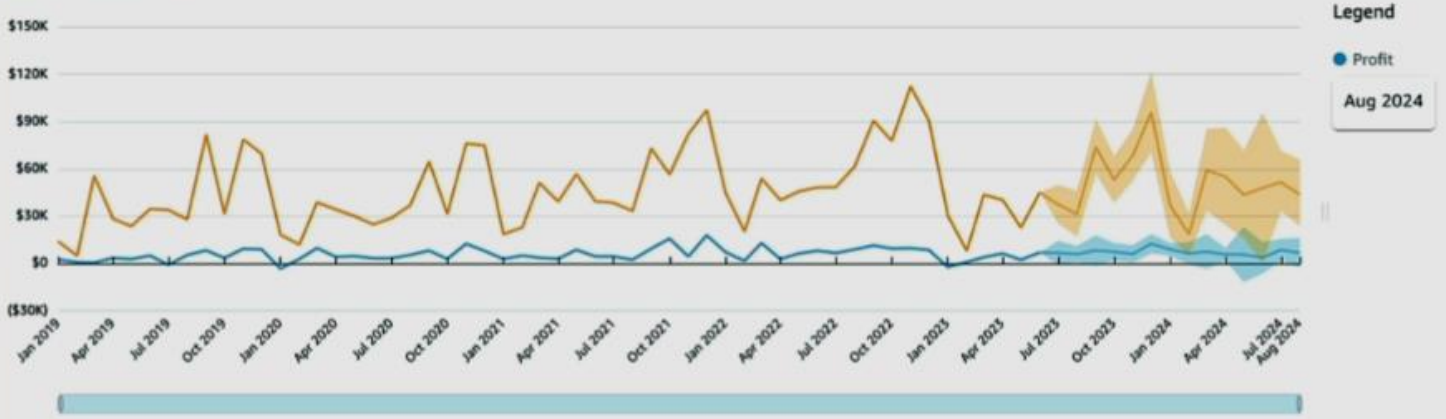
Total Usage Sessions

41,077

Total Free Trials

411

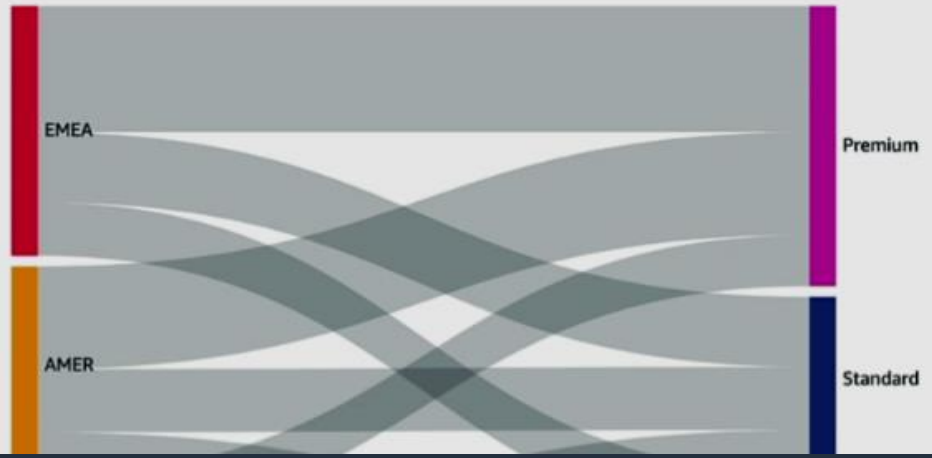
Monthly sales and profit



Product sales by city

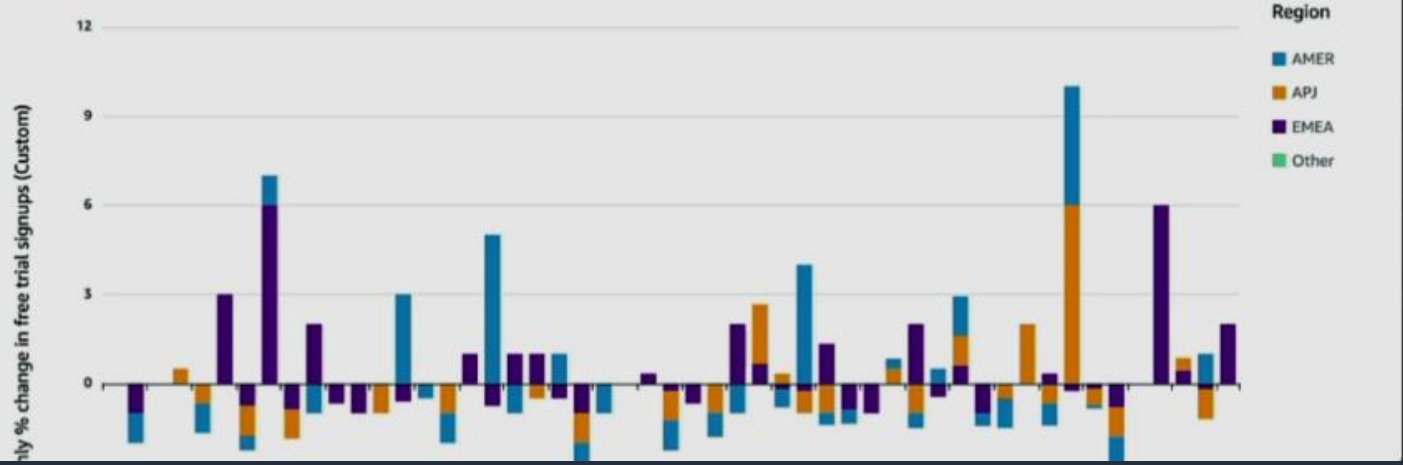
SHOWING TOP 262 IN CITY AND TOP 14 IN PRODUCT

Regional sales by segment



MoM % change in free trial sign-ups by region

SHOWING TOP 50 IN ORDER DATE AND TOP 4 IN REGION



"Free Trials to Paid Accounts: Bundling Features and Engaging Communications to Boost Conversions and Sales"

Generated by QuickSight AI

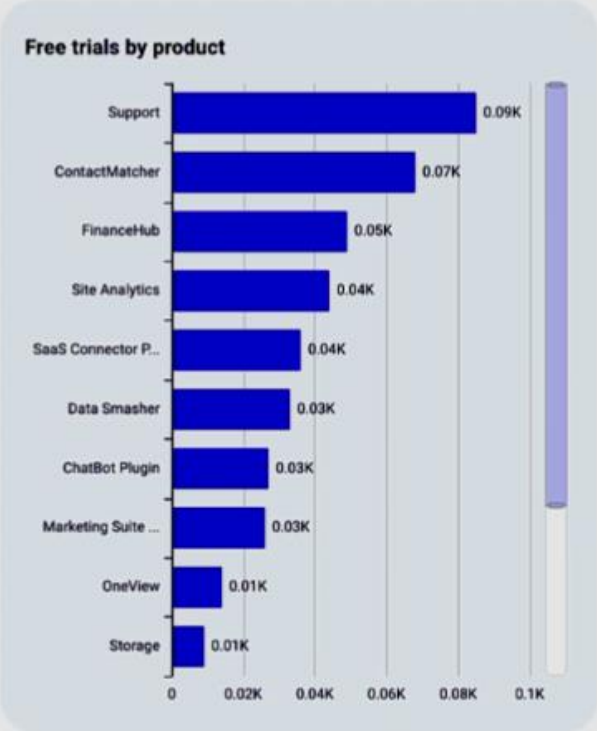
Introduction

The free trial sign-up trend chart shows promising growth opportunities. The highest number of 32 free trials last month represents a 166.67% increase over the previous month, demonstrating strong momentum. However, the low number of 1 free trial in February indicates an inconsistent trend. To capitalize on this momentum, the company should prioritize improving the sign up experience to reduce friction for new users, especially around the free trial process. Next, the company could test incentives and promotions targeted at converting the highest number of free trials from the last month into paid accounts. Finally, optimizing the trial to paid conversion funnel with a streamlined

Review the story
BUILT BY AI
DISCARD TRY AGAIN ✓KEEP

Recommendations - Bundling features

Based on the data and goals shared, bundling additional features during free trials could help convert more users into paying customers and boost sales. Offering more features for free during the trial period can help demonstrate the full value of the product and convince users to upgrade when the trial expires. This tactic allows prospects to experience the benefits of additional capabilities at no cost, making it easier for them to justify becoming a paying customer. Including key features that are likely to appeal to target customers within the trial offering, such as reporting or collaboration tools for business users, could help win over prospects who may have been on the fence otherwise.



The table shows the number of free trials by product. Support had the highest number of trials at 85, while ContactMatcher had 68 trials. The table contains information for a total of 14 products.

Demo Video

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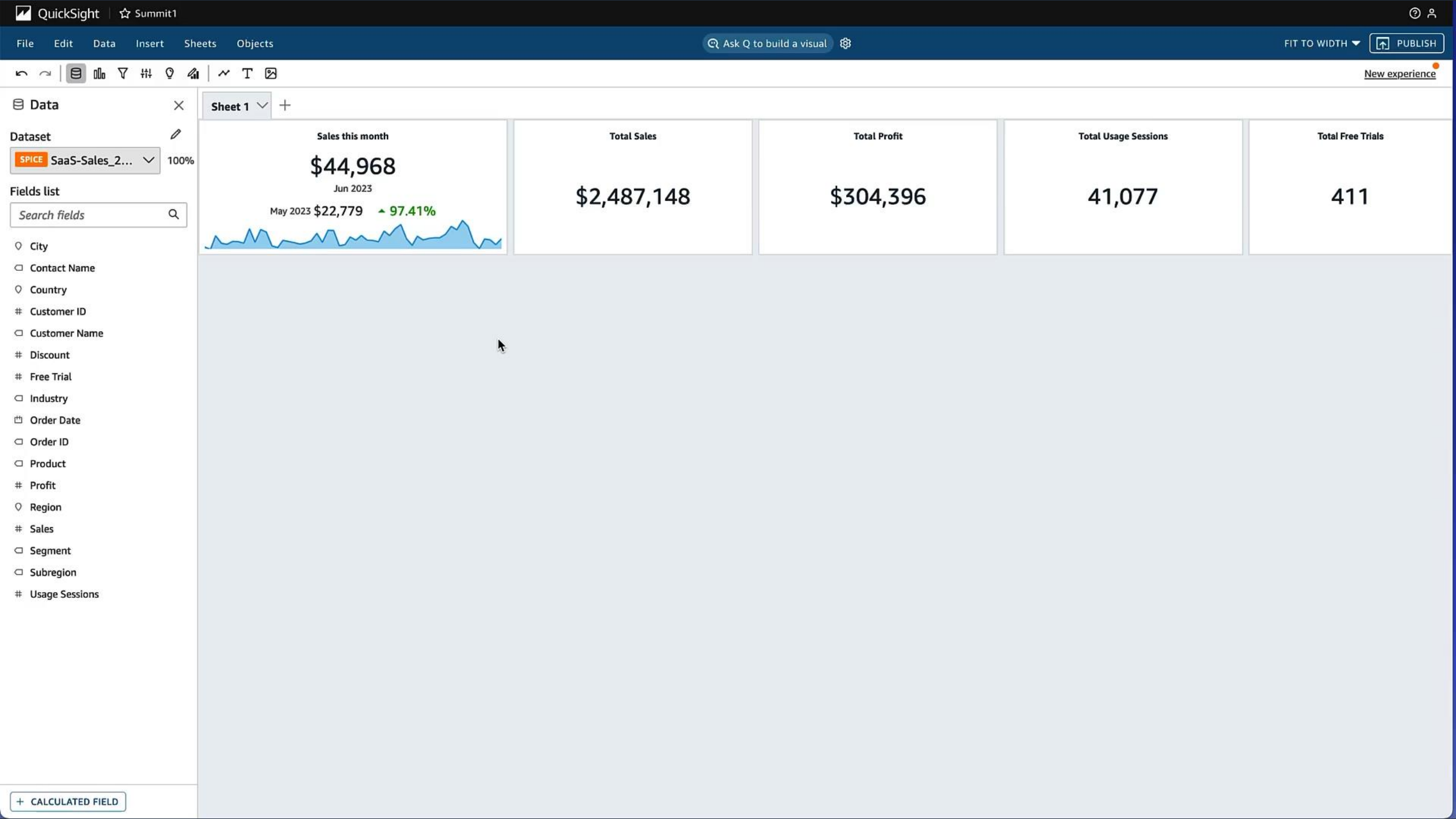
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FIT TO WIDTH
PUBLISH
New experience
Data
Dataset
SPICE SaaS-Sales_2...
100%
Fields list
Search fields
City
Contact Name
Country
Customer ID
Customer Name
Discount
Free Trial
Industry
Order Date
Order ID
Product
Profit
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Subregion
Usage Sessions
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QuickSight Q

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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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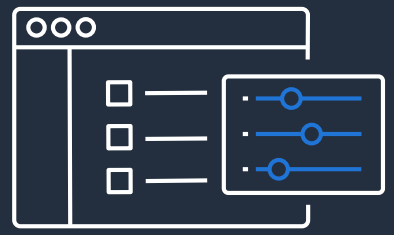

INSTEAD OF THIS

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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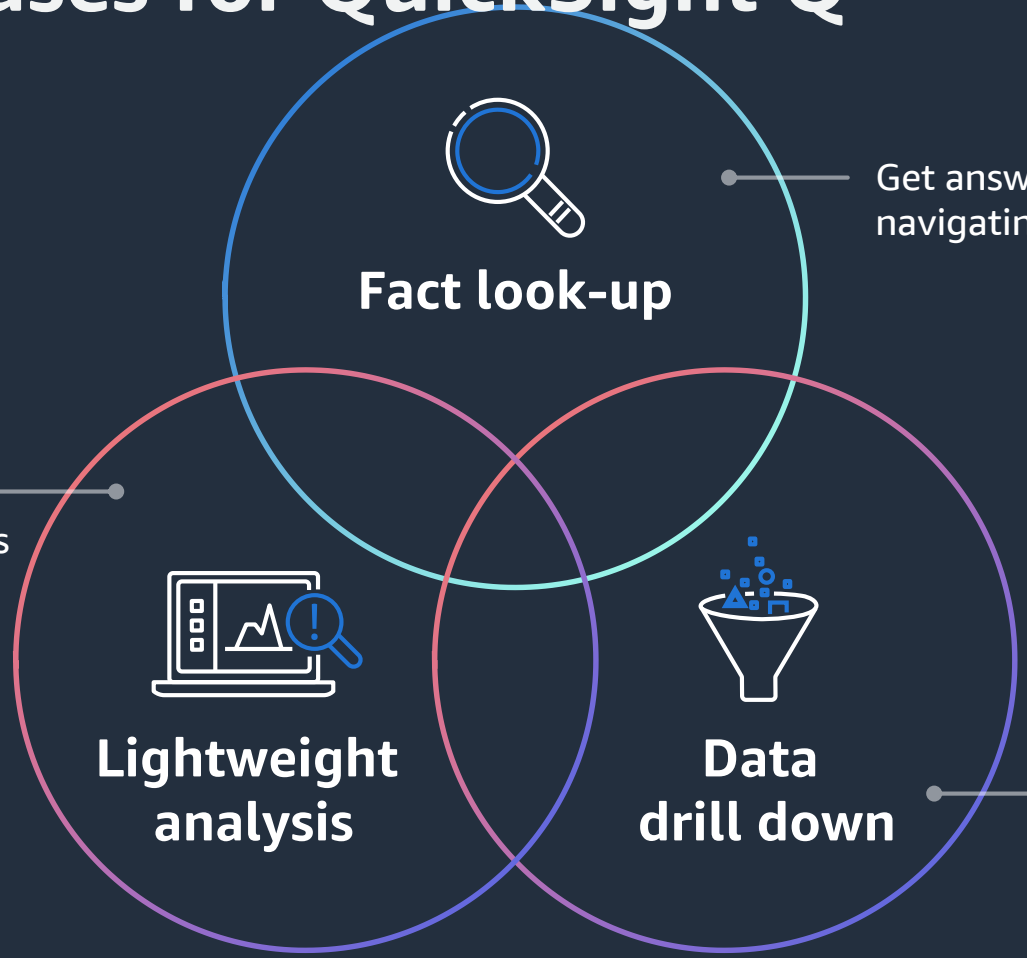
Common uses for QuickSight Q



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

aws

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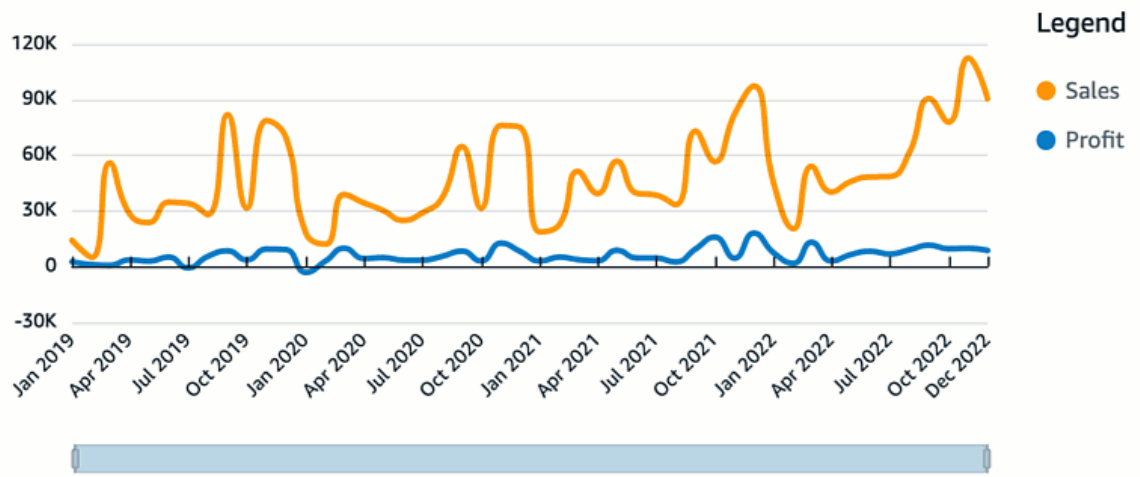
Software Sales | Type a question about your data

Sales today
$7,397

Sales this quarter
$280,595

Total sales
$2,297,201

Monthly sales and profit



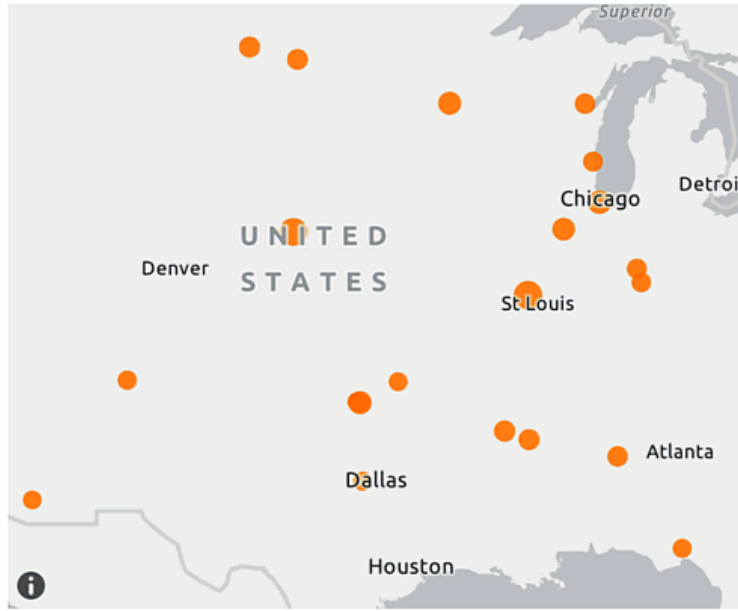
Sales leaderboard

Month-to-date

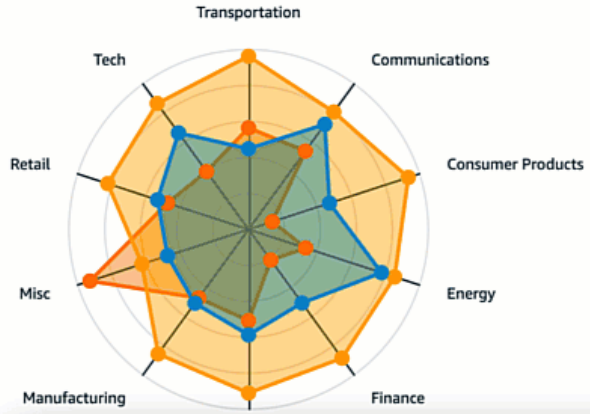
Account Manager	Sales
Austin Peters	$10,500
Brian Short	$2,970
Cameron Miller	$3,291
Dan Rutherford	$3,090
Emily Fisher	$8,167
Gordon Greene	$3,630
Joanne Carr	$3,813
Kimberly Newman	$3,956
Leah Murray	$3,042
Peter Ellison	$3,206

New orders - delivery pending

Quantity ordered, Month-to-date

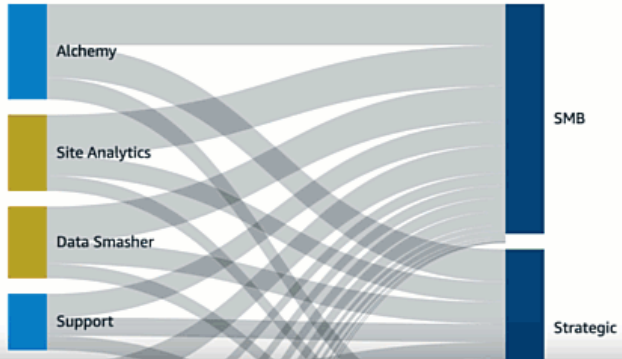


Industry Sales Segmentation

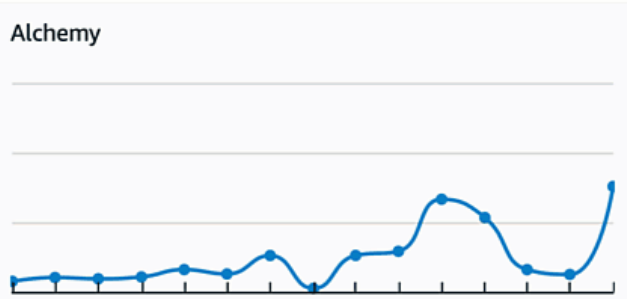


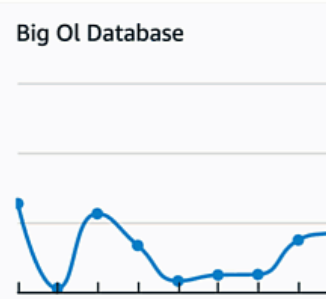
Most profitable products

Year-to-date



Order trends by product





ChatBot Plugin

ContactMatcher

AI-powered dashboard authoring experience

A NEW DASHBOARD BUILDING EXPERIENCE POWERED BY GENERATIVE BI

Natural language visual creation

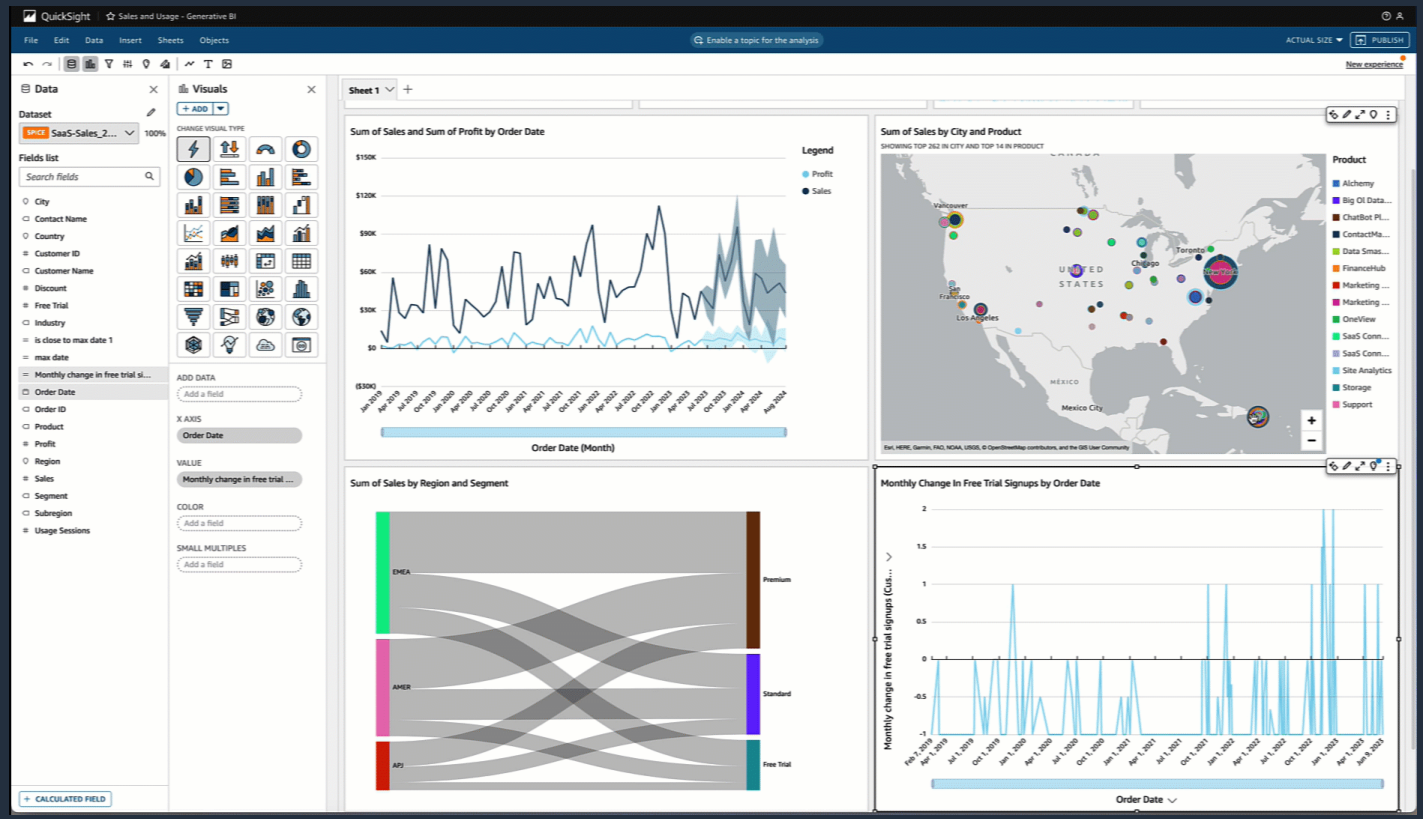
Use vague or precise language to generate and add visuals to a dashboard

Quick calculations

Accelerate analysis by easily creating calculations without looking up or learning specific syntax

Visual fine-tuning

Tailor visuals by describing the formatting changes in natural language



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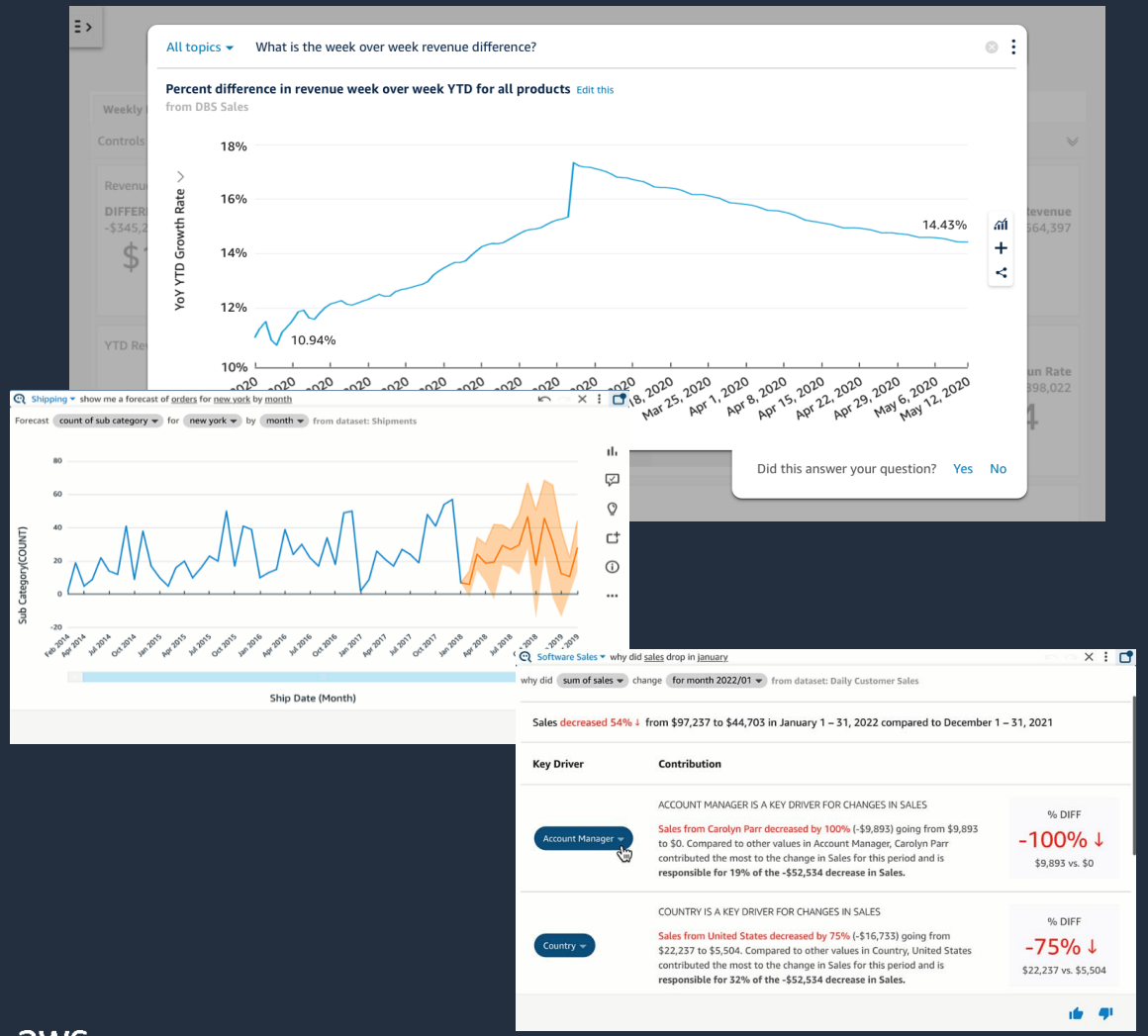
Design and functionality are conceptual and can change

Foster a Data-Driven Culture with Q

SELF-SERVICE INSIGHTS FOR ANYONE USING ML-POWERED NLQ



Ask questions in natural language

- ML-models interpret user question and intent to generate visualization
- AI-enhanced automated data preparation accelerates time-to-value

Forecast New!

- See what's likely to happen
- See future trajectories for up to 3 measures simultaneously

Ask 'Why'? New!

- Identify key drivers to changes in the data with contribution analysis
- Quantify contribution by each driver

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Data stories in QuickSight

IMPACTFUL DATA STORYTELLING TO DRIVE ACTIONS

Interpret data for others

Help others derive meaning from data and reach conclusions to drive decisions

Generate stories using AI

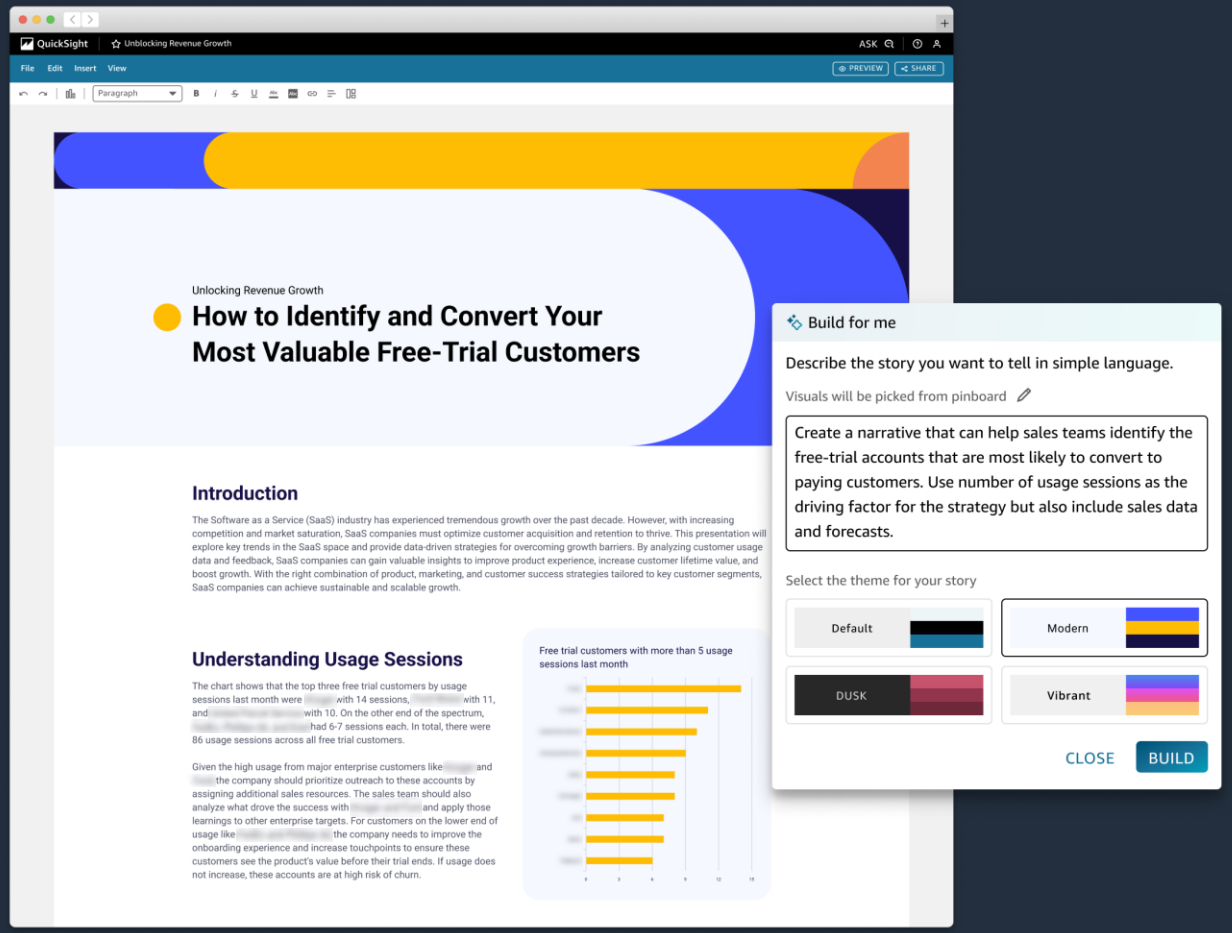
Generate cohesive, powerful, and insightful narratives analyzing data with only a few words

Create refined content

Control AI verbosity, customize narrative text, and apply stunning visual themes to bring content to life

Governed and always up to date

Quickly and easily share with people who already have access to the data and update data any time



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