
AWS
re:Invent

ANT302-R

Enhancing your applications with Amazon QuickSight dashboards

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AWS re:Invent

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aws

Amazon QuickSight

Cloud-native Business Intelligence with pay-per-session pricing and ML insights for everyone



Why Amazon QuickSight



Cloud native = No servers = Auto-scale

No servers or software to manage, maintain, deploy. Start with 10s of users and scale to 10s of 1000s



Fully integrated with AWS

Build end-to-end analytics in AWS. Secure private VPC access, fine-grained access control, ML integrations



Secure and global

End-to-end encryption. Native high availability. 10 global Regions. HIPAA, PCI, ISO, SOC and FedRamp eligibility



Easy to develop and maintain

Design with Amazon QuickSight, integrate with APIs. Secure data with row-level security and authenticate seamlessly via single sign-on



Fast, consistent performance

Fast, predictable performance for every time. Concurrent users or increased interactions do not slow down the system



ML insights

Contextual, relevant insights with ML-powered anomaly detection, forecasting, alerts, and customizable narratives



Insights for everyone

Provide access to all users, pay only for usage. No upfront costs, no charges for inactive users



Customize and embed

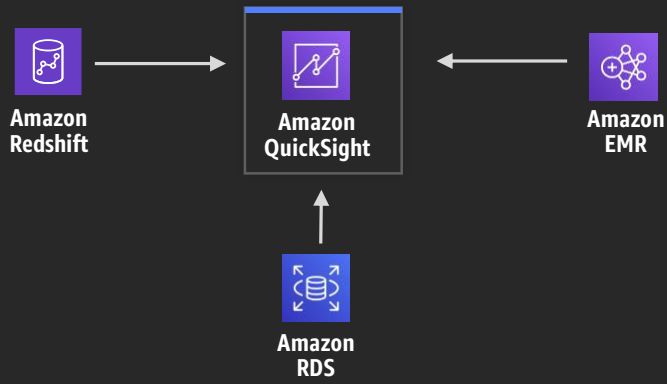
Embed into applications and enable analytics in hours, not months or years. Use themes to match application/corporate branding

ADMINISTRATOR → *BENEFITS* → *END USER*

Auto-scale for fast, consistent performance

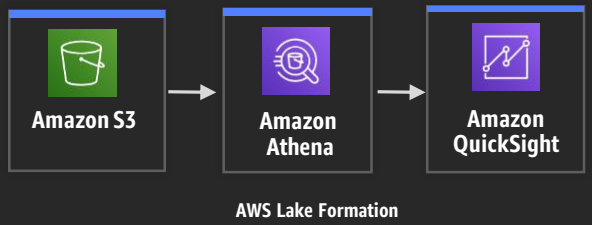
	Server-based BI architecture	Session-based AWS architecture
More concurrent users	More servers	Automatically scale to your users
More complex dashboards	More servers	All you can use in 30 min
Geographic distribution	More servers + management	Deploy as needed, no infra mgmt.
High availability	More servers + management	Native HA, no infra mgmt.

Better together: AWS + Amazon QuickSight



Private VPC connectivity = no public routing of data

Direct query to data sources or SPICE for fast access



Native fine-grained permissions for users with AWS Identity and Access Management (IAM)

Cost allocation by business unit or team

Get your first visualization in minutes

Audit access via AWS CloudTrail

Pay for what you use

Amazon QuickSight Enterprise Edition pricing

Authors



Create and publish interactive dashboards

$18

/user/month

Billed annually

$24/user/mo. paying month to month

Readers



Secure access to dashboards anytime, anywhere

$0.30 /session*

up to a max of

$5 /user/month

*session = 30 minutes from login

Leverage AWS advances in machine learning



Anomaly detection
Discover unexpected trends and outliers against millions of business metrics



Forecasting
Machine learning forecasting with point-and-click simplicity



Auto narratives
Summarize your business metrics in plain language



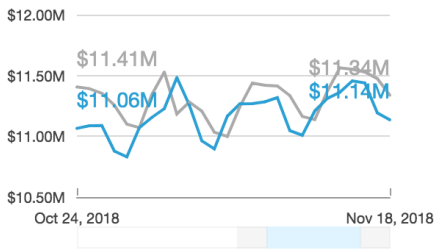
ML predictions
Visualize and build predictive dashboards with Amazon SageMaker models

ML insights

Oktank-Health Daily Sales Report

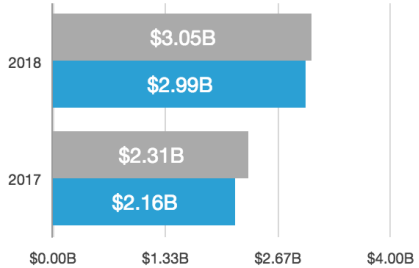
Daily Revenue

Daily revenue **decreased -0.51% (-$57,032.99)** on Nov 18, 2018, from $11.19M to $11.14M compared to the previous day and is **-1.78% (-$202,111.70) below** goal of $11.34M. We are **$2789.67K (0.334%) above** 30-day average revenue of $8.35M. We're operating at an **run rate of $4.06B.**



YTD Revenue

Year-to-date revenue **increased** by **61.95% ($1.14B)** from $1.85B to $2.99B compared to the same period last year and is **-1.81% ($55.03M) below** plan of $3.05B. We are at **98.19%** achievement of YTD goal and **84.61%** achievement for annual goal.

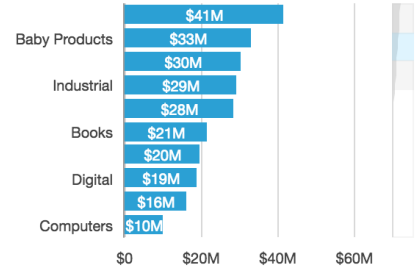


Callouts By Product and Country

Daily revenue for **Baby Products | Russia** on Nov 22, 2018 was **lower than expected** at $1,170.58

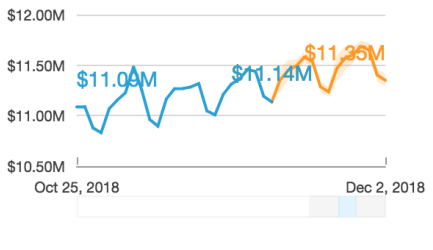
Callouts By Customers

Daily revenue for **MULTIDEL INC.** on Nov 22, 2018 was **higher than expected** at $60,433.95



Daily Revenue Forecast

Daily revenue is predicted to reach **$12.02M** by end of the year. We expect to exit the year with an annualized run rate of **$4.39B**. Total revenue for 2018 is predicted to reach $3.47B, **$63.06M (-1.78%) below** annual target of $3.54B.



Top / Bottom Movers by Product

Top daily revenue **increase** by products are:

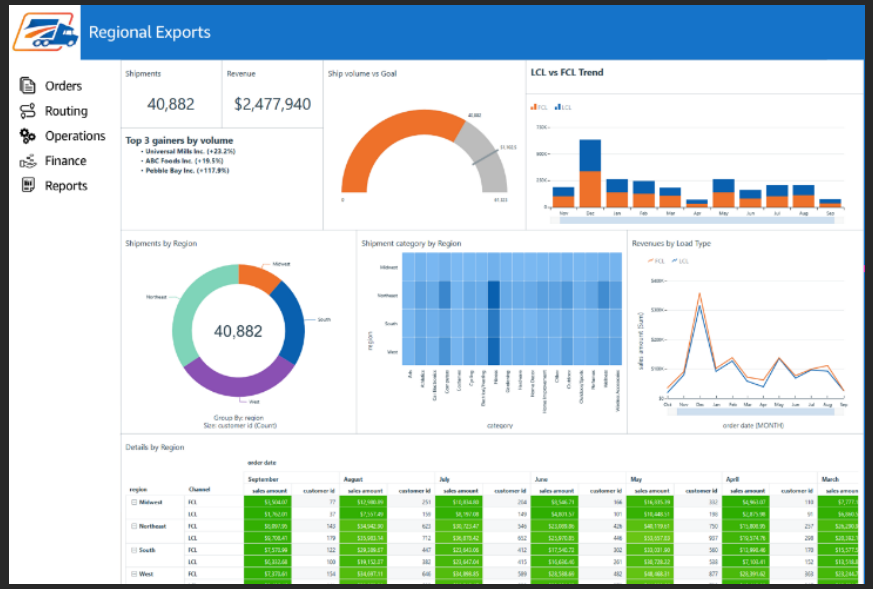
Top / Bottom to Plan Variance by Product

Top products **above** plan for today are:

Revenue by Product Category

Nov 18, 2018 | Nov 17, 2018

Embed Amazon QuickSight dashboards



Fully interactive with drill down, filtering, & external links

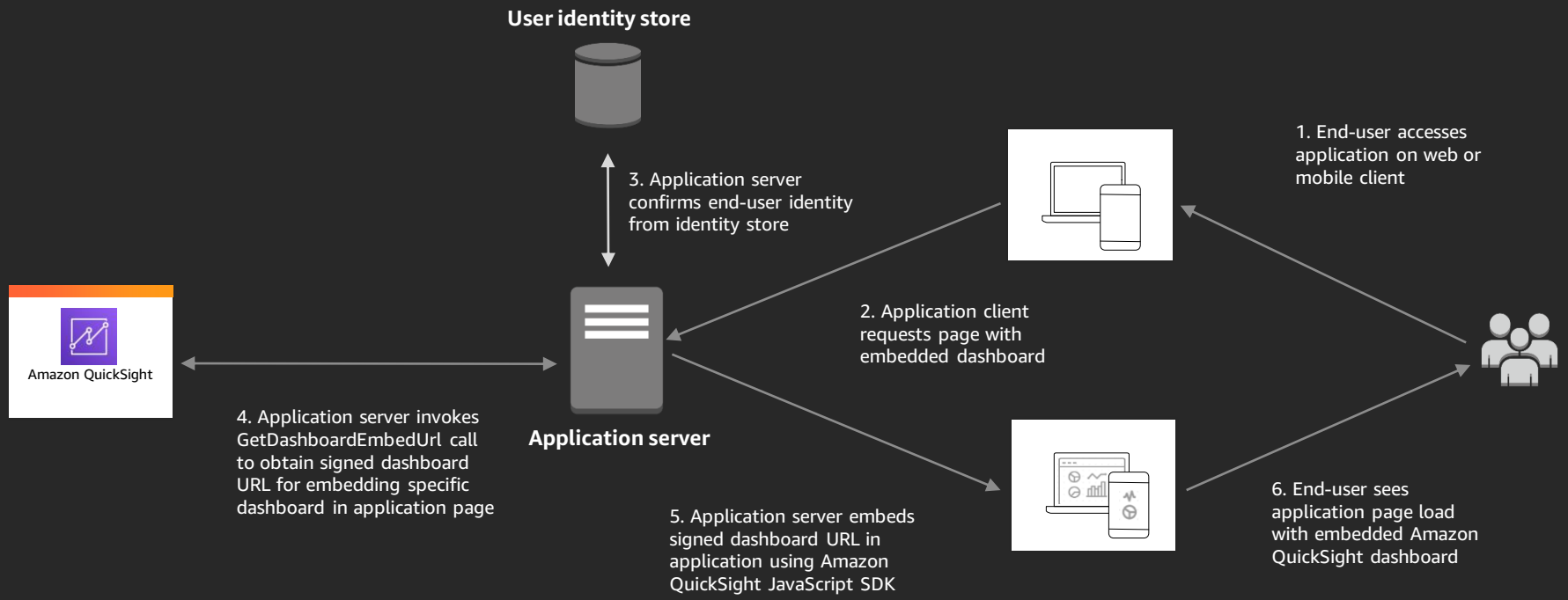
Personalized views with row-level security

No servers to manage, no long-term commitments

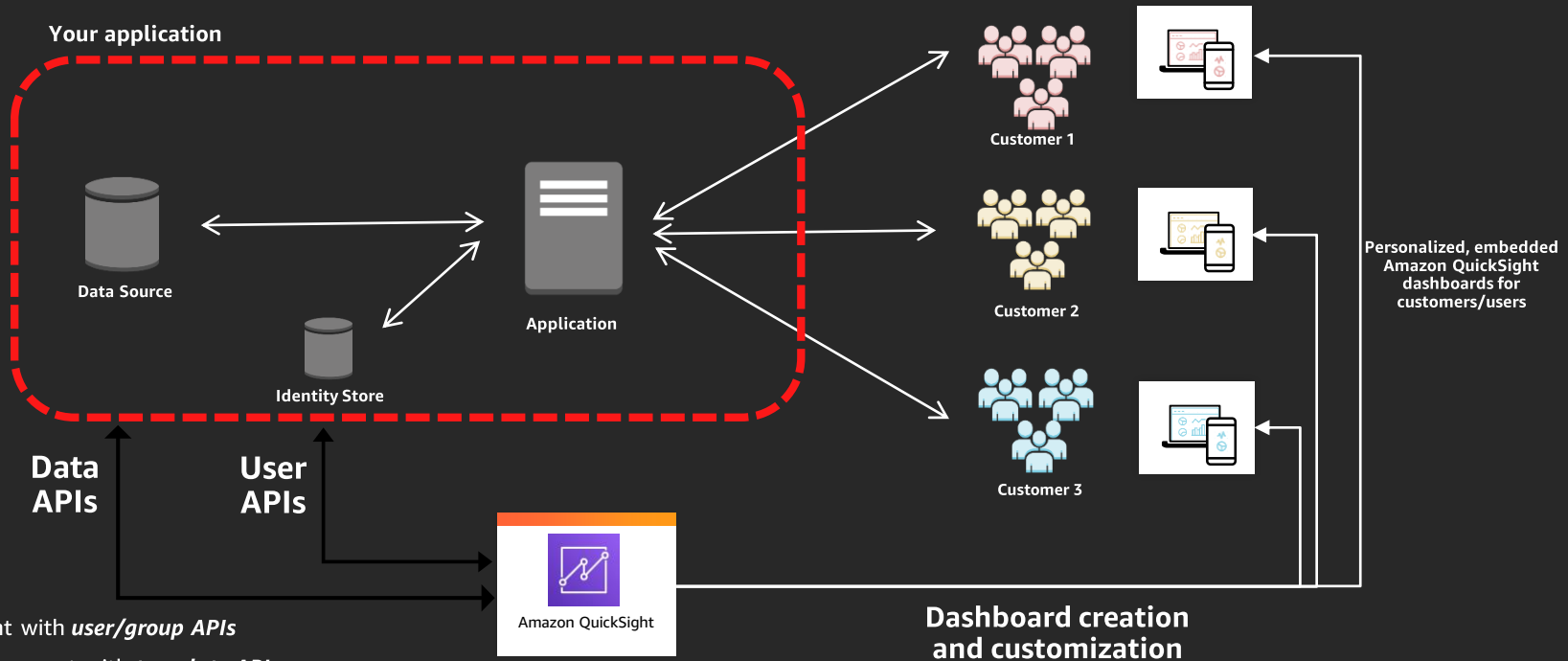
Pay for usage with pay-per-session reader pricing

Seamless authentication

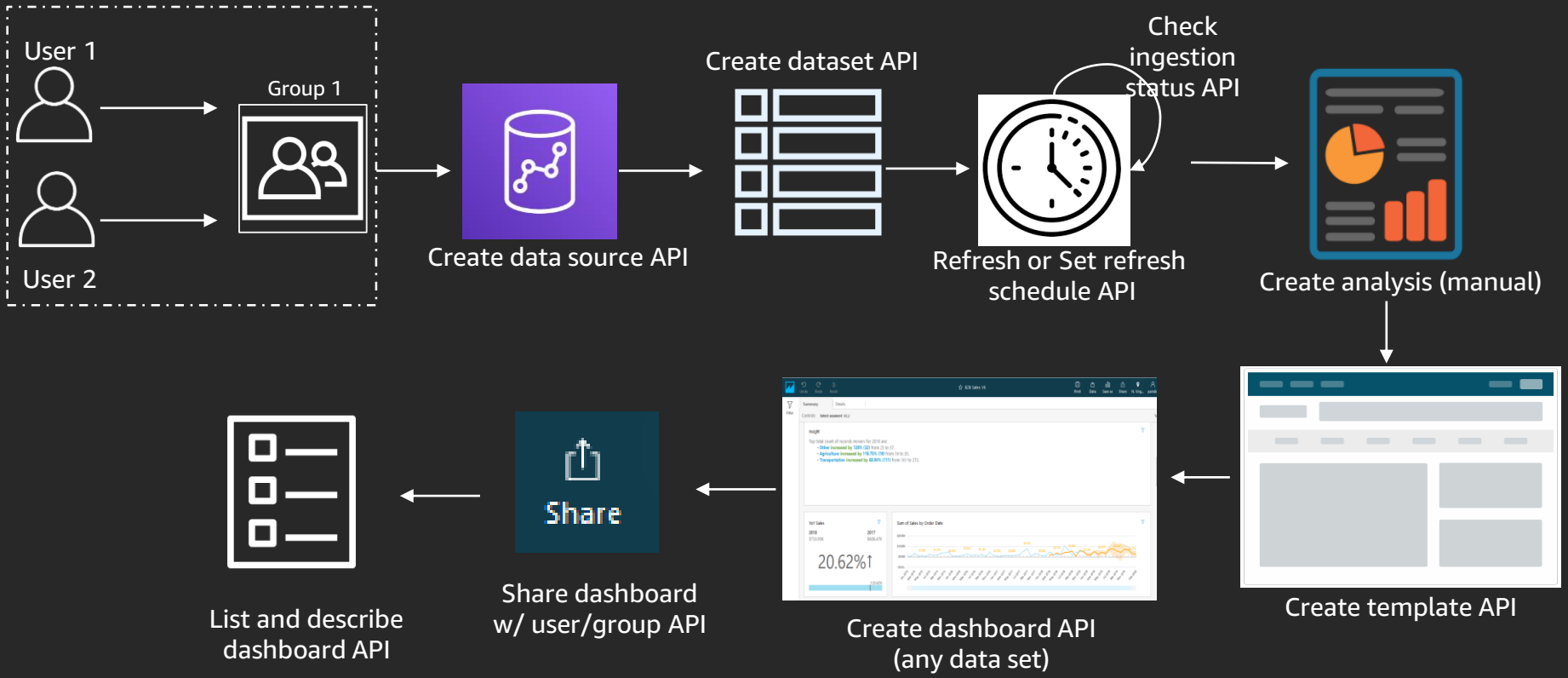
What's new? Embedding authentication



Personalized, embedded dashboards with new APIs



1. User management with ***user/group APIs***
2. Dashboard management with ***template APIs***
3. Data management with ***data source, dataset, and SPICE APIs***
4. *Coming soon:* Dashboard customization with ***theme APIs***


User 1
User 2
Group 1
Create data source API
Create dataset API
Check ingestion status API
Refresh or Set refresh schedule API
Create analysis (manual)
Create template API
Create dashboard API (any data set)
Share
Share dashboard w/ user/group API
List and describe dashboard API

What's new? APIs: Data & permissions

Data source APIs

- Create/manage data source connections w/o sharing credentials
- Audit data sources, manage ownership and access

Dataset APIs

- Create customized datasets for users or groups
- Allows isolation of data, additional row-level security possible

SPICE ingestion APIs

- Trigger SPICE ingestion of data when ETL/data load is complete
- Easily review history and trace SPICE ingestion details

Fine-grained access control APIs

- Manage user/group access to Amazon S3/Athena data via IAM policies

What's new? APIs: Dashboard

Template APIs

- Create templates from analysis
- Metadata for dashboard with placeholder for datasets
- Templates accessible via API only
- Can be copied/referenced across accounts

Dashboard APIs

- Easily create dashboards per user/group w/different datasets
- Move dashboards across dev environments
- Version dashboards for easy rollbacks
- Audit dashboards, list by users, manage ownership/sharing

Hands-on workshop

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