ORACLE

Oracle Analytics
Product Strategy

Global Leaders APAC 2020

Benjamin Arnulf
Senior Director
Product Strategy, Analytics

Safe Harbor

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Benjamin Arnulf

Senior Director
Product Strategy
Oracle Analytics

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Oracle Analytics Strategy

Oracle Analytics & ADW

Oracle PBCS

Power BI

Tableau Server

Oracle BI & Apps

Oracle Hyperion

Oracle HFM

Cognos

SQL Server

Business Object

Oracle Discover

Oracle Essbase

Oracle ERP

Excel & Macros

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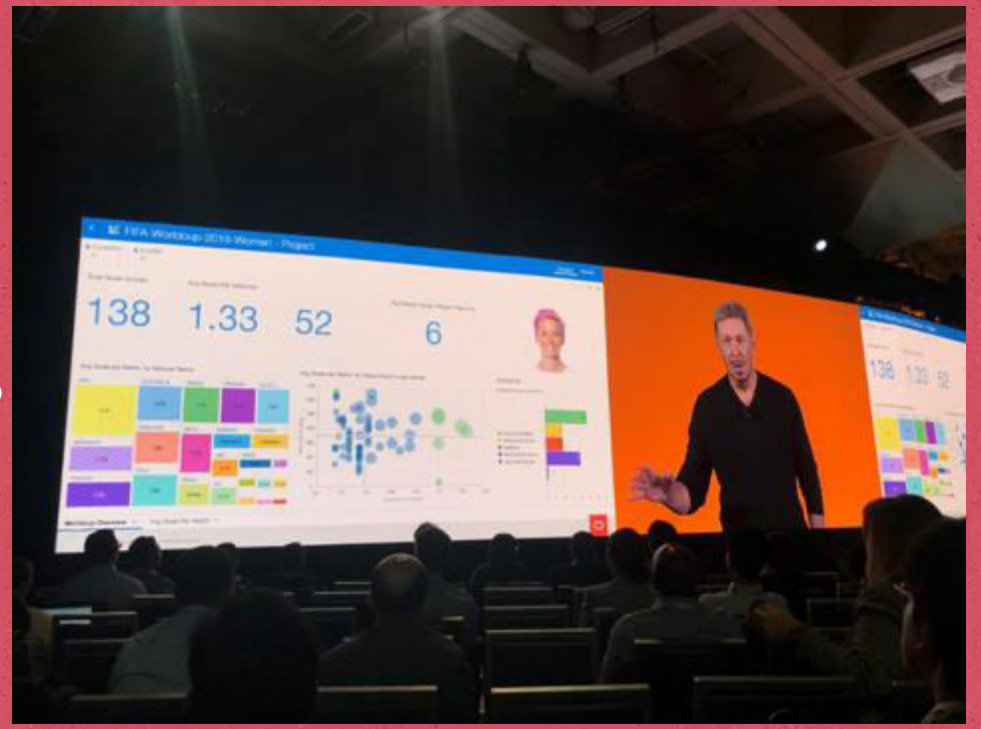
ORACLE
Analytics
Product
STRATEGY

Our mission is to help people
see data in new ways, discover insights,
unlock endless possibilities.



Oracle AI, Data, Analytics and Cloud Services

DEVELOPMENT

DIGITAL ASSISTANT
Digital Assistant, Event Services

LOW CODE
APEX, Visual Builder

DEVELOPER
Java, API, Helidon, SQL Developer, Shell, SDK

INFRASTRUCTURE AS CODE
Resource Manager, Terraform, Ansible

APPLICATION

SERVERLESS
Streaming, IOT, Events, Functions, Gateway

INTEGRATION
Integration, SOA Service, Golden Gate, Data Integrator

SAAS
ERP, HCM, SCM, CX, NetSuite, EPM, Marketing, Vertical Industry

DATA MANAGEMENT

DATA MANAGEMENT
Database Migration, Data Integration, Data Catalog

DATA PROCESSING
Data Flow, Big Data, Blockchain

DATABASE
Autonomous Database, Data Warehouse, Exadata, Bare Metal, VM, NoSQL, ATP

INFRASTRUCTURE

COMPUTE
Bare Metal/VM, CPU, GPU, HPC, Containers, Kubernetes

OPERATING SYSTEM
Autonomous Linux, OS Management, Marketplace, VMWare

STORAGE
NVMe, Block, File, Object, Archive, Data Transfer / Appliances

NETWORKING
VCN, Load Balancer, Service Gateway, FC, VPN, Cluster Networking

ANALYTICS

ANALYTICS
Analytics Cloud, Server, Fusion Analytics, Essbase

DATA SCIENCE
Data Science, Machine learning, Cloud SQL

AI
AI Applications, Tactical Edge Cloud

GOVERNANCE

GOVERNANCE
Compartments, Tagging, Cost Analysis, IAM

SECURITY
IAM, Audit, KMS Vault, CASB, Data Safe, DDoS, WAF

OBSERVABILITY
Monitoring, Logging, Notifications, Events, Alarms

MULTI CLOUD
Identity, Management

PUBLIC / GOVERNMENT CLOUD and CLOUD @ CUSTOMER

Oracle Analytics Strategy

Simplify & Unify

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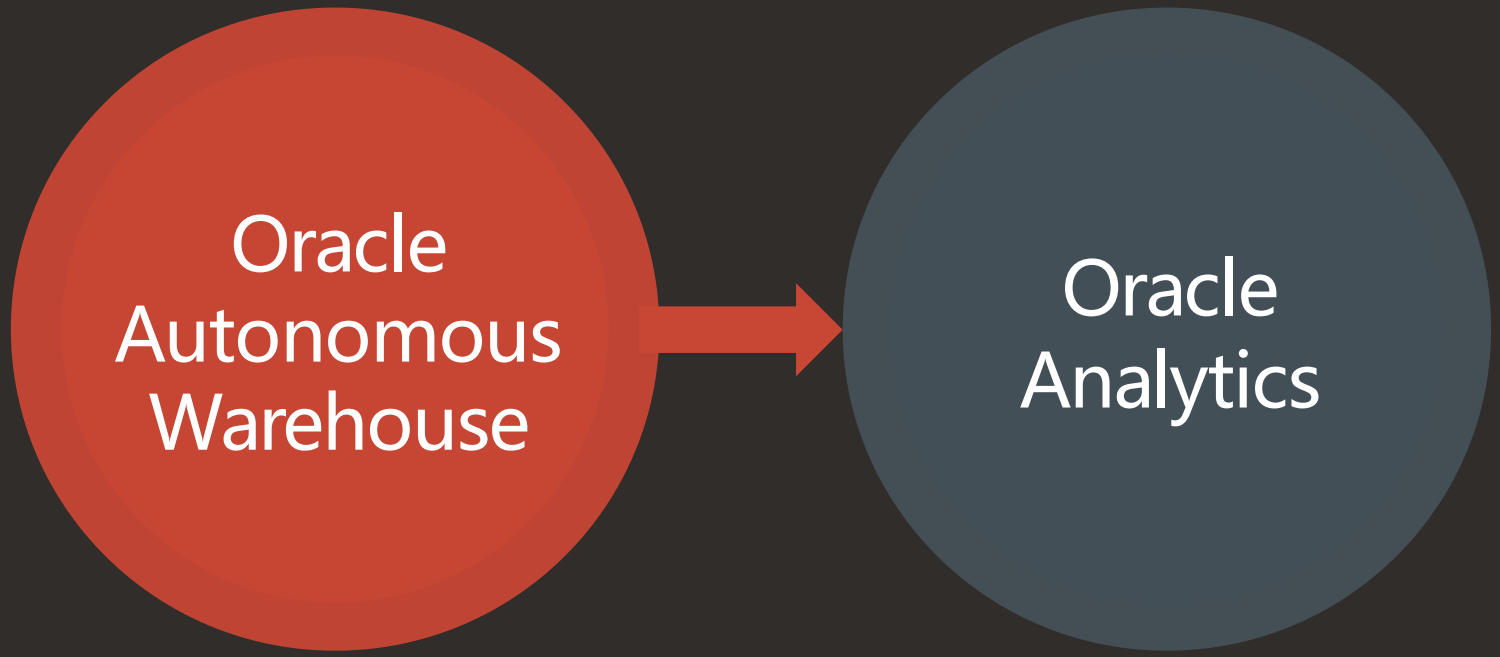
Data to Insights to Decisions



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New Oracle Analytics Products

Oracle Analytics Cloud

Oracle Analytics Server

Oracle Fusion Analytics Warehouse

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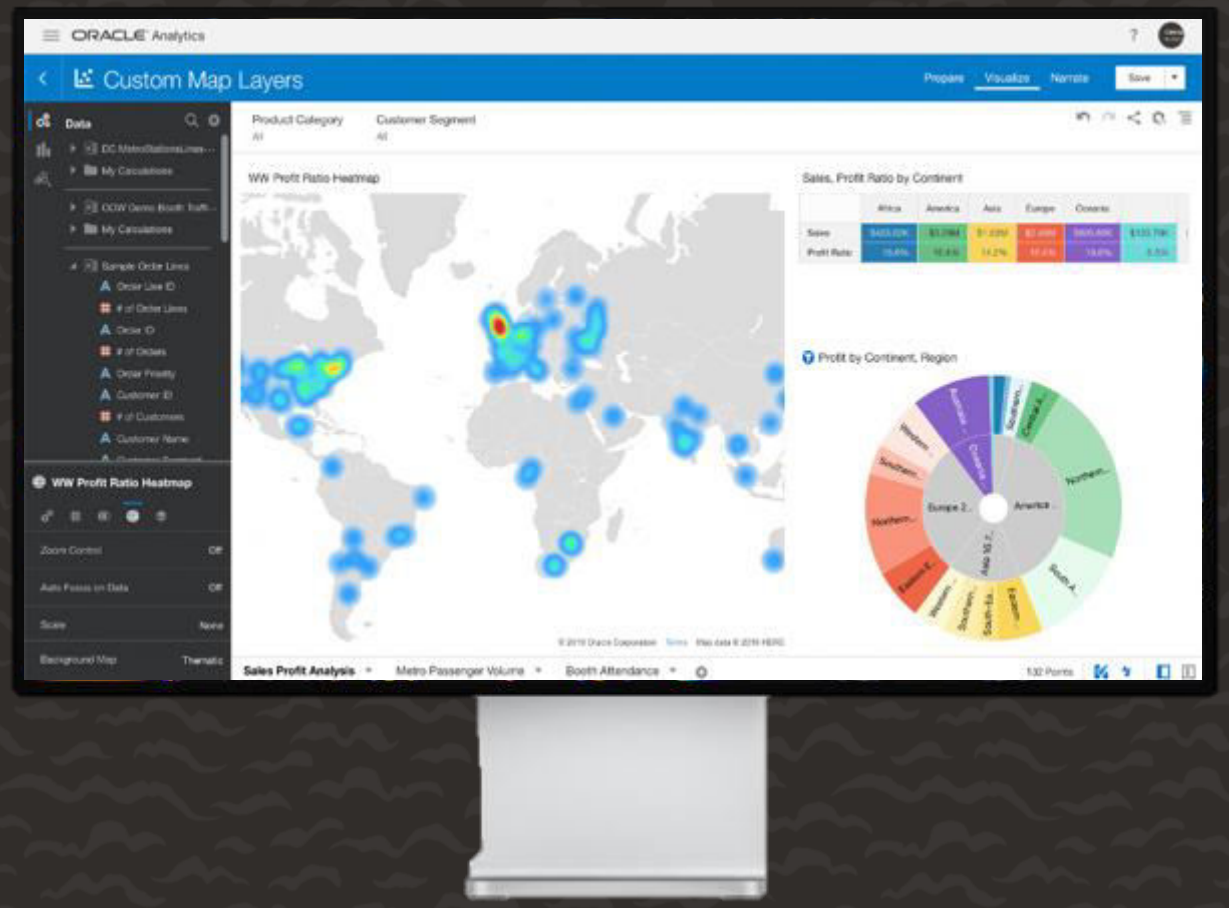
ORACLE
Analytics
Analytics
PRODUCTS

Oracle Analytics Cloud

- Augmented Analytics Cloud Platform.
- Data Visualization, Data Preparation, Data Flow.
- Self Upgrading, Self Patching, Self Securing.
- Machine Learning Advanced Integration.
- AI, NLG, NLP & Intelligent Data enrichment!



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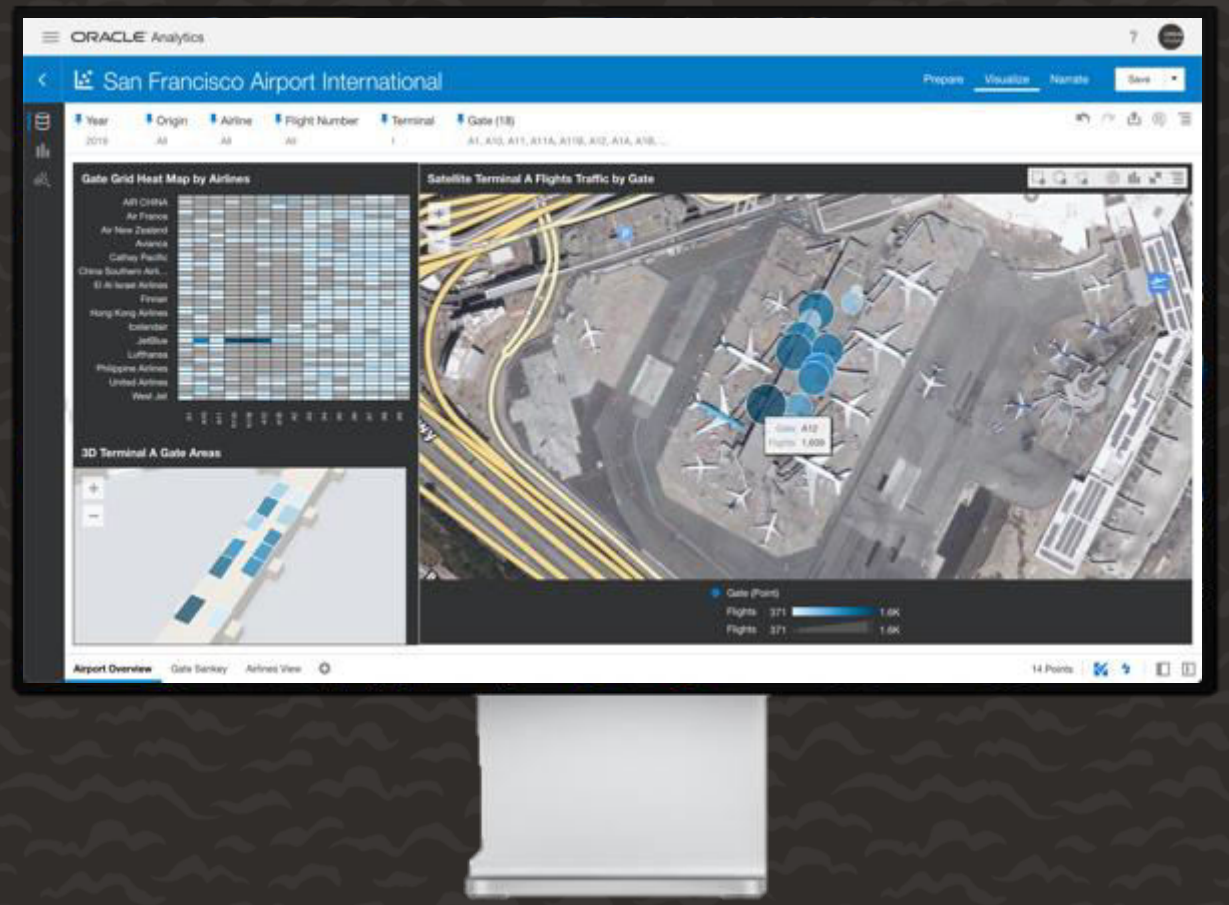
Oracle Analytics Server

- Modern analytics platform on-premise.
- Supports hybrid configurations.
- OBIEE customers with active support agreement can upgrade at no cost.
- Machine Learning, AI & Data enrichment.



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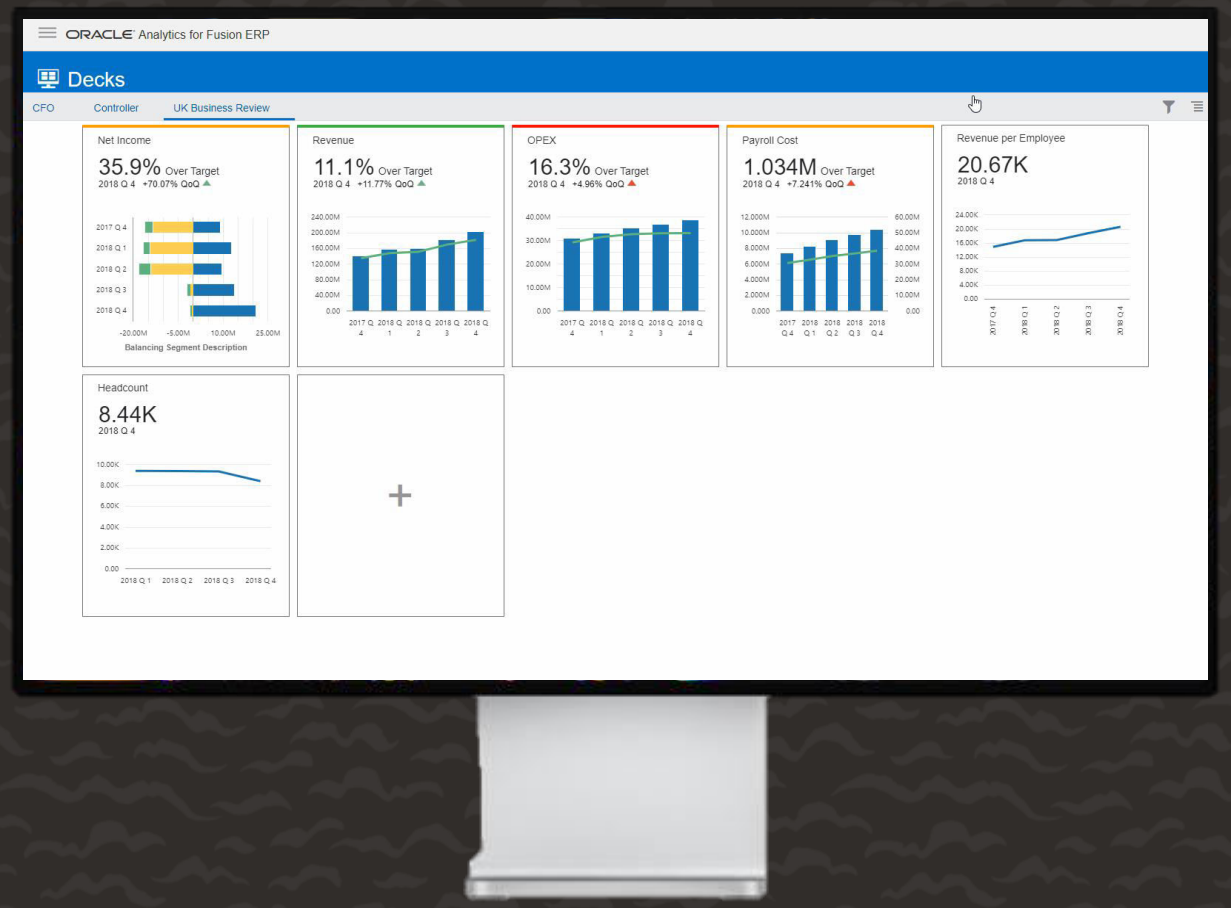
Oracle Fusion Analytics Warehouse

- Managed Augmented Analytics.
- Autonomous Data Warehouse.
- Key Performance Indicator Catalog & Targets.
- Data Pipeline, Data Model & Advanced analytics.
- For Fusion ERP, HCM, SCM, CX.



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ORACLE
Analytics
Analytics
PLATFORM

New Analytics Platform

Governed Analytics		Self-Service Analytics		Augmented Analytics	
Dashboards	Pixel-Perfect Reports	Data Preparation	Data Visualization	Voice & Chatbot	Natural Language
Semantic Models	Query Federation	Storytelling	Collaboration	Data Enrichment	1-Click Explain
Role-Based Access Control	Excel Integration	What-If Analysis	Mobile	Adaptive & Personalized	Machine Learning

Public / Government Cloud | Cloud @ Customer | On-Premise | Third Party Cloud

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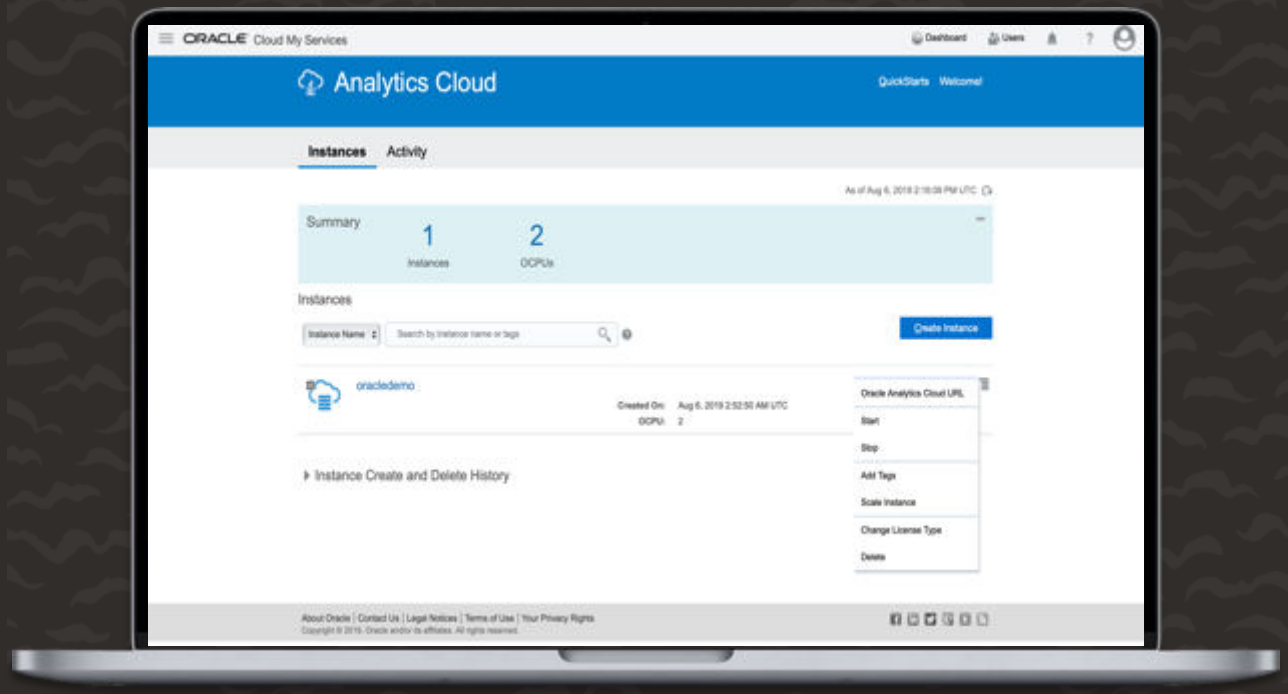
Autonomous Analytics

- Autonomous Analytics!
- Analytics at Scale
- Easy to setup
- Data Gateway
- Autonomous Database ready!



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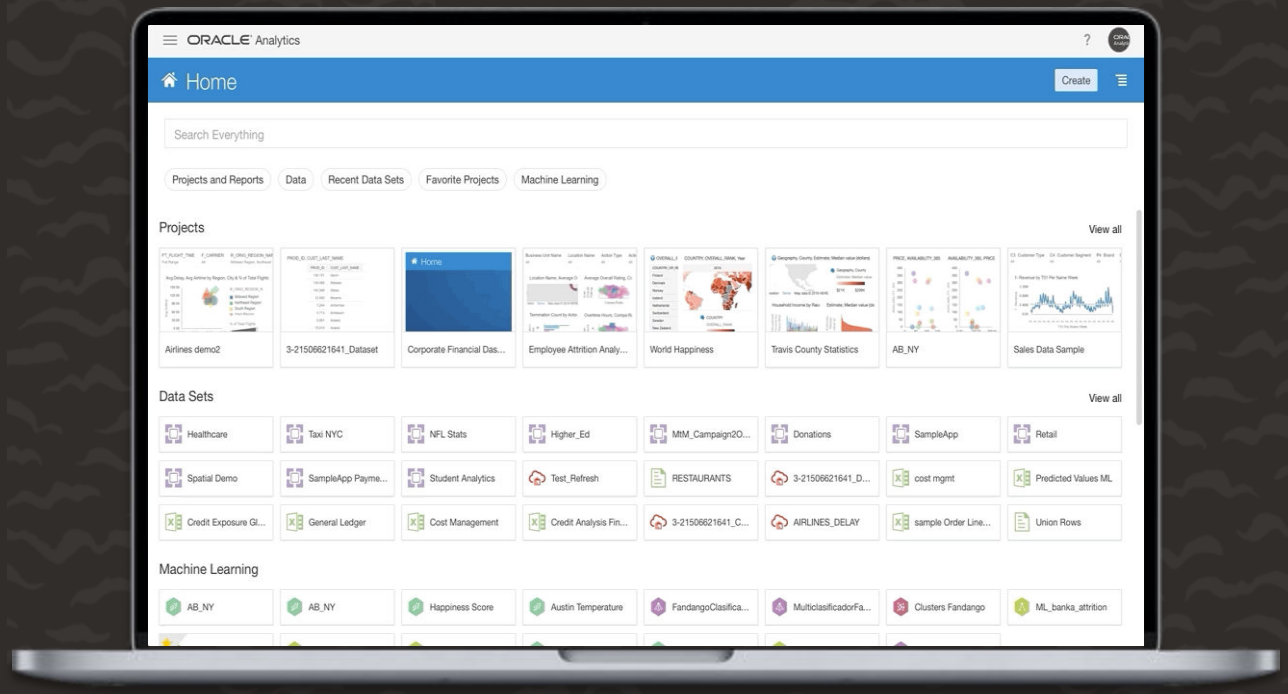
Open Connectivity

- Fully integrated with Autonomous Database
- Connectors to various data sources including: Amazon Redshift, Fusion Apps, EPM Cloud, Microsoft SQL Server, Snowflake, Oracle Database and more!



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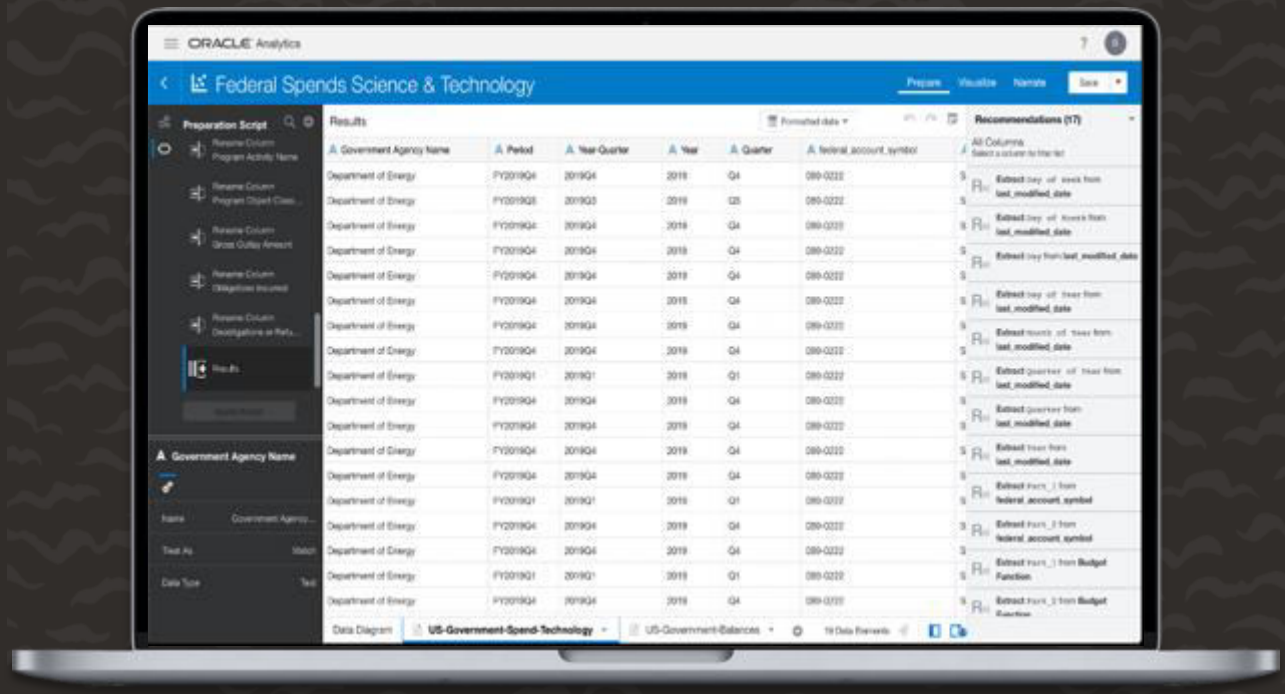
Data Preparation

- Use Data Preparation to prepare your data, metadata, rename and transform column type.
- Use Intelligent Data Enrichment to enrich your data with external and secure data such as country currency, capital, population…



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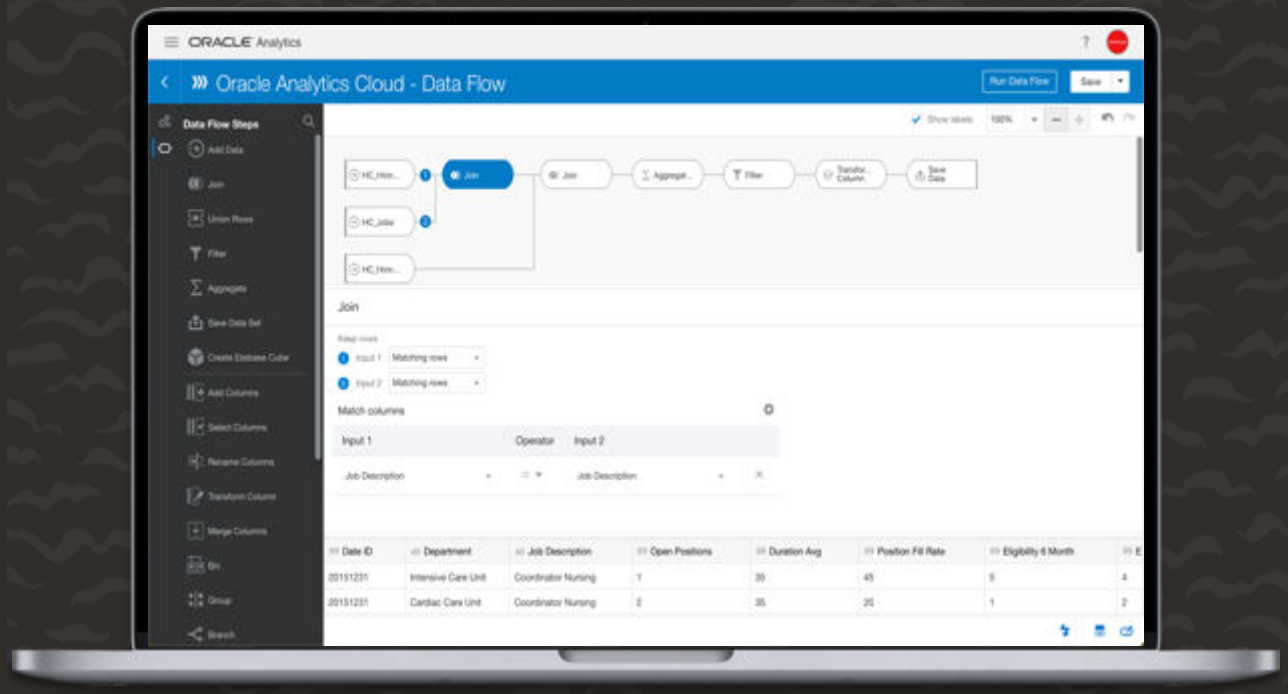
Data Flow

- Use Data Flow to ingest, clean and transform easily your data from various sources and cloud!
- Group, split, join, union, merge and save data into a database or a cube.



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Natural Language Processing

- Query Data directly using Natural Language Processing.
- No Query or SQL needed.
- Augmented Analytics.
- Voice Enabled.

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Self-Service Analytics

- Self-Service Analytics.
- 1-click to forecast for predictive analytics.
- What-if Scenarios.
- Multiple data sources join.
- Data Story Telling.

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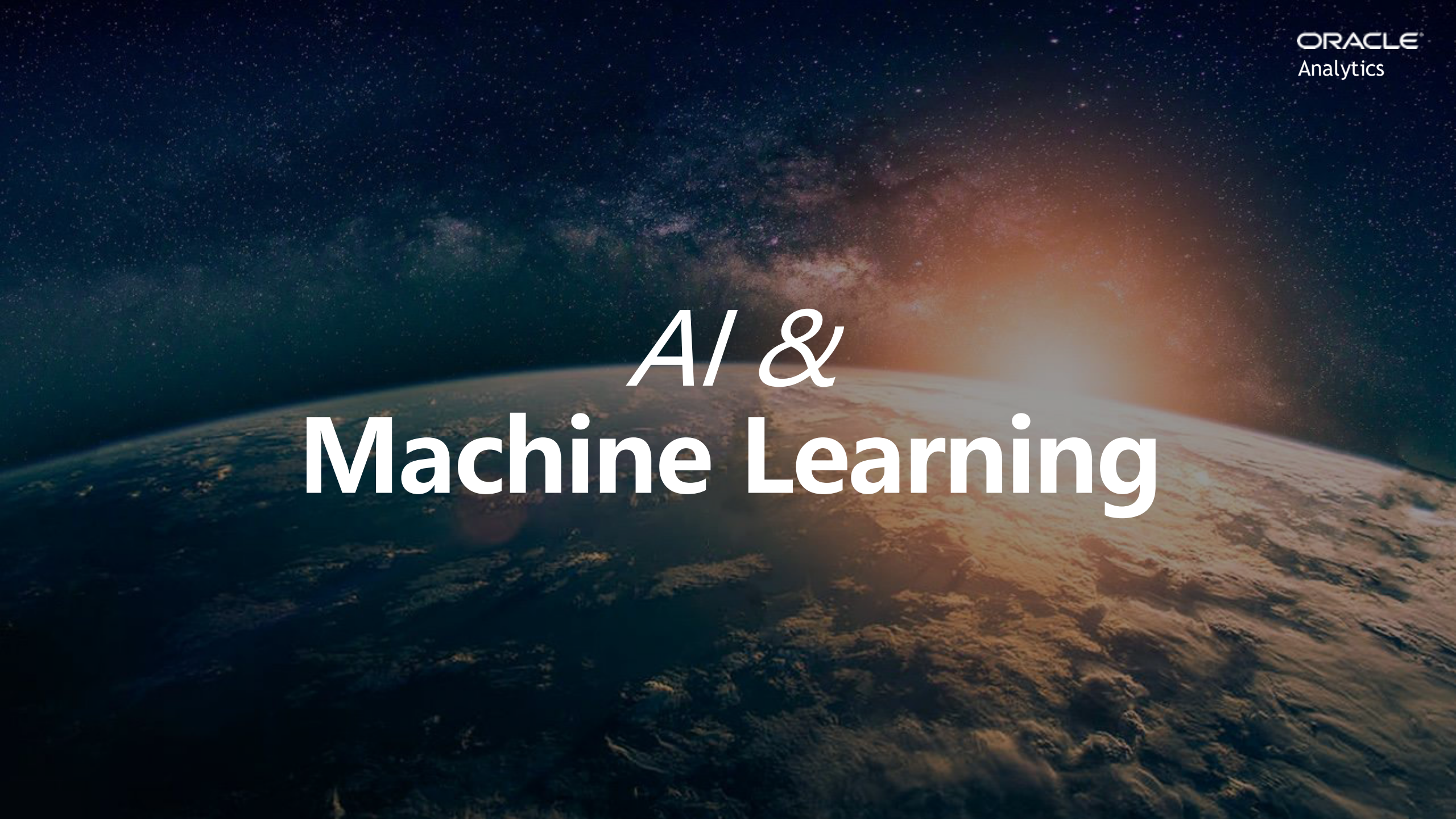
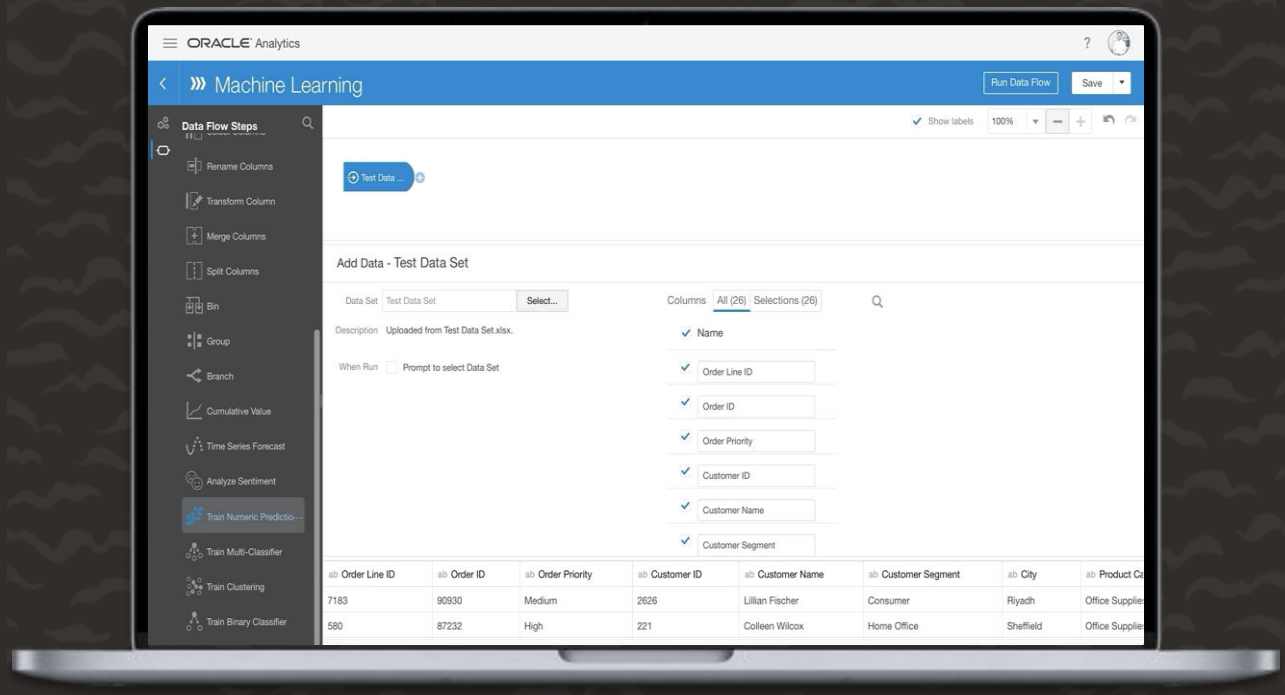

ORACLE
Analytics
AI &
Machine Learning

Machine Learning

- Data Flow to train machine learning models.
- Linear Regression, Random Forest, CART, K-Means Clustering and more algorithms.
- Machine Learning models for Predictive Analytics.



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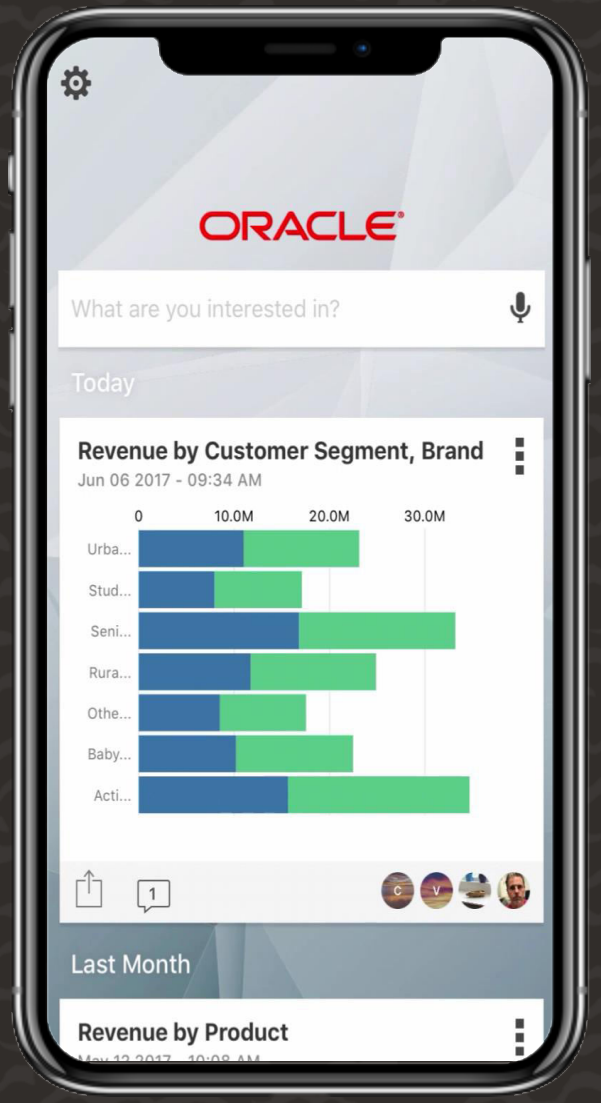
True Mobile Analytics

- True Mobile Augmented Analytics.
- All data sources available to query.
- Intelligent Recommendations Collaborative.



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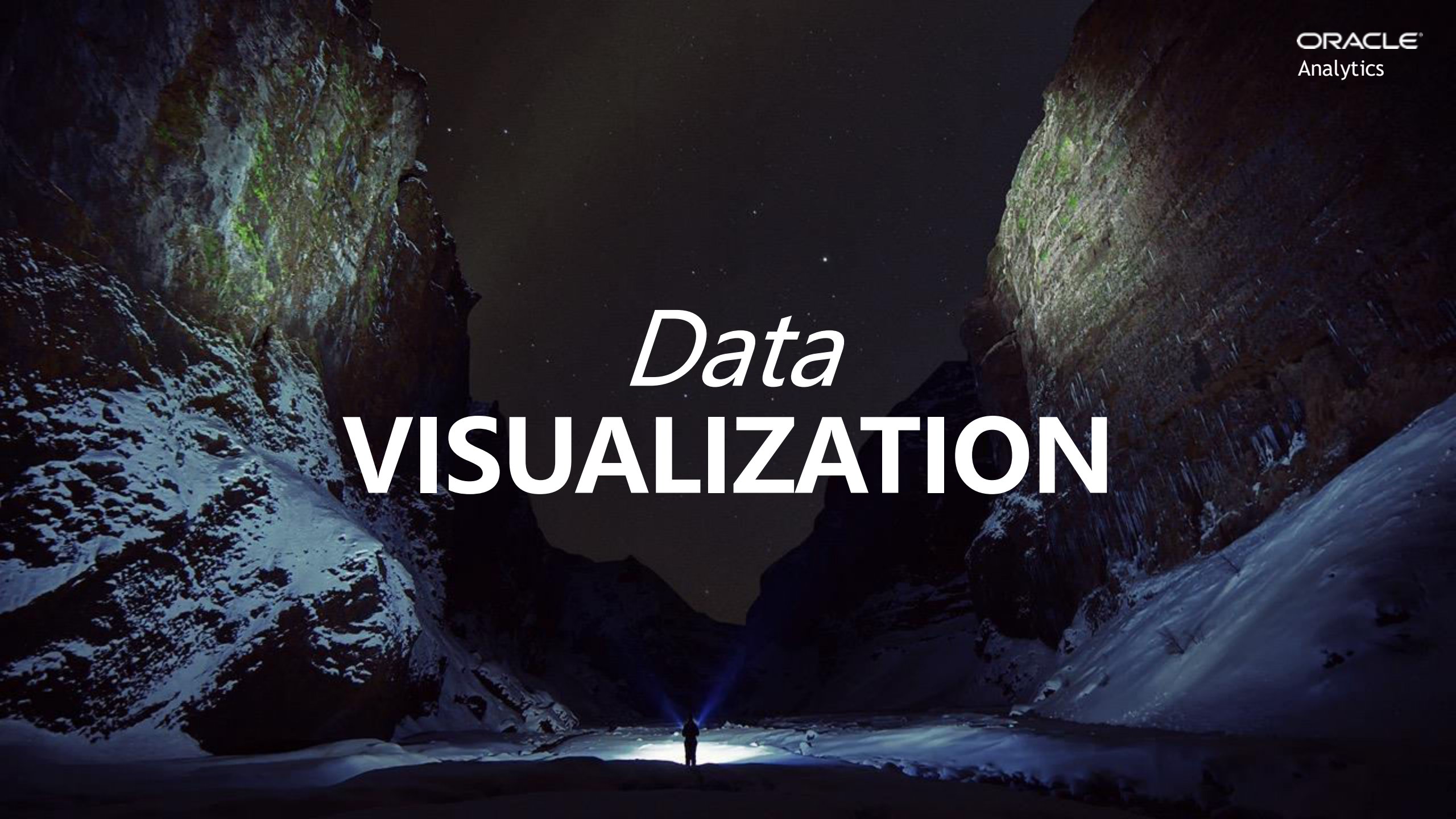

ORACLE
Analytics
Data
VISUALIZATION

Oracle Analytics - Executive Airport Analytics

Prepare | Visualize | Narrate

Data

US Airlines Delay

F_AIRTIME
F_CANCELLED
F_CARRIER
F_DEST
F_DISTANCE
F_DISTANCE_GRP
F_FLIGHT_DATE
F_FLIGHTNUM
F_FLIGHTS
F_ORIGIN
F_PILOT_ID
F_ROUTE
F_TAILNUM
FD_ARR_DELAY_G...
FD_ARRDELAY
FD_CARRIERDELAY
FD_DEP_DELAY_G...
FD_DEPDELAY
FD_LATEAIRCRAFT...
FD_NASDELAY
FD_SECURITYDEL...
FD_WEATHERDELA...
FT_ACTUALELAPS...
FT_AIR_TIME_BLK
FT_AIRTIME
FT_CRSARRTIME
FT_CRSDEPTIME
FT_CRSELAPSEDTI...
FT_DEP_TIME_BLK
FT_TAXIIN
FT_TAXIOUT
FT_WHEELSOFF
FT_WHEELSON
P_AIRCRAFT_DETA...
P_AIRCRAFT_MAN...
P_AIRCRAFT_MOD...
P_AIRCRAFT_SEAT...

Flight Traffic Heatmap

Title: Custom
Flight Traffic Heatmap
Title Font: Auto
Legend: Auto

F_CARRIER: All
P_AIRCRAFT_MANUF: All
F_FLIGHT_DATE (Year): All

Flight Traffic Heatmap

Flights Completed

27.9M

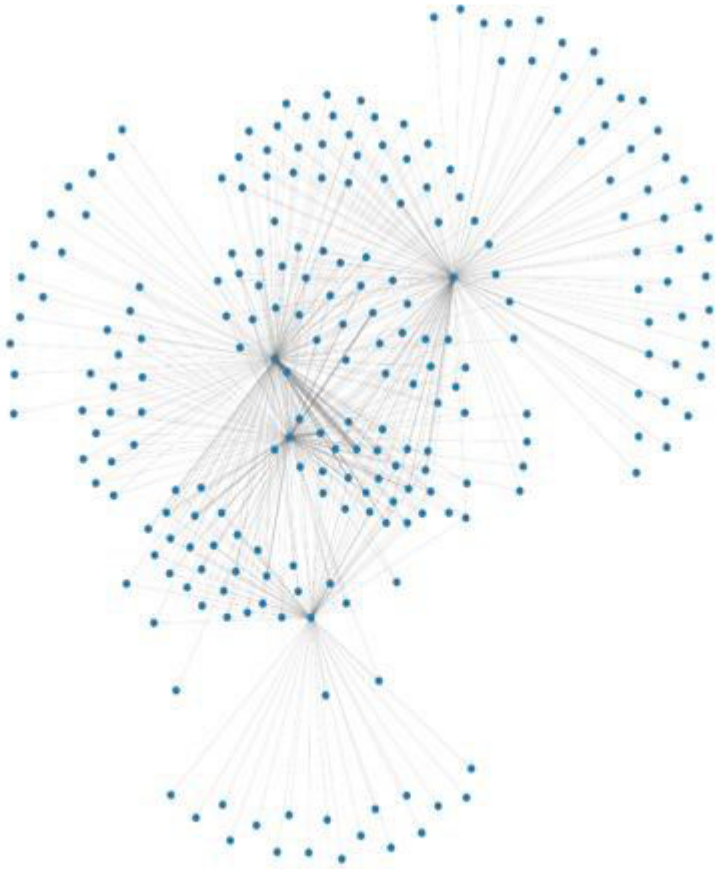
Total Planes

6.7K

Total Airports

332

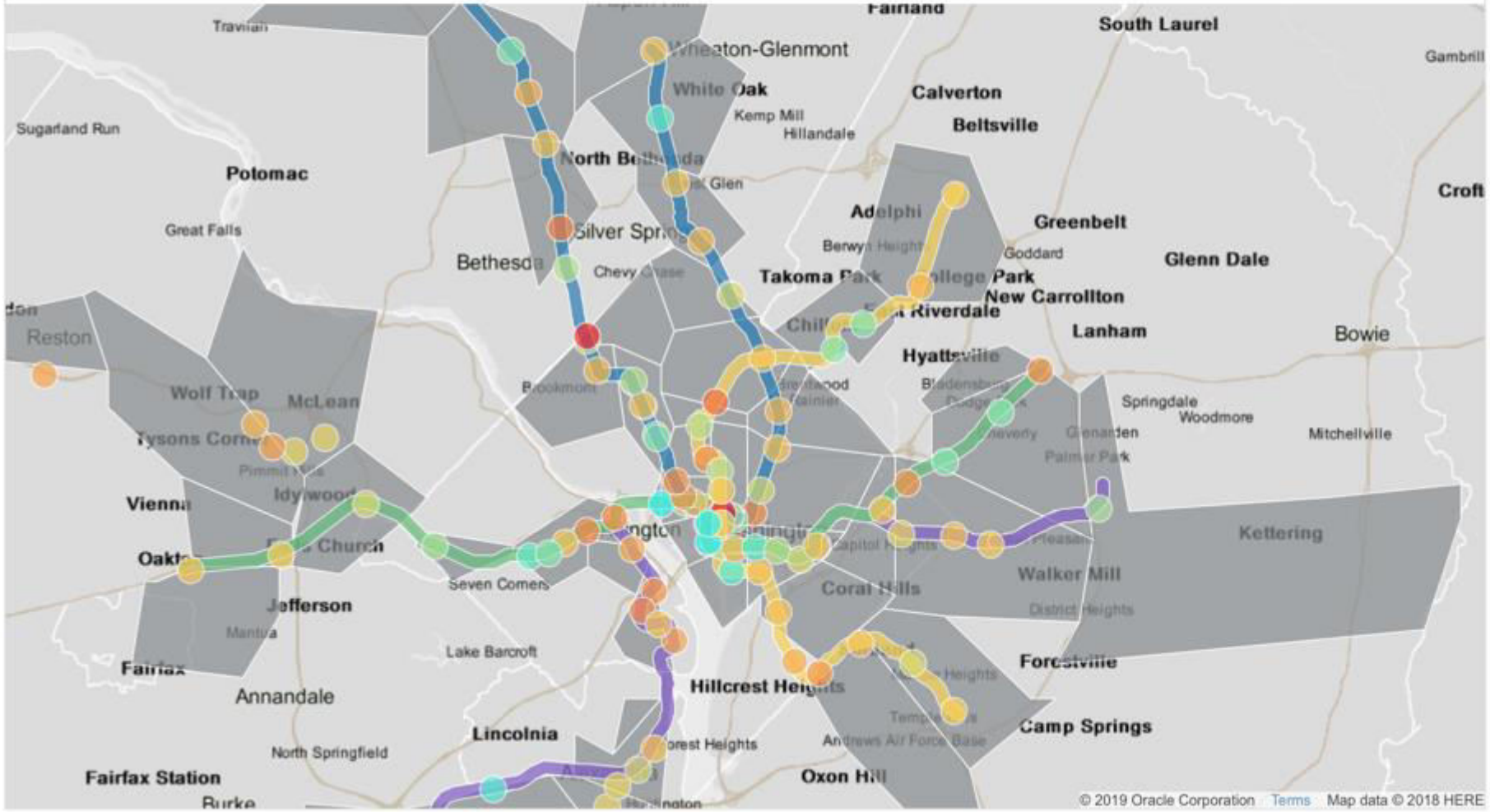
Traffic by Carriers and Destination Network



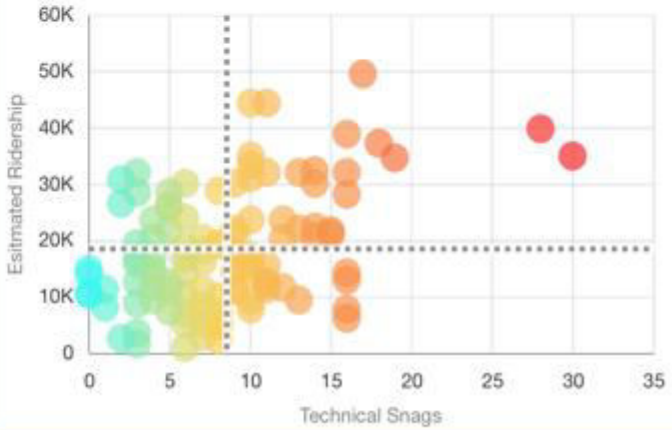
Executive Overview | Canvas 2

Line
All

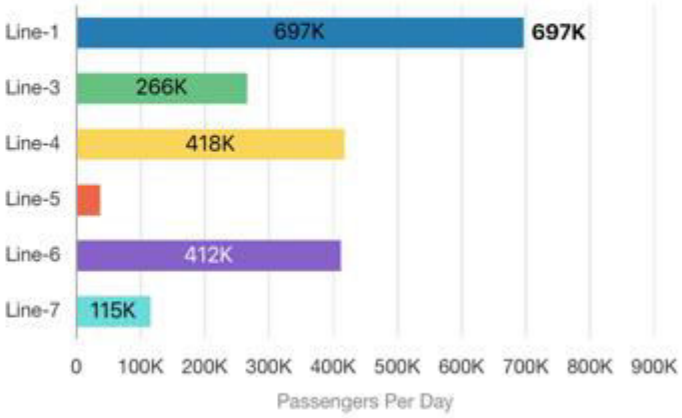
Passenger Volume Per Day in DC Metro

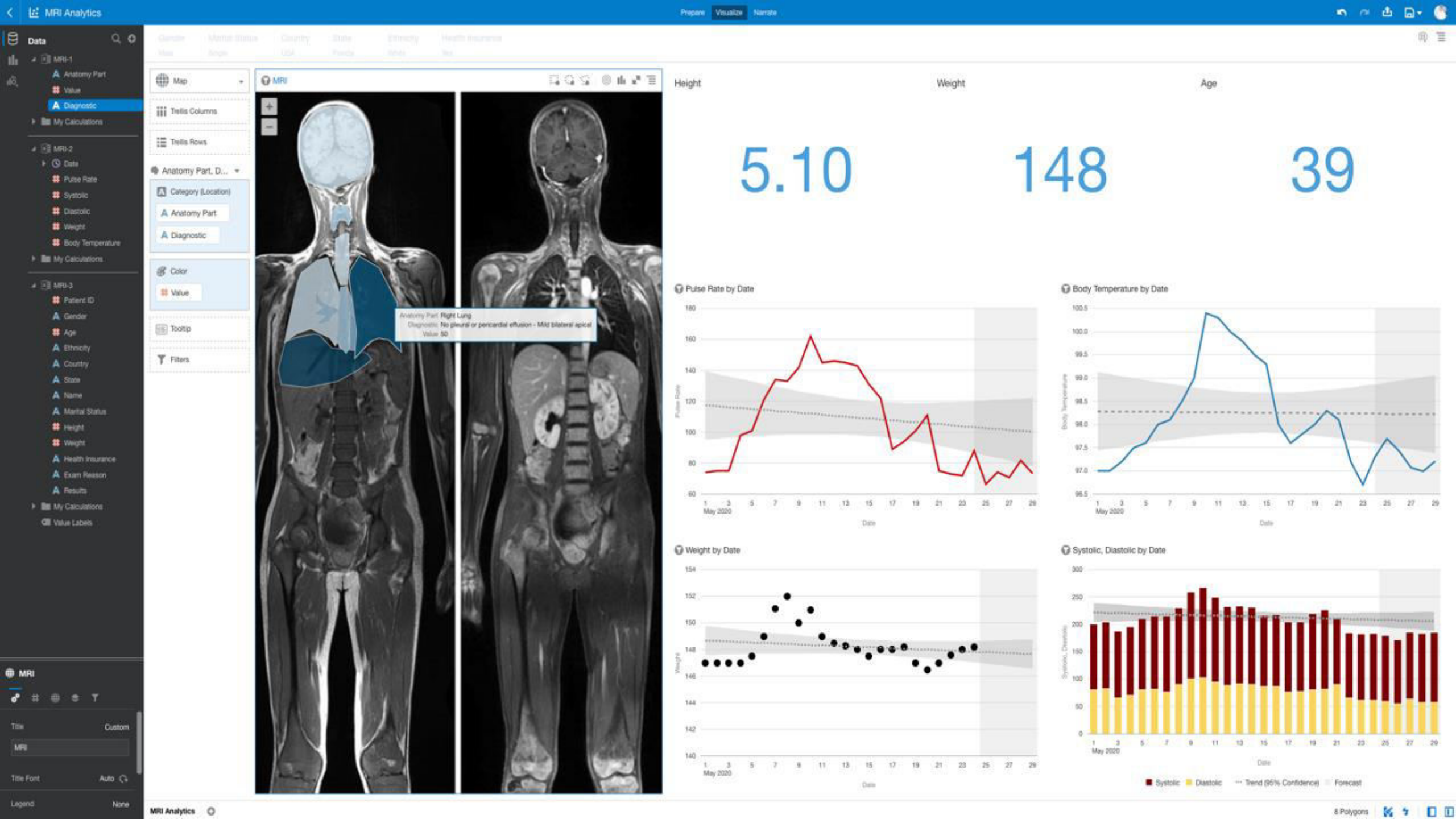


Ridership x Technical Snags by Station



Passengers Per Day by Line

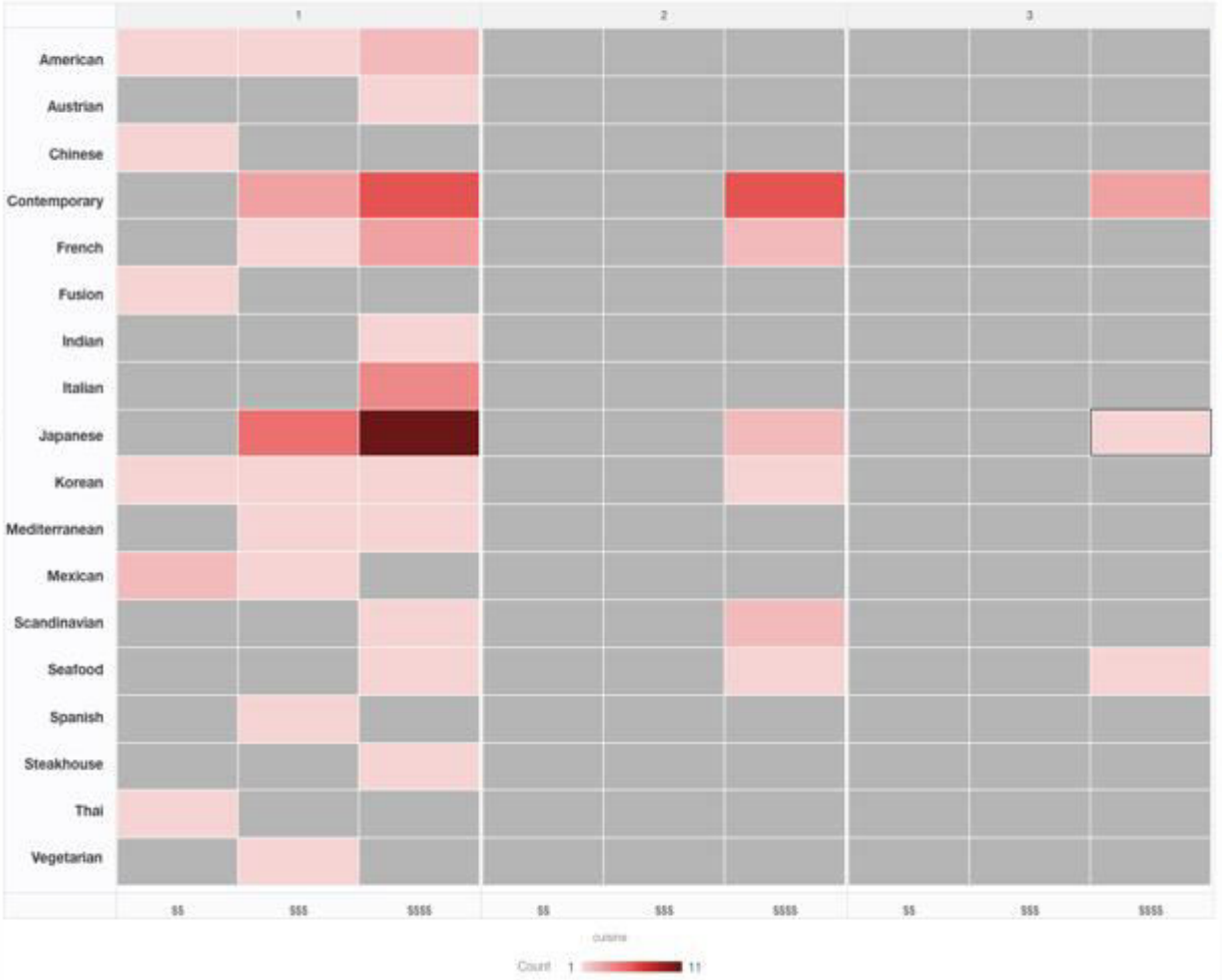



MRI Analytics
Prepare
Visualize
Narrate
Data
MRI-1
Anatomy Part
Value
Diagnostic
My Calculations
MRI-2
Date
Pulse Rate
Systolic
Diastolic
Weight
Body Temperature
My Calculations
MRI-3
Patient ID
Gender
Age
Ethnicity
Country
State
Name
Marital Status
Height
Weight
Health Insurance
Exam Reason
Results
My Calculations
Value Labels
MRI
Title
Custom
MRI
Title Font
Auto
Legend
None
Map
Trellis Columns
Trellis Rows
Anatomy Part, D...
Category (Location)
Anatomy Part
Diagnostic
Color
Value
Tooltip
Filters
MRI
Anatomy Part Right Lung
Diagnostic No pleural or pericardial effusion - Mild bilateral apical
Value 50
Height
Weight
Age
5.10
148
39
Pulse Rate by Date
Body Temperature by Date
Weight by Date
Systolic, Diastolic by Date
May 2020
Date
Systolic
Diastolic
Trend (95% Confidence)
Forecast
MRI Analytics
8 Polygons

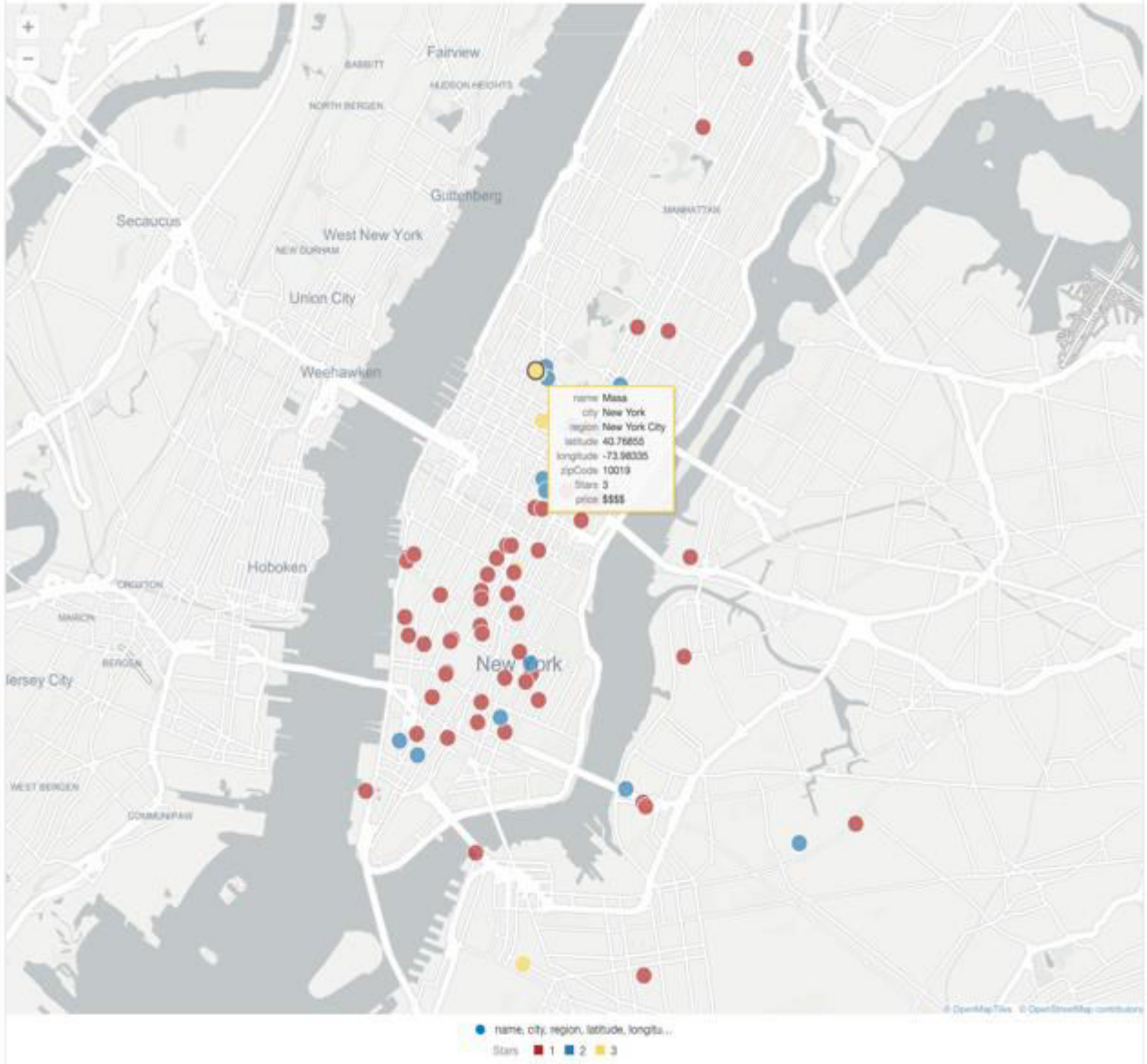
year: 2019 | city: New York | cuisine: All | Stars: All | price: All

1 Star	2 Stars	3 Stars
55	14	5

Restaurants by Cuisine, Price and Stars



Interactive Map of Restaurants in the Michelin Guide



Author: Benjamin Arnulf - **Dataset**: Kaggle - https://www.kaggle.com/jackywang529/michelin-restaurants/version/1 - Jacky Wang

Country: India | Commodity (3): Rice, Sugar, Wheat | Currency: INR | Type: Retail | Kg: KG | Year: Last 10 Years | state: All

Commodity price increase and disparity across India

United Nations World Food Programme

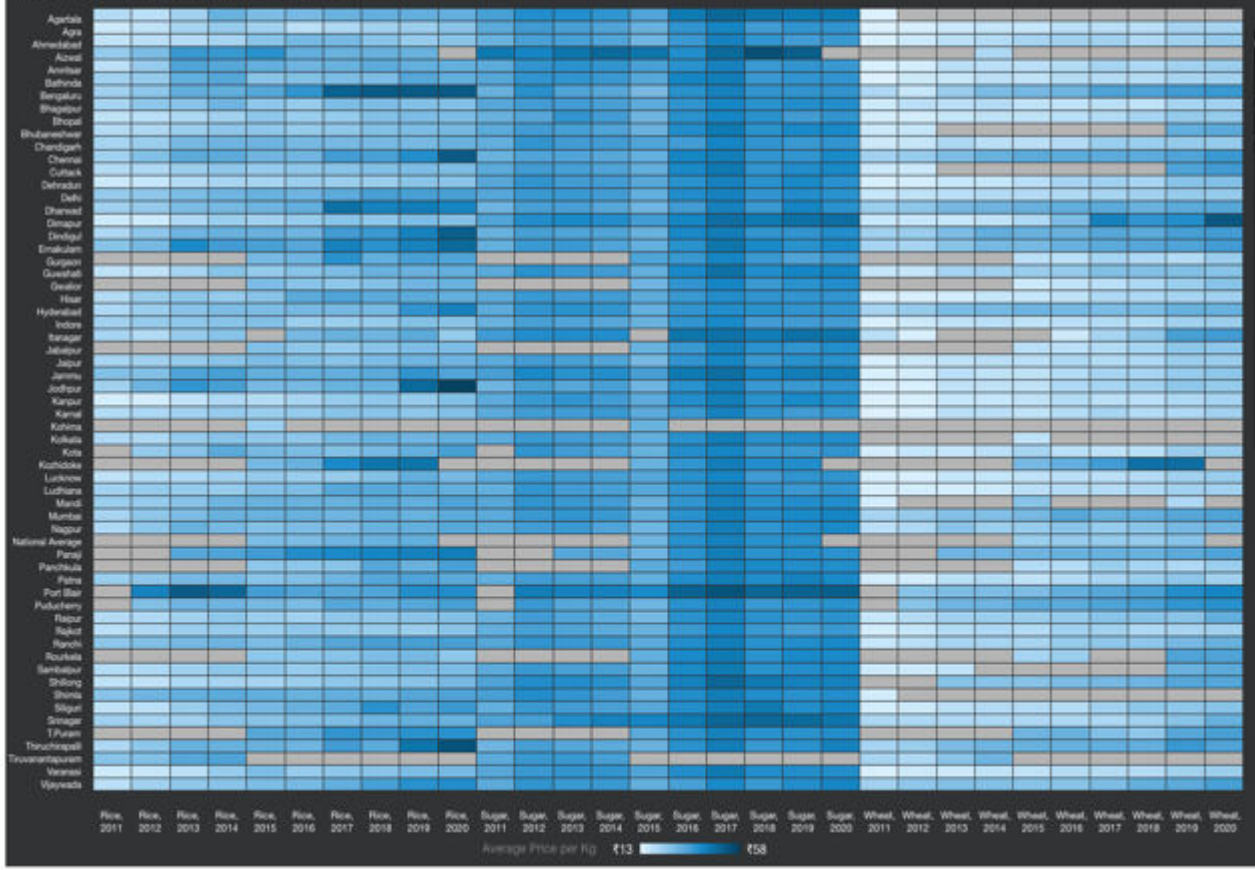
1.7x Rice

1.2x Sugar

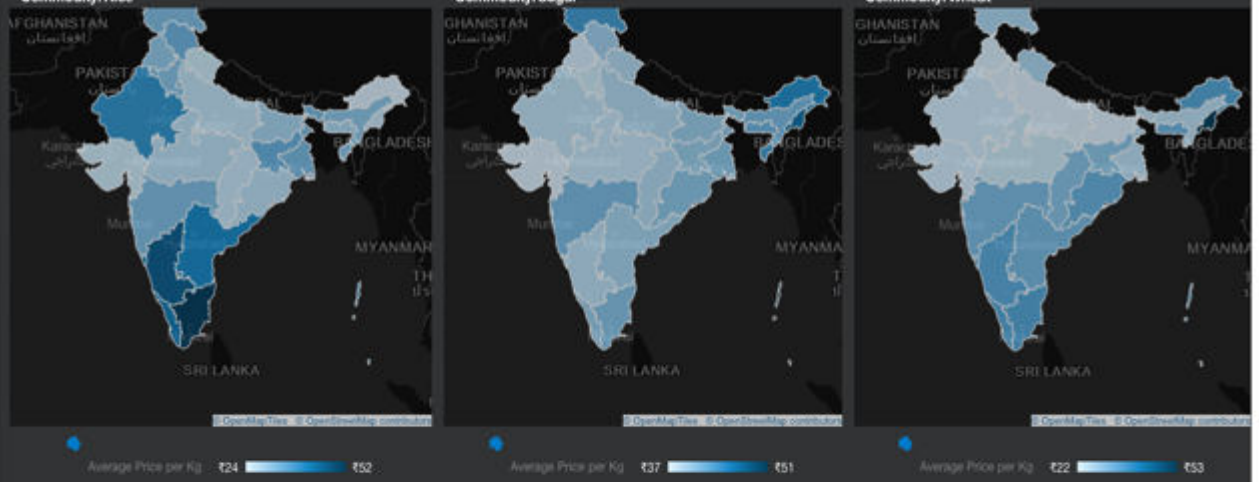
1.6x Wheat

The World Food Programme (WFP) is the leading humanitarian organization saving lives and changing lives, **delivering food assistance in emergencies,** and **working with communities to improve nutrition and build resilience**. As the international community has committed to ending hunger, achieve food security, and improved nutrition by 2030, **one in nine people worldwide still do not have enough to eat.** For its efforts to **combat hunger**, for its contribution to bettering conditions for peace, and for acting as a driving force in **efforts to prevent the use of hunger as a weapon of war**, the World Food Programme was awarded the Nobel Peace Prize in 2020.

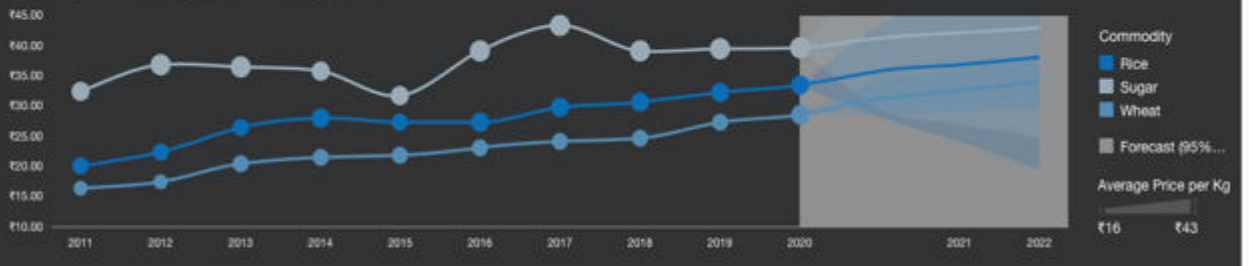
Average price by kg per year and market in India



Latest average price by kg and state



Average Price volatility by kg per Commodity and Year



Source: Word Food Programme – Food Prices Data Source - Period: From January 2011 to July 2020. Data Visualization: Created with Oracle Analytics Cloud. Author: Benjamin Arnulf

Medical Partner: «NULL»
Country: All

watsi

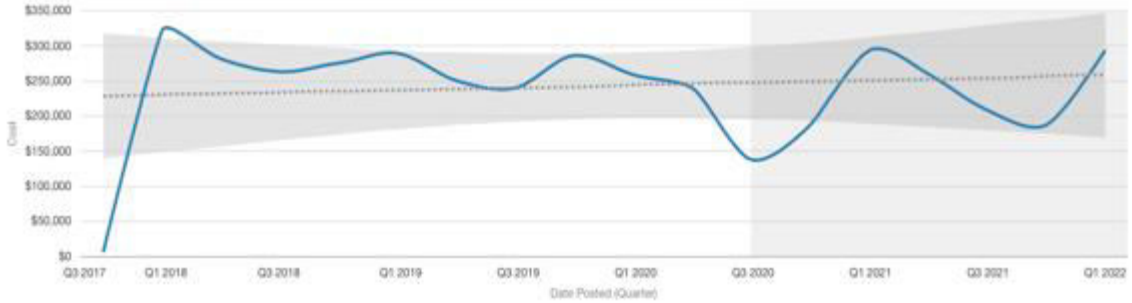
Total Funded

$2,857,779

Total Number of Cases

5,000

Forecasted Funds by Quarter

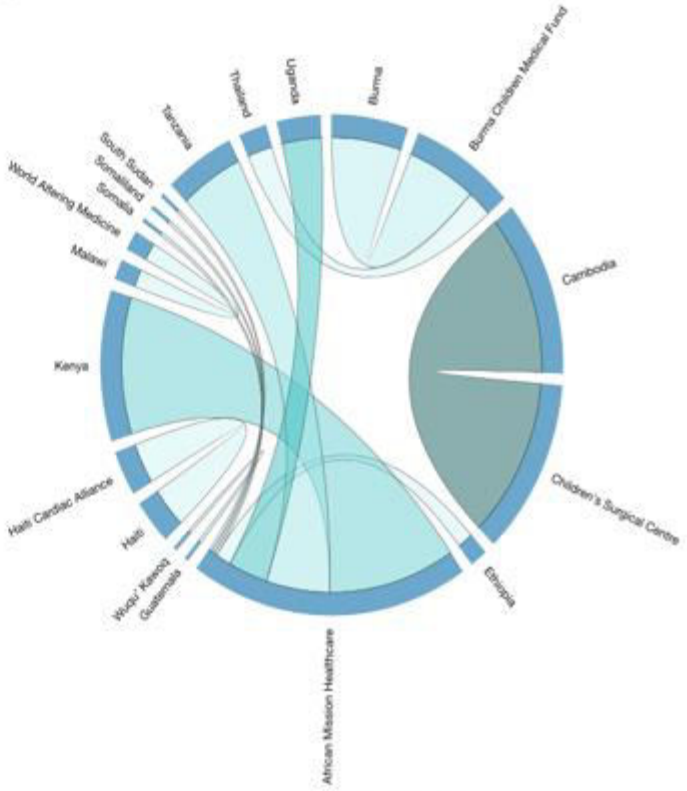


Patient Case: Veronicah

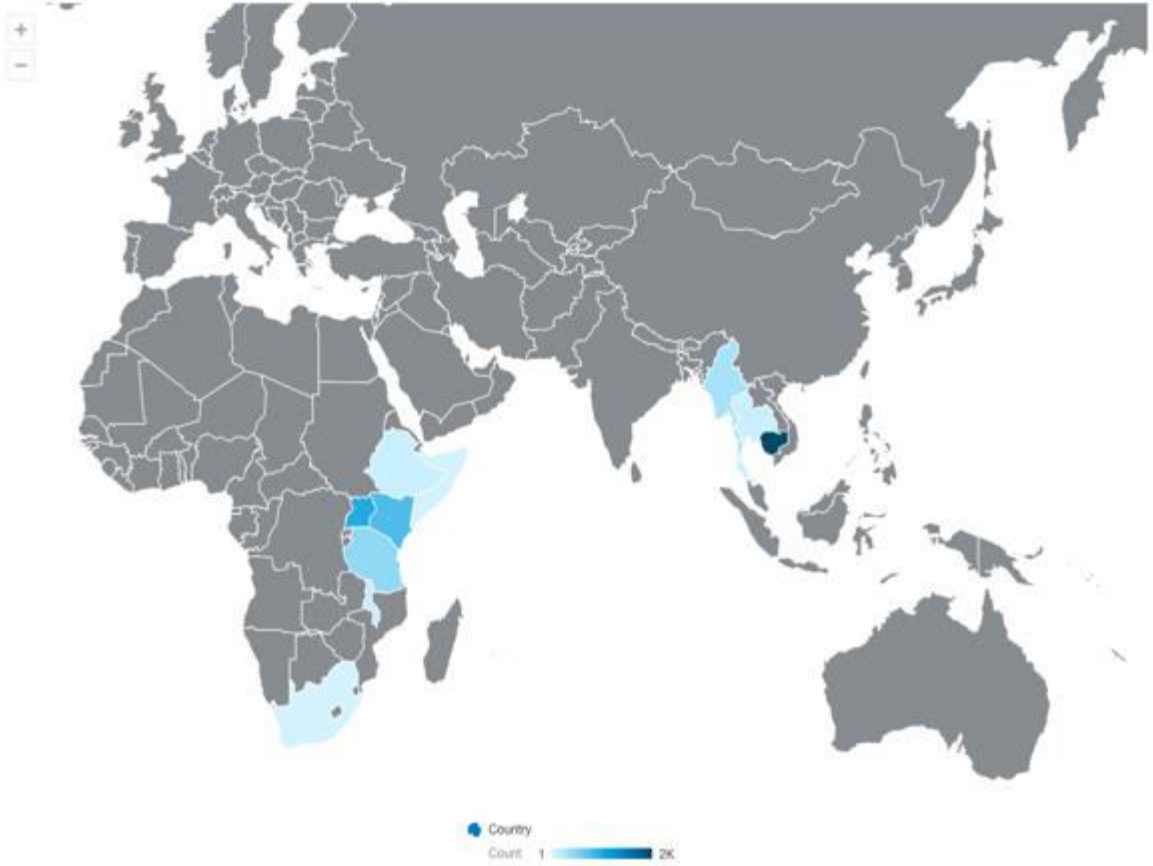
Case ID: 21908

Case ID	Country	Patient Name	Date Posted	Cost
21908	Kenya	Veronicah	01/08/2020	$708

Top 10 country by funded healthcare cases



Top Countries with Funded Healthcare



Funds by country

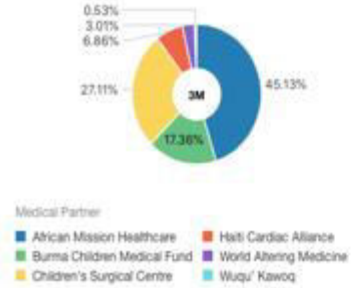
The data represents the Cost for a total of 13 Countries.

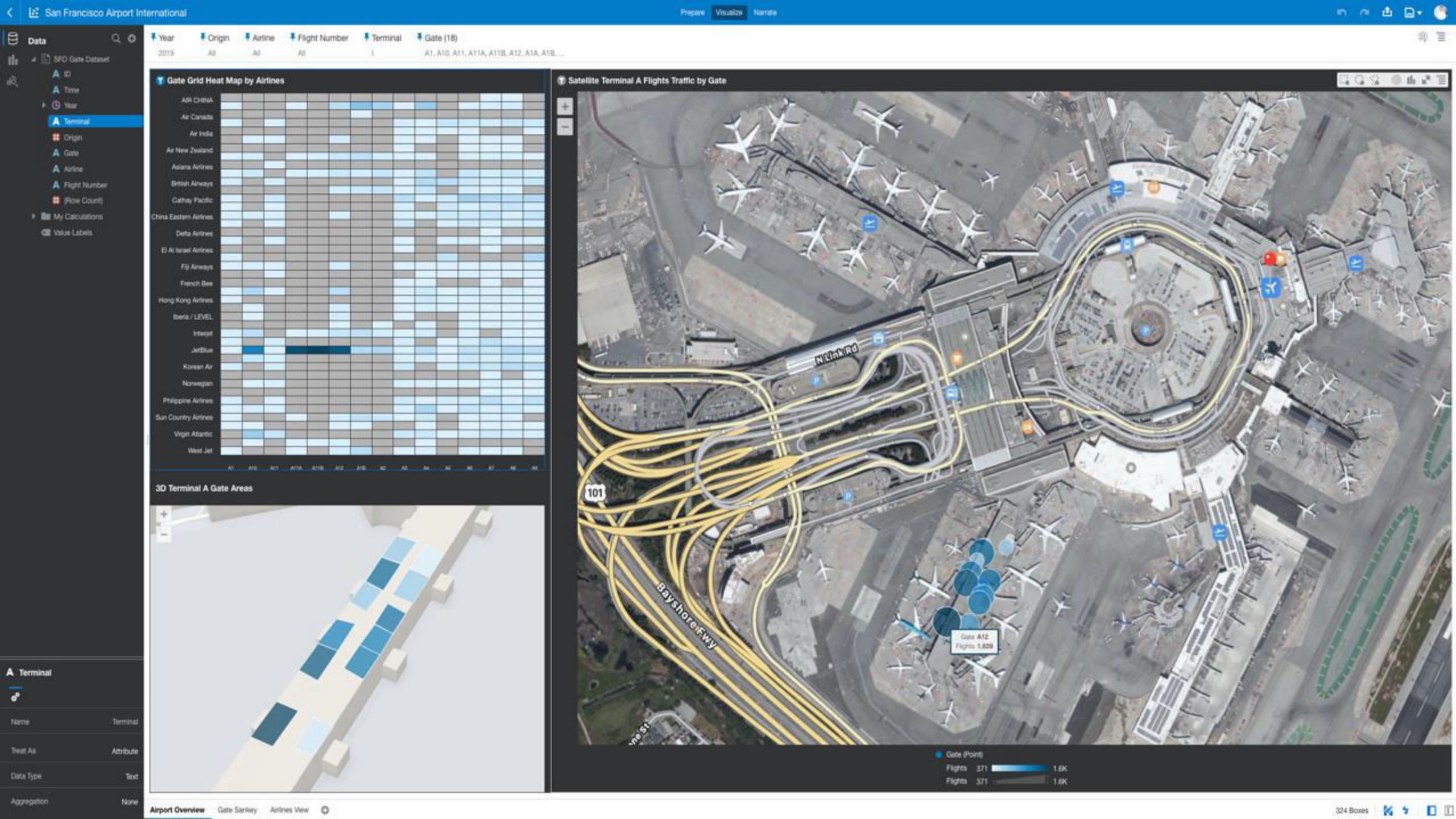
What stands out in this situation is that two Countries account for more than half of the total. There is a dominant group of Countries. This group is composed of two Countries: Cambodia Kenya, with 27.11% 23.23%, respectively.

Combined, the 11 other Countries make up the rest of the list, accounting for 49.66% of the total.

When taken together, the 13 Countries reach a total value of 2,857,779, 219,829 on average. The most frequent value is 1,500 and appears twice.

Funds by Medical Partners




San Francisco Airport International
Prepare
Visualize
Narrate
Data
SFO Gate Dataset
ID
Time
Year
Terminal
Origin
Gate
Airline
Flight Number
(Row Count)
My Calculations
Value Labels
Year
2019
Origin
All
Airline
All
Flight Number
All
Terminal
I
Gate (18)
A1, A10, A11, A11A, A11B, A12, A1A, A1B, ...
Gate Grid Heat Map by Airlines
AIR CHINA
Air Canada
Air India
Air New Zealand
Asiana Airlines
British Airways
Cathay Pacific
China Eastern Airlines
Delta Airlines
El Al Israel Airlines
Fiji Airways
French Bee
Hong Kong Airlines
Iberia / LEVEL
Interjet
JetBlue
Korean Air
Norwegian
Philippine Airlines
Sun Country Airlines
Virgin Atlantic
West Jet
3D Terminal A Gate Areas
Satellite Terminal A Flights Traffic by Gate
N Link Rd
101
Bayshore Fwy
Gate A12
Gate (Point)
Flights 371 1.6K
Flights 371 1.6K
Terminal
Name Terminal
Treat As Attribute
Data Type Text
Aggregation None
Airport Overview
Gate Sankey
Airlines View
324 Boxes

Data
- Singapore-Airbnb
  - id
  - name
  - host_id
  - host_name
  - neighbourhood_group
  - neighbourhood
  - latitude
  - longitude
  - Room Type
  - price
  - minimum_nights
  - Reviews
  - last_review
  - reviews_per_month
  - calculated_host_listing...
  - availability_365
- My Calculations
- Value Labels

Image
Source: File — airbnb.png
Align
Transparency: 0%
Aspect Ratio: Locked
Width: Auto Fit
Height: Auto Fit
Background Fill Color
Color Transparency: 0%
Description

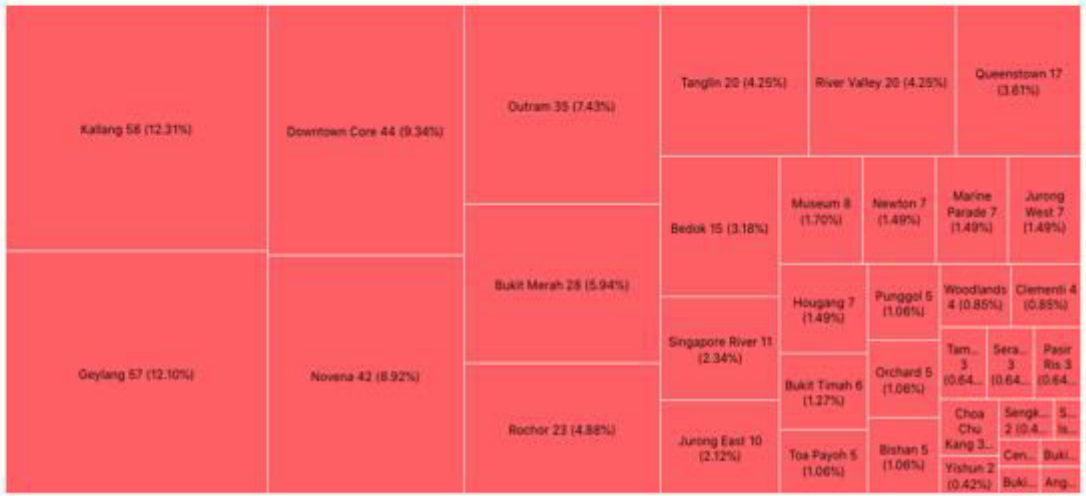
last_review (Year)	last_review (Quarter)	Room Type	neighbourhood	neighbourhood_group	price
2019	Q1 2019	All	All	All	Full Range

airbnb Singapore Airbnb Analytics

Total number of Airbnb in Singapore for the period
471

Total number of reviews for the period
4,474

Reviews per month and Price by Room Type



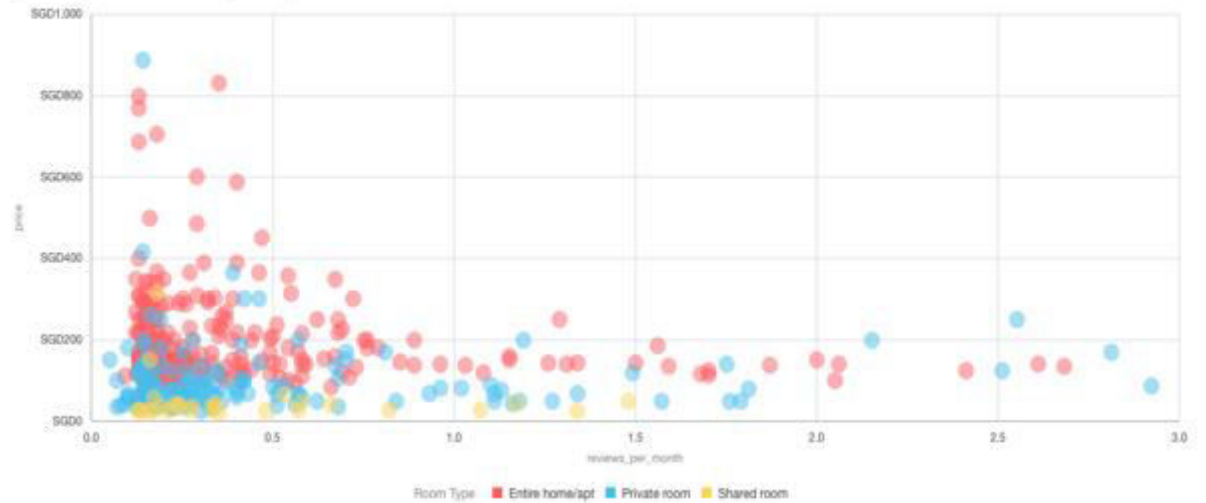
Singapore Map

Airbnb Detailed Listing

id	neighbourhood	name	host_name	Room Type	Reviews	price
289234	Tampines	Booking for 3 bedrooms	Belinda	Private room	12	SGD417
324945	Bukit Merah	20 Mins to Sentosa @ Hilltop ! (B)	K2 Guesthouse	Private room	13	SGD44
833289	Bukit Merah	Warm hospitality Italian style	Laura	Private room	2	SGD150
960342	Hougang	Individual room available for rent near to market	Natesh	Private room	6	SGD35
1615074	Outram	AweSome view! Ensuite 1+1 @Chinatown	Kaurus	Private room	3	SGD67
2387730	Kallang	Promotion: City,$54/pax, Fast WIFI, Boutique Inn	Tommy	Private room	8	SGD54
2532466	Outram	2BR perfect for work and leisure	Quinn	Entire home/apt	24	SGD250
3141692	Kallang	Family 5/6 Beds Room	DropINN	Private room	31	SGD137
3179080	Kallang	12-Bed Ladies Dormitory	Chloe	Shared room	18	SGD37
3258894	Geylang	Nicely Furnished 1 Bedroom Unit	Shirley	Entire home/apt	41	SGD85
3822245	River Valley	Cozy Studio Apt @ Orchard Area	Ric	Entire home/apt	63	SGD137
3924672	Orchard	Sunny Room with attached bathroom,	Moira	Private room	1	SGD122
4008568	Novena	★★★3BR Spacious Condo @ near novena (pa	Alvin	Entire home/apt	32	SGD358
4613432	Geylang	Nicely furnished apt close to City	Alex	Entire home/apt	23	SGD119
4817784	Clementi	Master Bedroom with Serene Greenery	Julian	Private room	6	SGD99
4916186	Geylang	Convenient apt home away from home	Alex	Entire home/apt	19	SGD119
4969777	River Valley	New!! Cozy 1 Bedroom Apt in the City	Alex	Entire home/apt	6	SGD119
5177256	Bishan	Little Habitat 2- Love Local	Sheu Sheen	Private room	70	SGD49

price SGD19 — SGD3K

Reviews per month and Price by Room Type



Demonstration

Oracle Analytics Roadmap – November 2020 Update

Delivered 2020

Fusion Analytics Warehouse

ERP Analytics
- Multiple COA
- Stat Currency
- Cross Finance

HCM Analytics
- Recruiting
- Internal Mobility
- Taleo Playbook

Languages & Data Centers
- English Only
- Ashburn (NA) & London (EMEA)

Oracle Analytics Cloud
- JDBC connector for accessing OAC
- Expanded Filter Capabilities
- Page header unification
- Heat-map Digitized Map layers
- Propagate permissions to related artefacts
- Enrichments for live sources
- Remote Data Gateway support for accessing Essbase via a subject area
- Embedded Analytics Authentication Mechanism
- Access via a private IP
- Customize time zone

Oracle Analytics Server
- Windows Support
- SQL Server RCU

2021

NetSuite Analytics Warehouse
- Beta Program

Fusion Analytics Warehouse

ERP Analytics
- Spend Analysis

HCM Analytics
- Performance
- Goals
- Survey Analytics

Languages & Data Centers
- Support for 11 Languages *
- Frankfurt (EMEA) & Sydney (APAC)

Oracle Analytics Cloud
- Generic JDBC Connectivity
- Scheduled Refresh for Data Sets
- Connectivity to Google BigQuery
- Impersonation Support for Big Data Source
- Advanced Self-Service Datasets
- Increased download limits for data export
- Multi-Column and No Sort Options
- Clean consumer mode for projects
- Pivot Export to Excel
- Support for subject area hierarchies in self-service pivot and table
- Custom Knowledge
- Text Analytics and Market Basket Analysis
- Multiple selections in a Data Action
- Vanity URLs
- Ability to add new map backgrounds

2021

NetSuite Analytics Warehouse
- Sales and Payables
- Inventory and Financials

Fusion Analytics Warehouse

ERP Analytics
- Employee Expenses
- Multiple Calendar

HCM Analytics
- Compensation
- Absence & Accruals

Languages & Data Centers
- Support for all 29 Languages
- Sao Paolo (LAD) & Jeddah (EMEA)

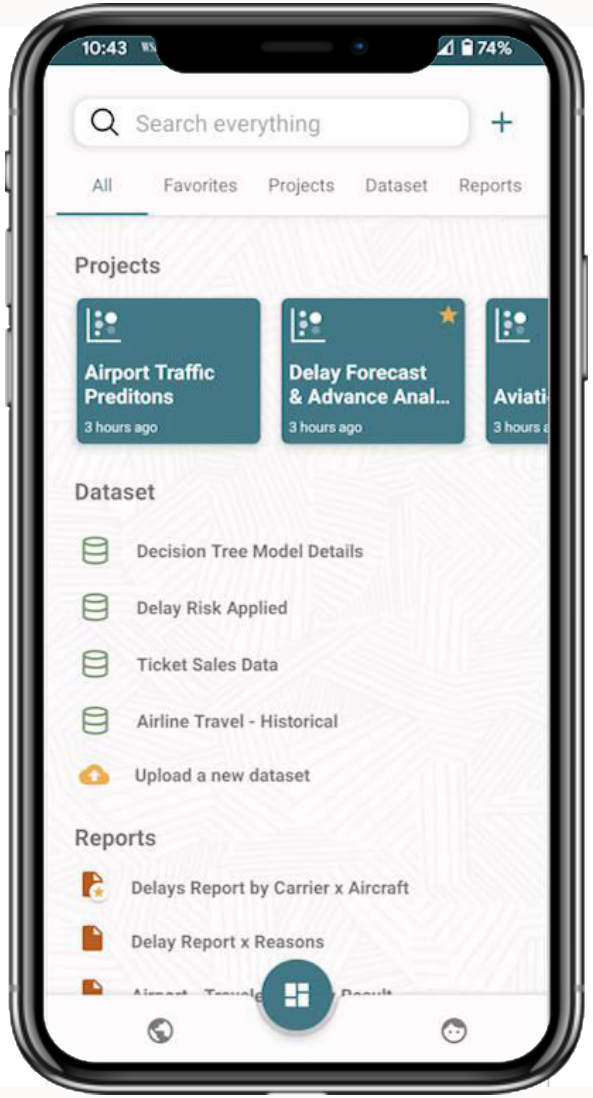
Oracle Analytics Cloud
- REST connector
- Data Quality Insights
- Conditional Formatting
- Flexible, layer-based combo chart
- Mapbox Maps
- Customized Actions for Consumers
- Improved Natural Language Generation
- High resolution printing in Data Visualization
- Disjointed Layers on Maps

Oracle Analytics Server
- Annual Oracle Analytics Server Release

The above is intended to outline general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle Corporation.

New Oracle Analytics Mobile App!

- Unified Home Page & Search
- Viewing and interacting with DV projects
- Launch “Classic” content from the App
- Share & collaborate on projects and datasets
- Open, create & upload datasets



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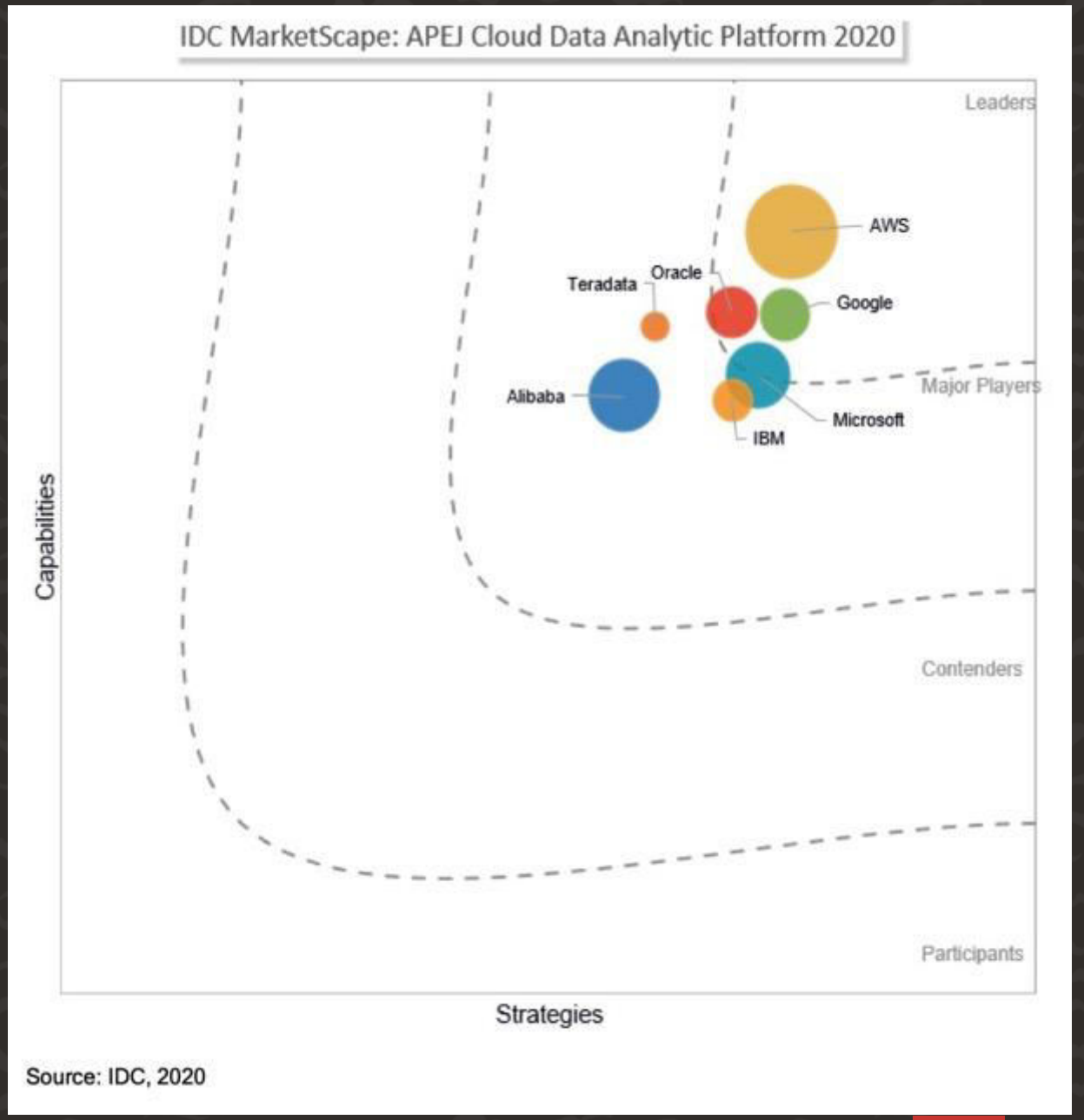
TRENDS

IDC 2020 MarketScape: Oracle is named a Leader in the latest IDC MarketScape

- Oracle is named a Leader in the latest IDC MarketScape: APEJ Cloud Data Analytics Platform 2020 Vendor Assessment which recognizes our Cloud Data & Analytics Platform as “highly accelerated and trusted for customers speeding up their transformation to the cloud.”



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Thank You

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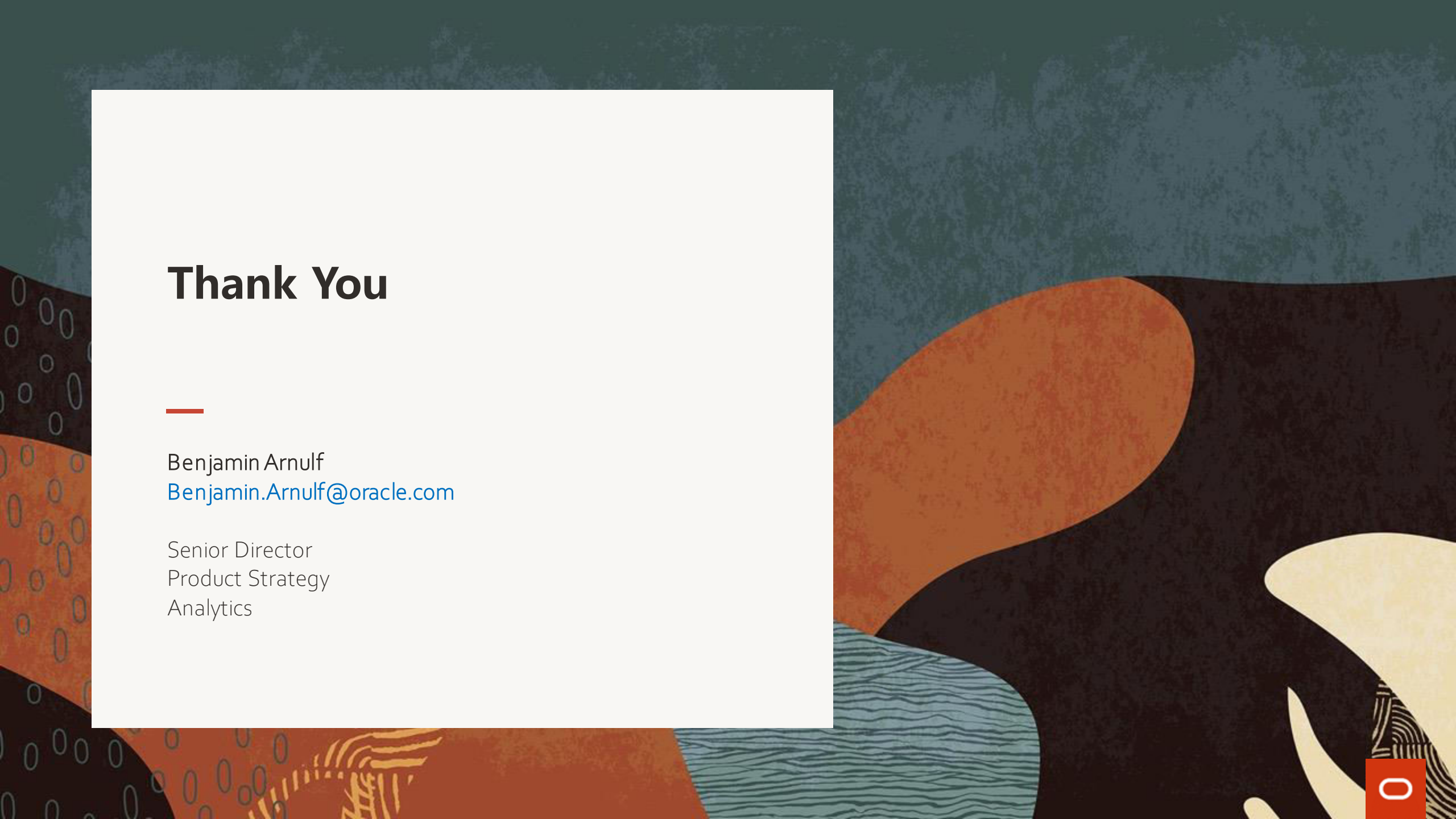
Senior Director
Product Strategy
Analytics