



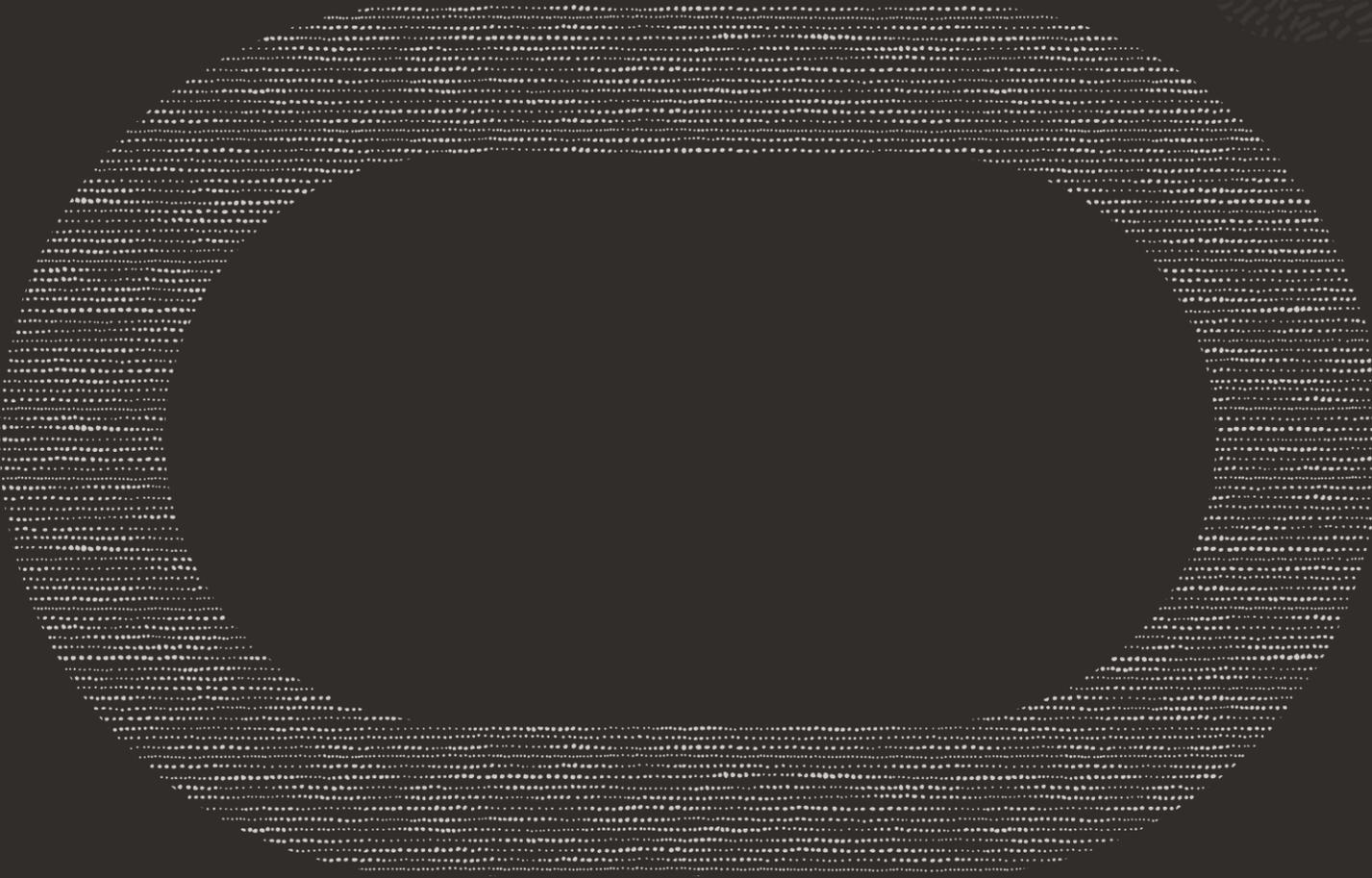
Oracle Analytics Product Management Update



Alexandria Toothman
Product Manager
Product Strategy
Oracle Analytics



Ben Arnulf
Senior Director
Product Strategy
Oracle Analytics



ORACLE
Analytics

Product Strategy
Augmented Analytics

Benjamin Arnulf
Alexandria Toothman





Statements in this presentation relating to Oracle's future plans, expectations, beliefs, intentions, and prospects are “forward-looking statements” and are subject to material risks and uncertainties. A detailed discussion of these factors and other risks that affect our business is contained in Oracle's Securities and Exchange Commission (SEC) filings, including our most recent reports on Form 10-K and Form 10-Q under the heading “Risk Factors.” These filings are available on the SEC's website or on Oracle's website at <http://www.oracle.com/investor>.

All information in this presentation is current as of May 2021 and Oracle undertakes no duty to update any statement in light of new information or future events.

Product Strategy

Oracle Analytics



Alexandria Toothman

Product Manager

Product Strategy

Oracle Analytics

**20+ years of helping
customers analyze
the world's most
important data**

Monitoring nurse and doctor shifts during crisis

Using Machine Learning for customer segmentation outliers

Analyzing insurance claims after disasters

Keeping hotel customers safe during stays

Detecting Churn and Attrition with Predictive Analytics

Improving diagnosis and use AI for predictive maintenance

Visualizing real-time flight profitability

Analyzing Behavior and Sentiment for consumers

Mapping layers on restaurant to adapt operations

Increasing the speed and lowering the costs of construction

Analyzing supply chain volatility to keep up with demand

Detecting money laundering and reducing business risk

Supporting citizens through crisis with real-time Machine Learning





> 400K customers trust Oracle to help run their businesses

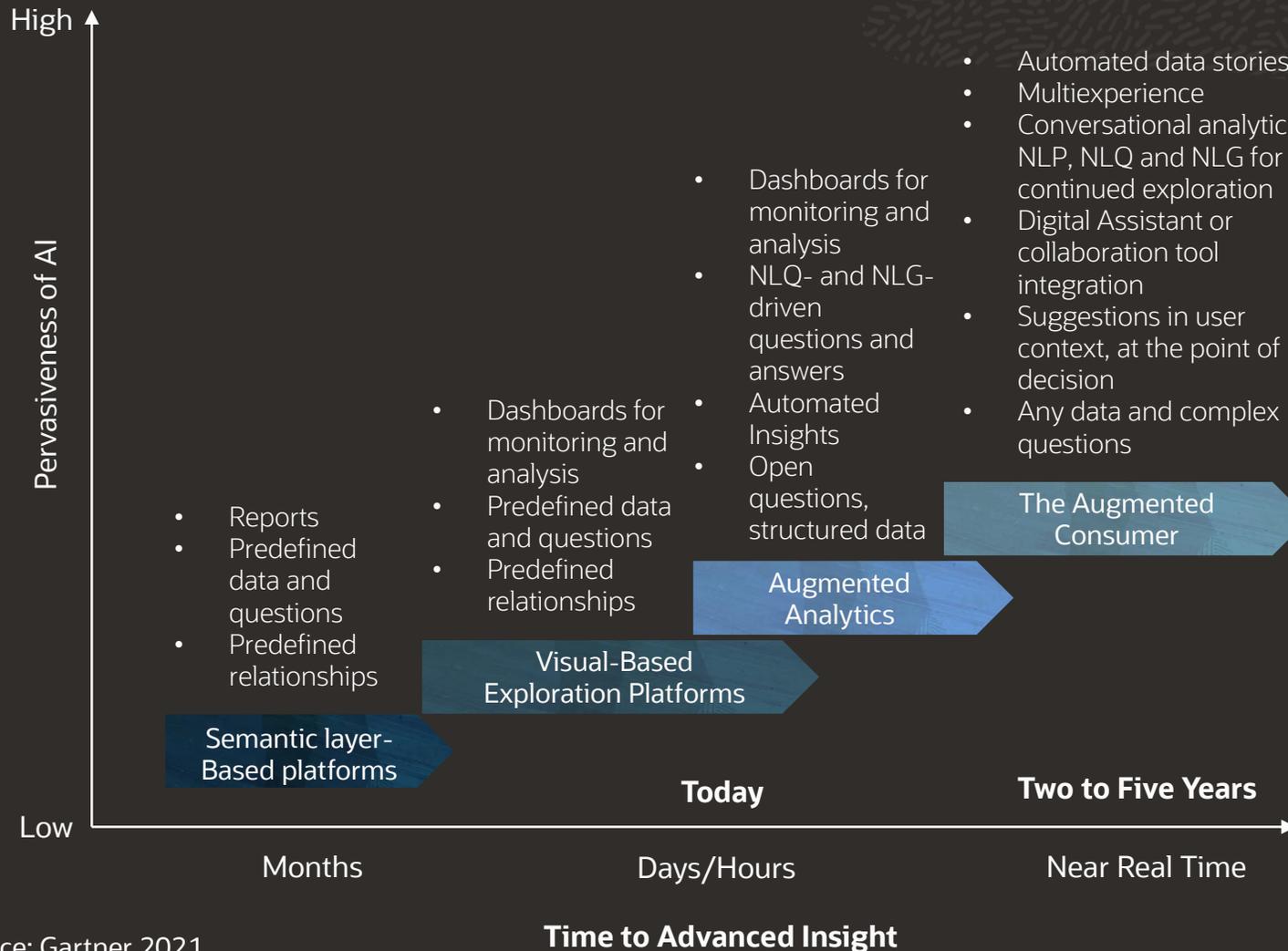




**> 350 Top Leaders
innovating with
Oracle Analytics**



Timeline of Innovation Points in the **Analytics** Market

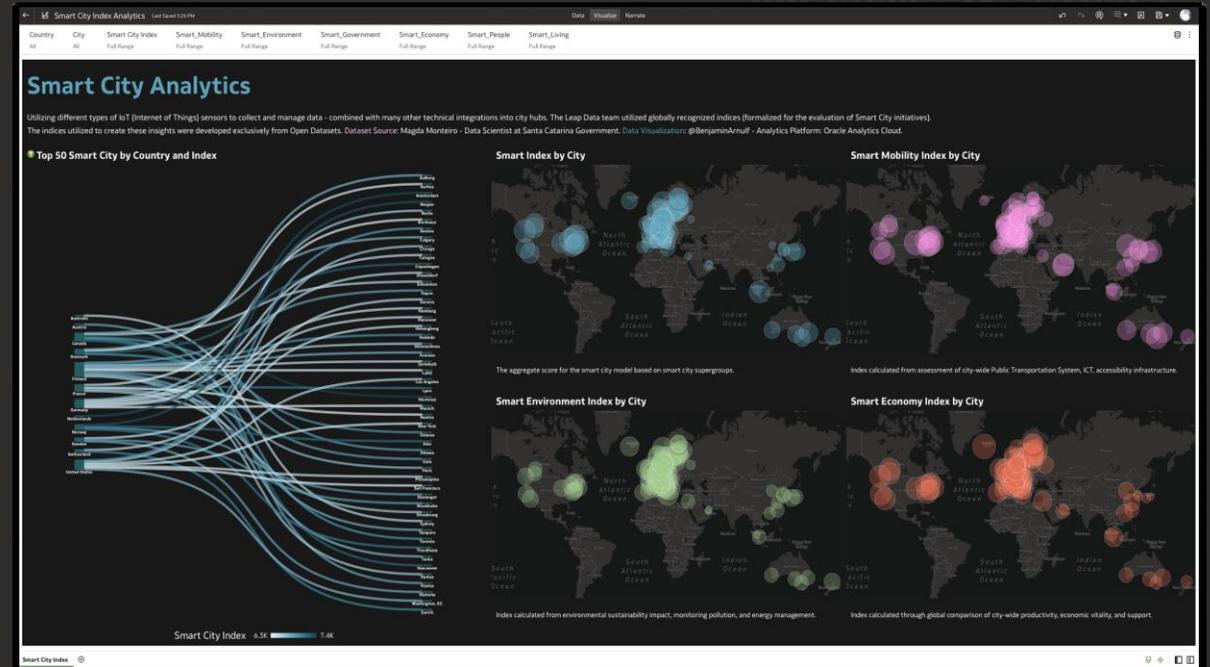


Source: Gartner 2021



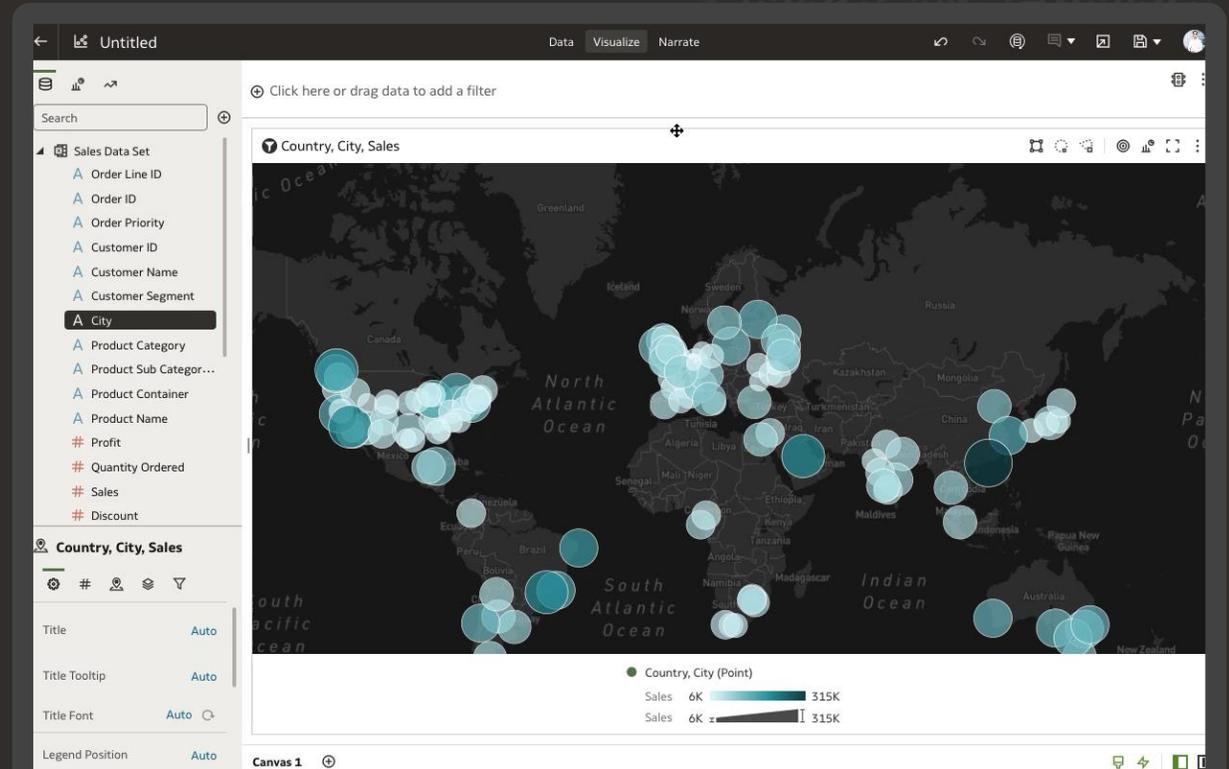
Oracle Analytics

- ✓ Augmented Analytics Platform
- ✓ Data Preparation, Data Flow, Data Enrichment
- ✓ Data Visualization, Machine Learning, AI
- ✓ Automated Forecast and Insights
- ✓ NLP, NLG, Mobile Application
- ✓ Self Upgrading, Patching and Securing



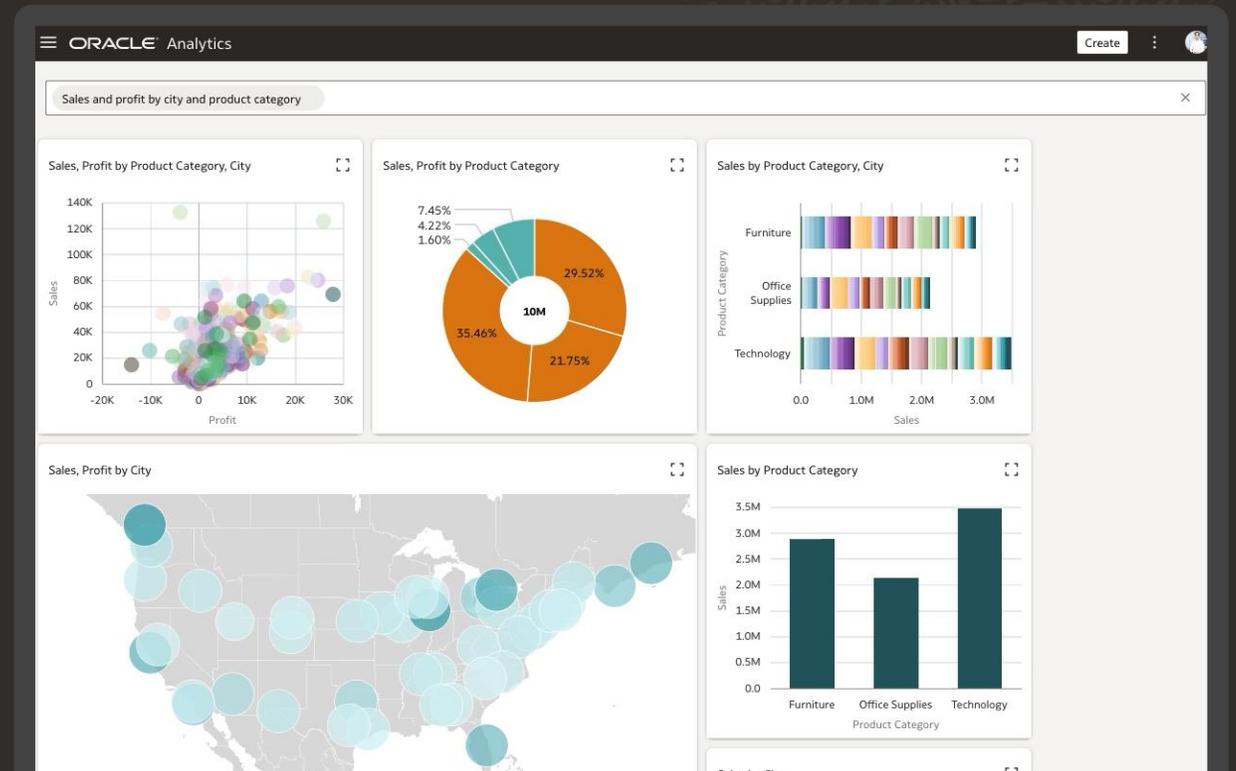
Self-Service Analytics

- ✓ 50+ Data Visualization Types.
- ✓ 1-click to forecast for predictive analytics.
- ✓ What-if Scenarios.
- ✓ Multiple data sources join.
- ✓ Data Story Telling.
- ✓ Mapbox Mapping Engine & Library.



Auto-Insights

- ✓ Query Data with **Natural Language Query**
- ✓ No Query or SQL needed
- ✓ Description of the visualization
- ✓ **Natural Language Generation**
- ✓ Augmented Analytics
- ✓ **Auto-Insights** and **Explain**



Mobile Analytics

- ✓ Unified Home Page & Search
- ✓ Interacting with **DV projects**
- ✓ Launch Dashboard
- ✓ **Share & collaborate** on projects
- ✓ Open, create & **upload datasets**
- ✓ Easy to setup



Analytics Platform

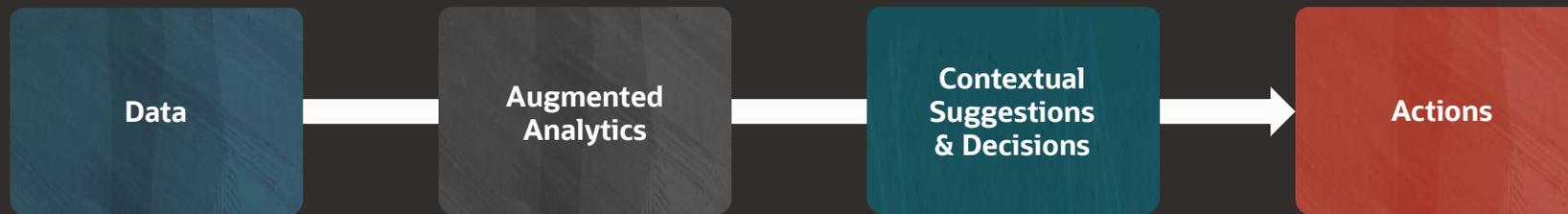
Oracle Analytics



Benjamin Arnulf

Senior Director
Product Strategy
Oracle Analytics

New Analytics **Vision**



The quickest path for better **decisions and actions** with AI & Analytics

Simplify & Unify

Oracle Cloud Platform for Advanced AI, Data & Analytics

Oracle Artificial Intelligence Next Generation Services



Digital Assistant



Language



Speech



Vision



Anomaly Detection



Forecasting

Oracle Analytics

OAC

Oracle Analytics Cloud

FAW

Fusion Analytics Warehouse

NSAW

NetSuite Analytics Warehouse

Oracle Data Science & Machine Learning



Data Science



Machine Learning



Data Science Virtual Machines

Integration



Streaming



Data Integration



Data Catalog

Data Management



Big Data



Data Processing



Data Flow



Autonomous Database

Oracle Cloud Infrastructure Generation 2



Compute



Operating System



Storage



Network



Security



Multi Cloud



New Analytics Products



OAC
Oracle Analytics
Cloud



OAS
Oracle Analytics
Server



FAW
Fusion Analytics
Warehouse



NSAW
NetSuite Analytics
Warehouse

Oracle Analytics Platform & Features

Oracle Analytics

OAC

Oracle Analytics
Cloud

OAS

Oracle Analytics
Server

FAW ERP

ERP Analytics
Warehouse

FAW HCM

HCM Analytics
Warehouse

FAW SCM

SCM Analytics
Warehouse

FAW CX

CX Analytics
Warehouse

NSAW

NetSuite Analytics
Warehouse

Oracle Analytics Warehouse

Oracle Analytics Features

Interactive Data
Transformation &
Cleansing

Data Enrichment
with
Machine Learning

Semantic
Models

Auto-ML
& AI Insights

Natural Language
Generation &
Processing

Metadata
& Data Search

Analytics
Catalog

Multi Data Sources
Connection

Scheduled
Data Flow

Self-Service
Data Sets

Interactive
Spatial & Data
Visualization

One-Click
Advanced Analytics

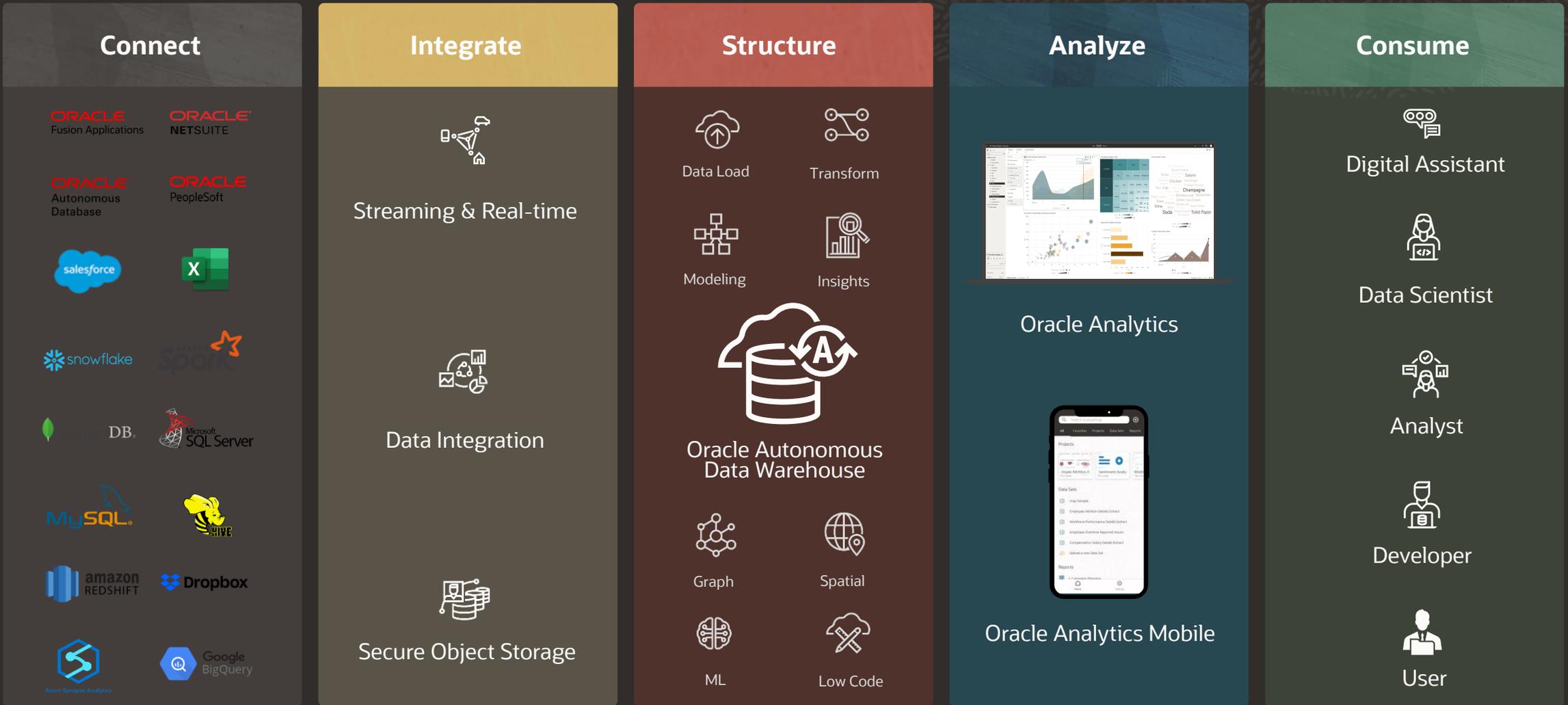
Smart Data
Profiling

Mobile
Analytics

Security | Governance | Compliance

Oracle Cloud Infrastructure

Oracle Analytics Solution



Roadmap

Oracle Analytics

Oracle Analytics Cloud & Server Roadmap

Released in CY 2021 1st Half

Oracle Analytics Cloud

- ✓ Generic JDBC connectivity
- ✓ Google BigQuery connectivity
- ✓ Scheduled refresh for data sets
- ✓ Custom Knowledge enrichments
- ✓ Advanced self-service data sets
- ✓ Data Quality Insights
- ✓ Increased limits for Data Flows
- ✓ Support for subject area, Essbase, and EPM hierarchies in self-service pivot and table
- ✓ Chart custom sort dialog
- ✓ On-canvas filters for date and measures
- ✓ Discrete layers on maps
- ✓ High resolution printing in Data Visualization
- ✓ Graph analytics in Data Flows
- ✓ Enhanced content and in-content search
- ✓ Next generation OA Mobile
- ✓ Health & performance service metrics

Oracle Analytics Server

- Annual Oracle Analytics Server Release including features through [OAC 5.9](#)
- Support for SUSE Linux and IDM
- New DB Certifications
- In-Place upgrade from OAS 5.5

CY 2021 – 2nd Half

Oracle Analytics Cloud

- ✓ Microsoft Azure Synapse connectivity
- ✓ Support for analytic views from subject areas
- ✓ REST connector
- ✓ Turn off auto-joins for multi-table data sets
- ✓ Flexible, layer-based combo chart
- ✓ Mapbox maps and interaction
- ✓ Sort visualizations by outside columns
- ✓ Automated Insights
- ✓ Improved Natural Language Generation
- ✓ Redwood Design user experience
- ✓ Conditional formatting
- ✓ Improved handling of Nulls in list filters
- ✓ Customized actions for consumers
- ✓ Improved Back button experience
- ✓ New print control options
- ✓ Improved handling for Notes
- ✓ Visualization multi-select
- ✓ Increased limits for export from visualizations
- ✓ Additional PDF encryption
- ✓ Administrator mgmt. of self-service assets
- ✓ Performance insights for canvases & visualizations
- ✓ Datasets with multiple tables: local subject areas, expression filters
 - OTBI, OBI/OAS sources for multi-table datasets
 - Compute ML model Gain and Lift values
 - Improved experience for pivot tables
 - Canvas performance analysis tool
 - Provide a product review

CY 2022 – 1st Half

Oracle Analytics Cloud

- Improved query performance for dataflow datasets on OCI Gen 2
- Web-based semantic modeler
- Semantic model markup language
- CX Unity and Sparkline connectors
- Auto Insights for datasets
- Function As A Service integration for Data Flows
- Files in MT datasets
- Admin Governance for self-service content
- OML Natural Network algorithm support
- SAC Mail formats
- Author controlled Dashboard filter bar
- Customizable consumer navigation
- OCI Data Flows Interactive connector
- OCI Vision integration
- OCI Language integration

Oracle Analytics Server

- OAS on OCIE Marketplace
- Annual Oracle Analytics Server Release including OAC features through Q1 CY 2022

Data Visualizations

Oracle Analytics

- MarketData
- ROWID
- TransactionID
- Date
- TimeOfDay
- Customer
- SKU
- Qty
- Product
- Price
- Total
- StoreFloorLocation
- CustomerName
- Preferred
- EmployeeName
- CheckoutLane
- Channel
- Customer Goal
- My Calculations
- Value Labels

Product: All | Channel: All | CustomerName: All

Area

Trellis Columns

Trellis Rows

Values (Y-Axis): Total

Category (X-Axis): Date (Day)

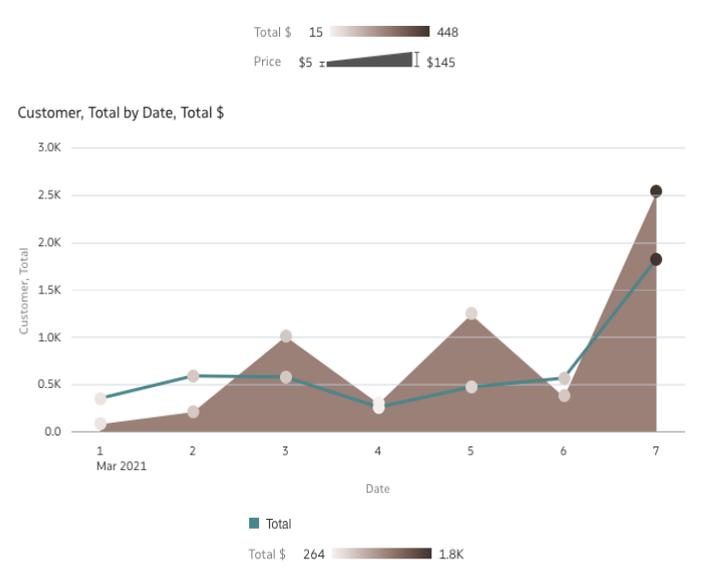
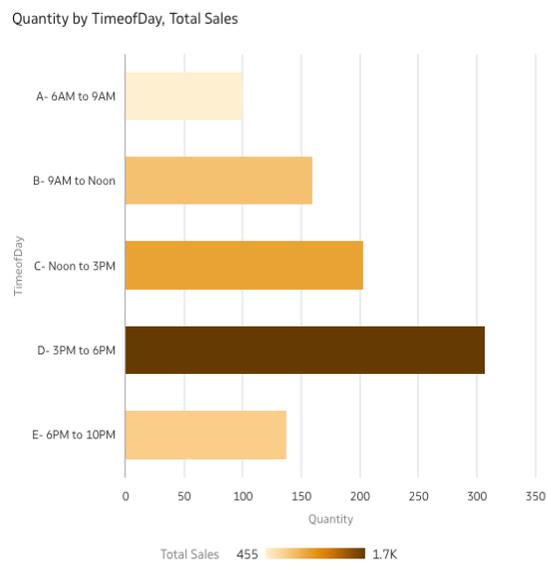
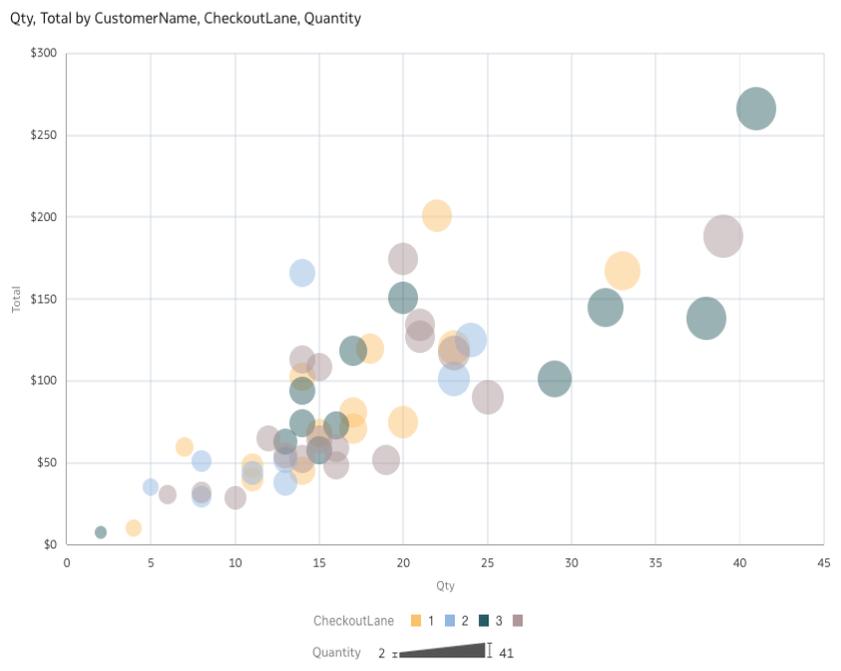
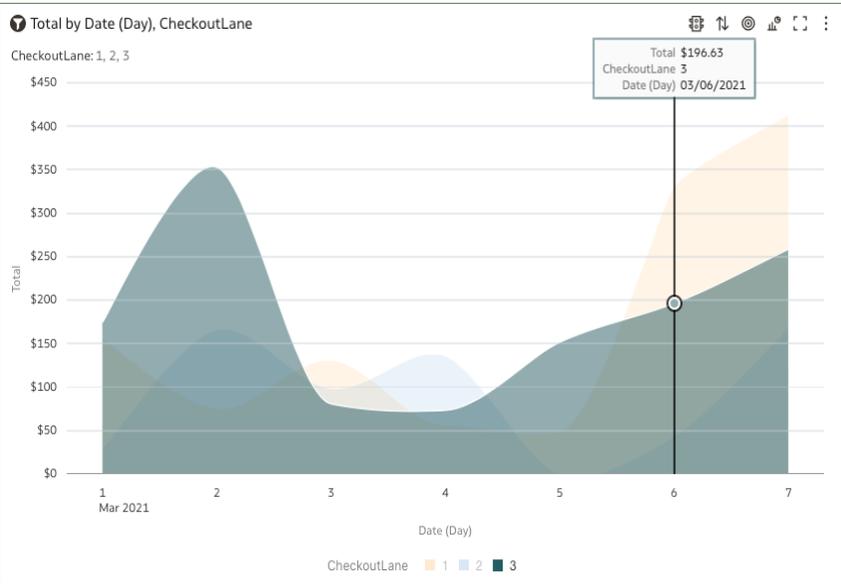
Color: CheckoutLane

Size (Width)

Tooltip

Detail

Filters: CheckoutLane



Total by Date (Day), Ch...

Title: Custom

Title Tooltip: Auto

Title Font: Auto

Item	City Pickup	Country Pickup	City Delivery	Country Delivery	Route	Carrier	Cargo Number
All	All	All	All	All	All	All	X01200020

Search

Bar

- Bar
- Stacked Bar
- 100% Stacked Bar
- Horizontal Bar
- Horizontal Stacked
- Horizontal 100%
- Combo
- Butterfly
- Waterfall
- Boxplot
- Horizontal Boxplot

Line

- Line
- Area
- Stacked Area
- 100% Area
- Radar Line
- Radar Area
- Radar Bar

Scatter

- Scatter
- Category
- Stacked Category

Pie (+Treemap)

- Pie
- Donut
- Sunburst

Treemap

Grid

- Pivot
- Table
- Correlation Matrix
- Grid Heat Map
- Picto

Network

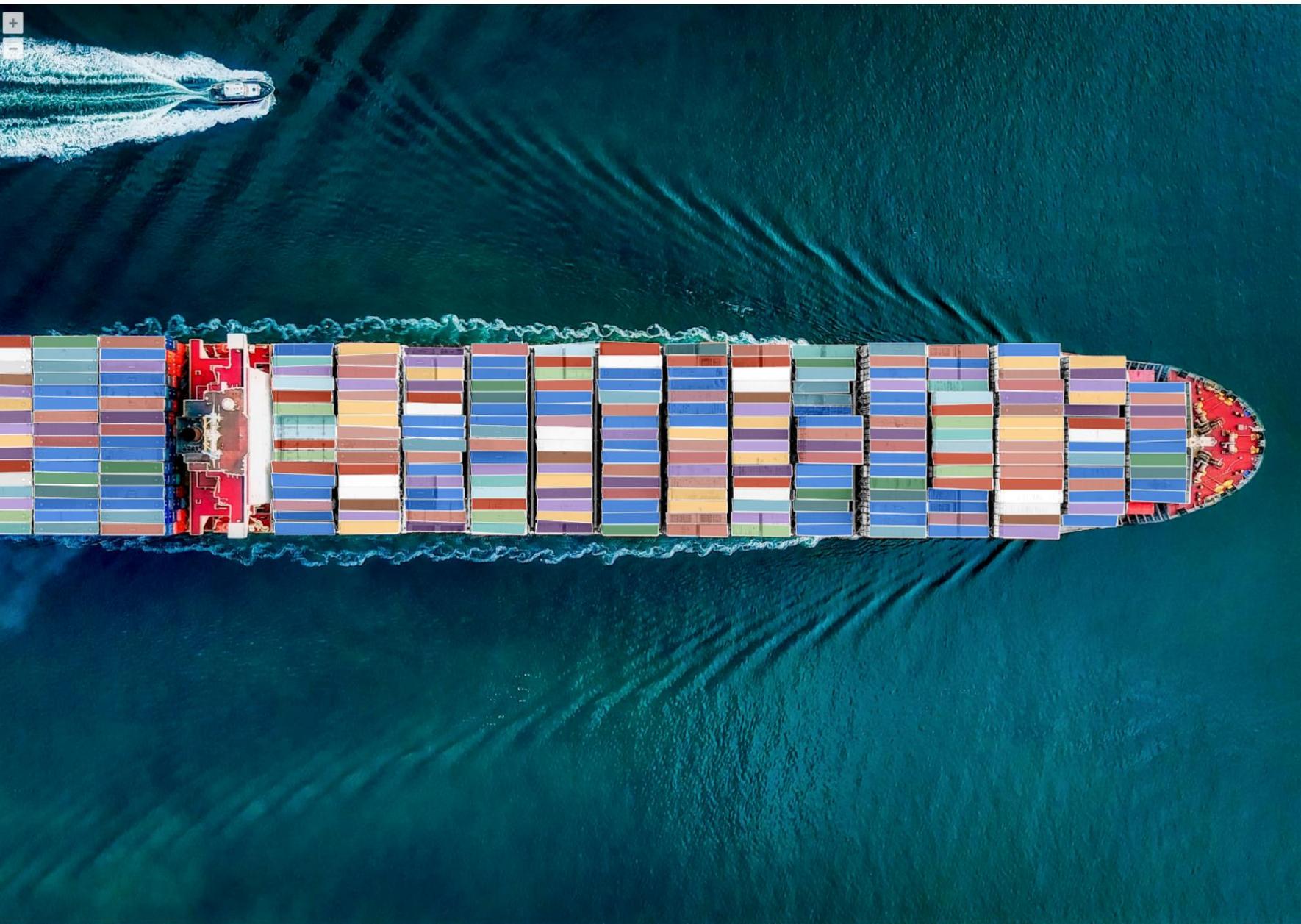
Map

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Legend Position: None



CARGO ANALYTICS

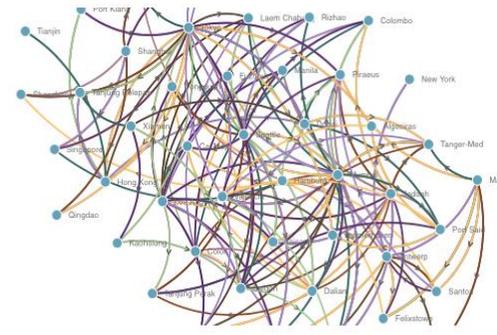
Containers

281

Total Rate

\$19.13M

Route



Destination



Item	City Pickup	City Delivery	Cargo Number	Rate
Item 0	Shanghai	Singapore	X01200020	\$5,000
Item 1	Shanghai	Shenzhen	X01200020	\$3,500
Item 10	Hong Kong	Port Klang	X01200020	\$4,220

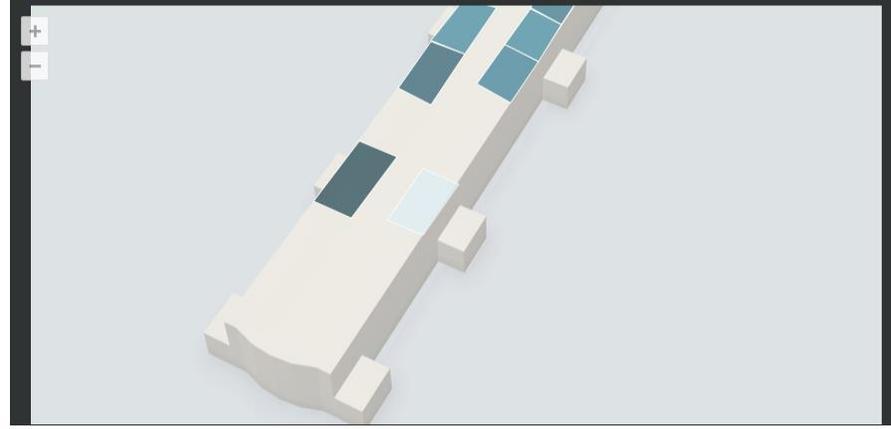
Rate

- Rate > 5,000
- Rate > 4,500
- Rate > 4,000
- Rate > 3,500
- Rate ≤ 3,500

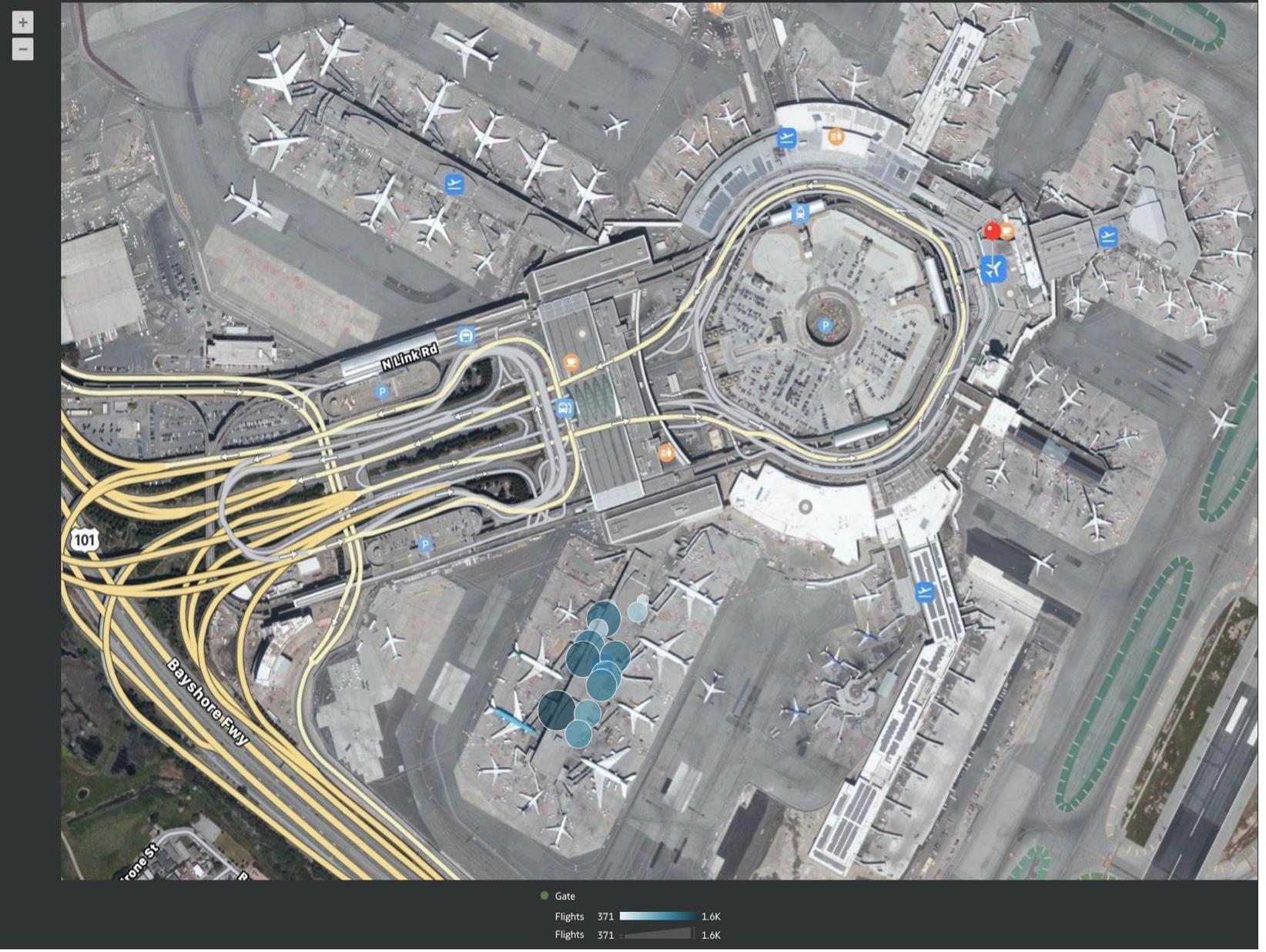
Gate Grid Heat Map by Airlines



3D Terminal A Gate Areas



Satellite Terminal A Flights Traffic by Gate





Commodity price increase and disparity across India

1.7x

Rice

1.2x

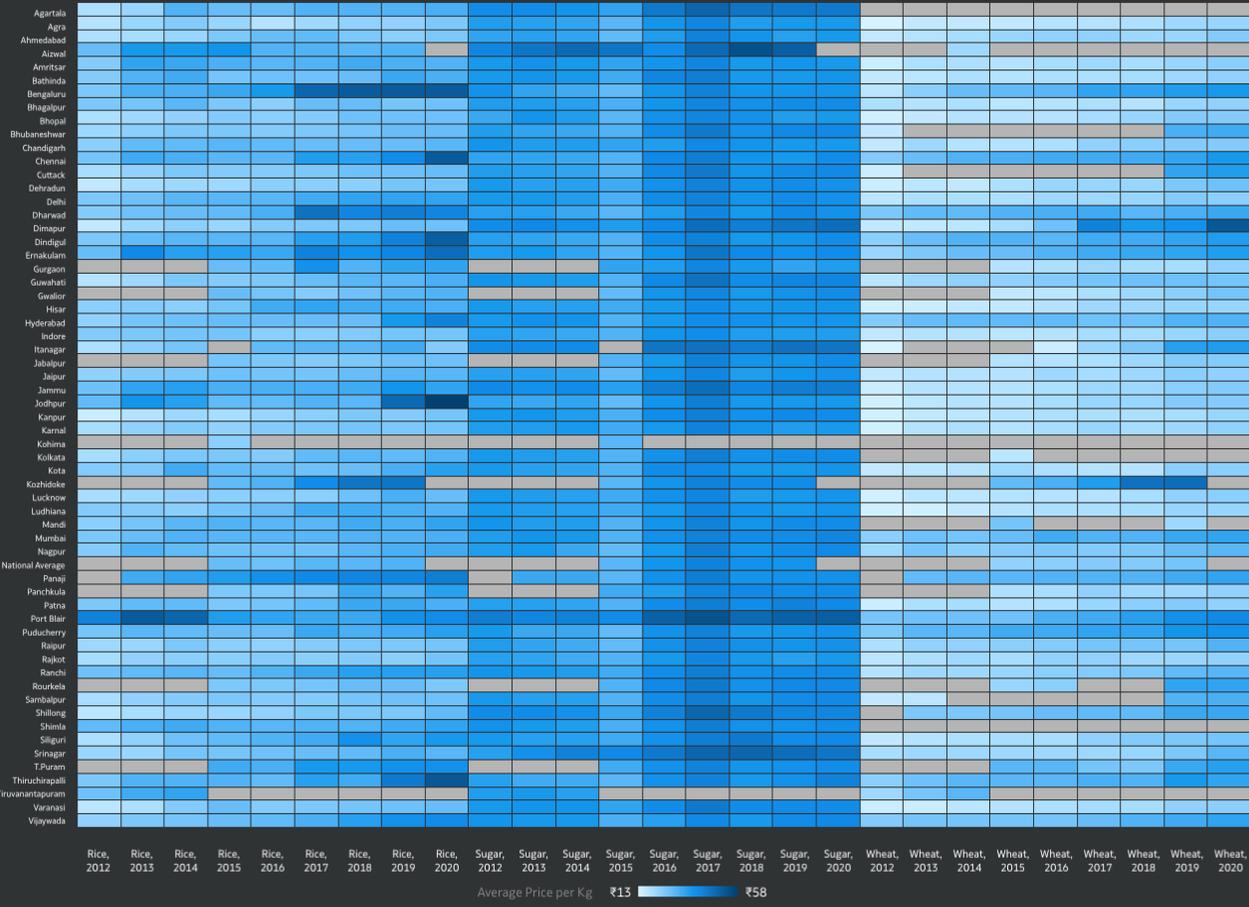
Sugar

1.6x

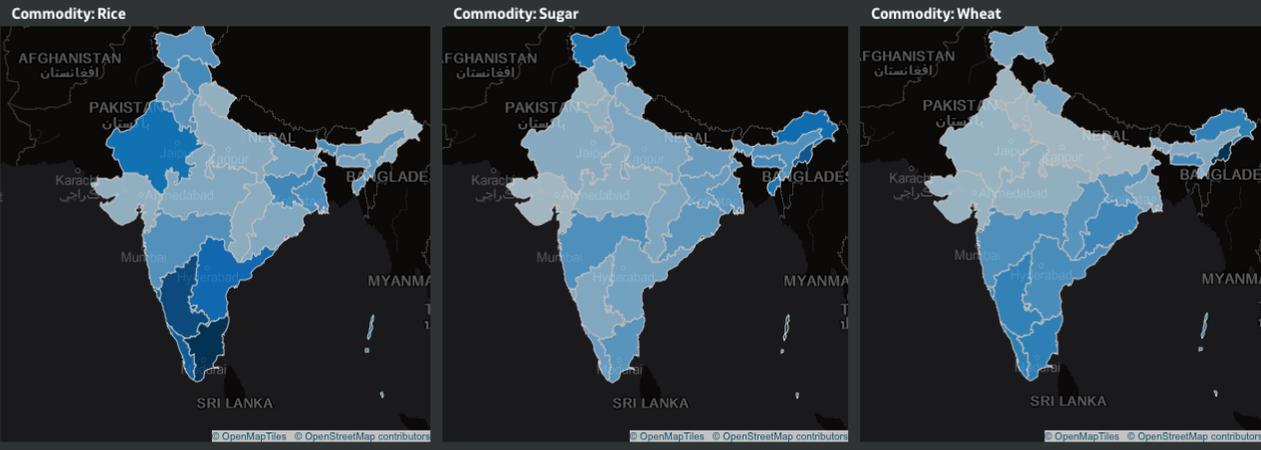
Wheat

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**.

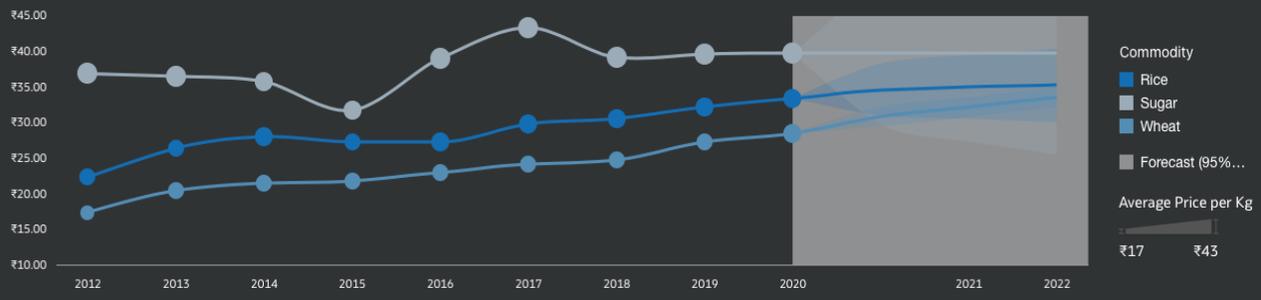
Average price by kg per year and market in India



Latest average price by kg and state



Average Price volatility by kg per Commodity and Year



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

Bar

- Bar
- Stacked Bar
- 100% Stacked Bar
- Horizontal Bar
- Horizontal Stacked
- Horizontal 100%
- Combo
- Butterfly
- Waterfall
- Boxplot
- Horizontal Boxplot

Line

- Line
- Area
- Stacked Area
- 100% Area
- Radar Line
- Radar Area
- Radar Bar

Scatter

- Scatter
- Category
- Stacked Category

Pie (+Treemap)

- Pie
- Donut
- Sunburst
- Treemap

Grid

- Pivot
- Table
- Correlation Matrix
- Grid Heat
- Picto

Travel Analytics

Year

2021 2022

Period:

Monthly occupancy by bungalow

Name	Vacancy	Monthly Occupancy
WB08	Y	100%
WB15	N	100%
WB01	Y	80%
WB13	N	80%
WB07	N	75%
WB11	N	75%
WB14	N	75%
WB03	Y	70%
WB06	N	70%
WB02	N	60%
WB09	N	55%
WB04	Y	50%
WB05	Y	50%
WB10	Y	50%
WB12	N	50%



Outliers Analysis



Occupancy of Water Bungalow - Kudadoo Maldive. Photo: Courtesy of Kudadoo by Hurawahli



Occupancy of Water Bungalow ...

#

Title:

Title Tooltip:

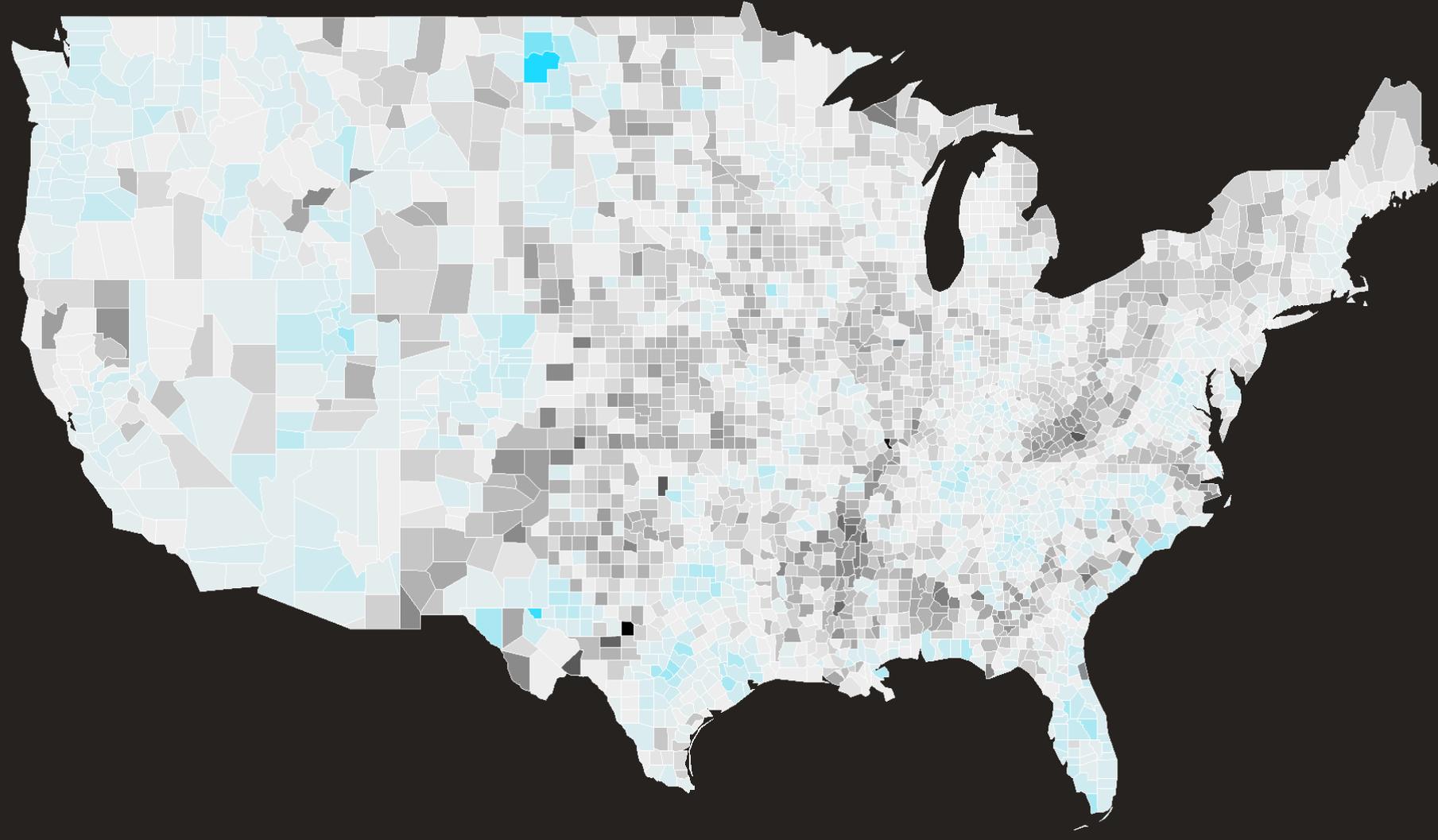
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Legend Position:

Percent Change in Population by county since 2010

Census Bureau - Estimate resident population - 2010 to 2019

Change -33.3% 136.2%

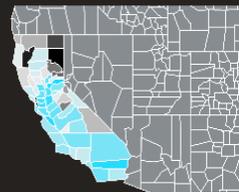


New York



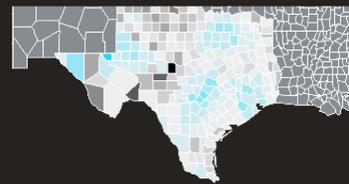
Change -8.685% 4.67%

California



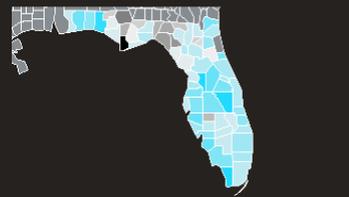
Change -12.39% 14.32%

Texas



Change -33.3% 106.1%

Florida



Change -14% 41.7%

HCM Analytics - Top Talent



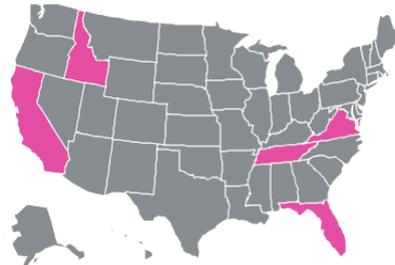
Annual Master KPI



Top Talent

6

Location of Top Talents by State



Potential and Agility Radar



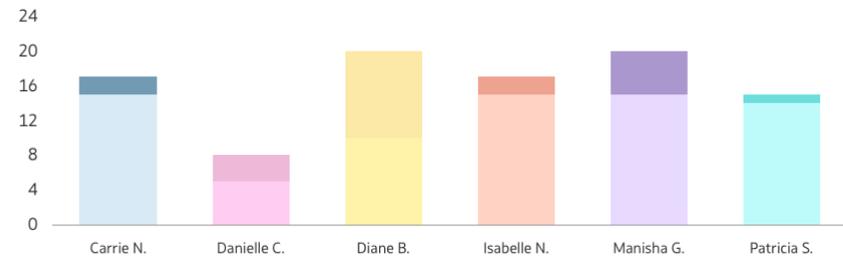
Attribute Indicators by Top Talent

Name	Business Travel	Restricted Stock	Manager
Carrie N.	●	●	●
Danielle C.	●	●	●
Diane B.	●	●	●
Isabelle N.	●	●	●
Manisha G.	●	●	●
Patricia S.	●	●	●

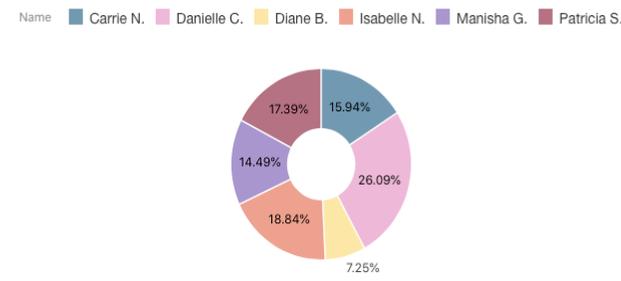
Talents Total Headcount

12

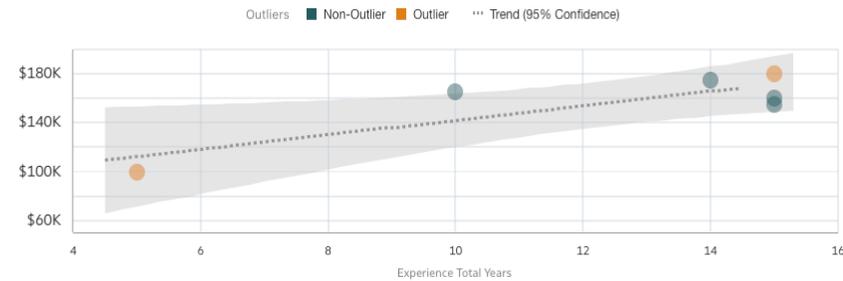
Total experience vs Company Experience



Overtime % by Top Talent



Outliers for Income vs Total Experience



Search

MRI-1

- Anatomy Part
- Value
- Diagnostic

My Calculations

MRI-2

My Calculations

MRI-3

My Calculations

Value Labels

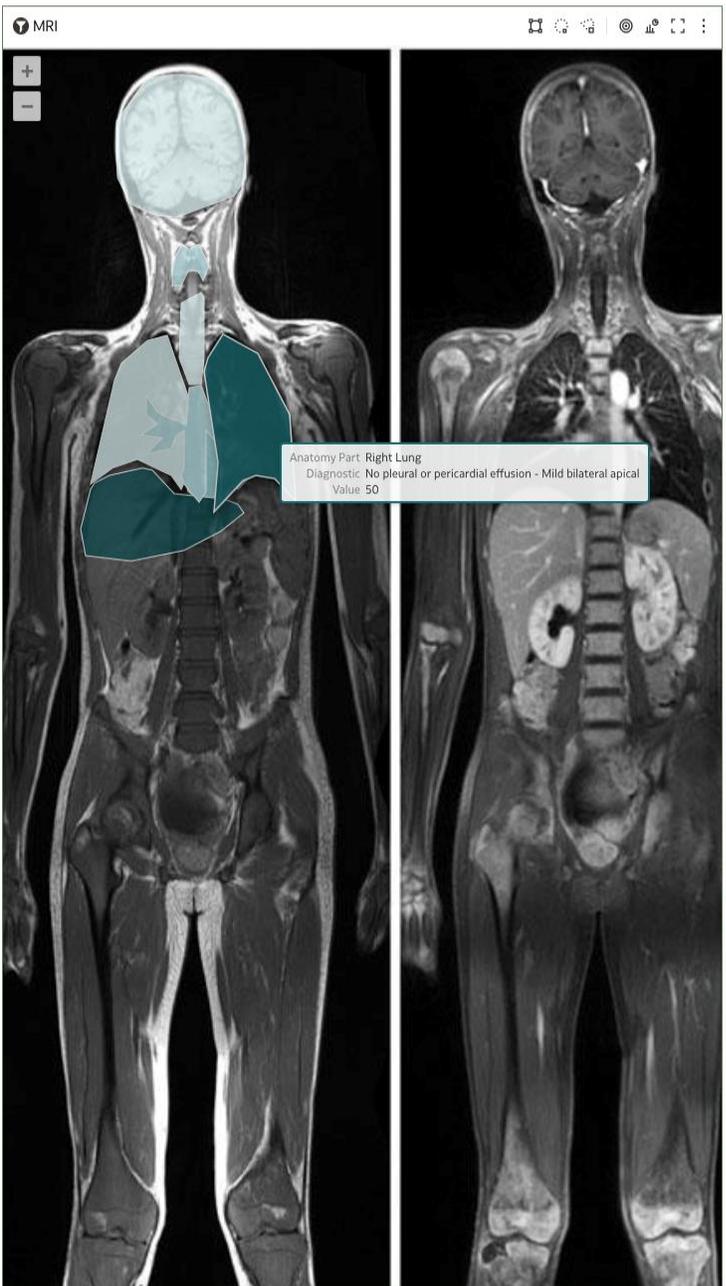
Map

Trellis Columns

Trellis Rows

Anatomy Part, Di...

- Category (Location)
 - Anatomy Part
 - Diagnostic
- Color
 - Value
- Tooltip
- Filters



Height

5.10

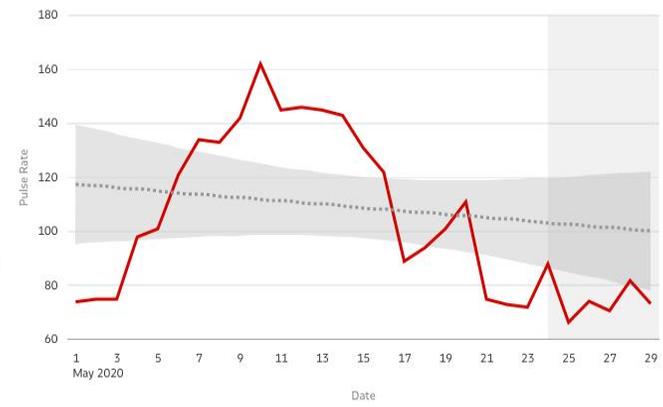
Weight

148

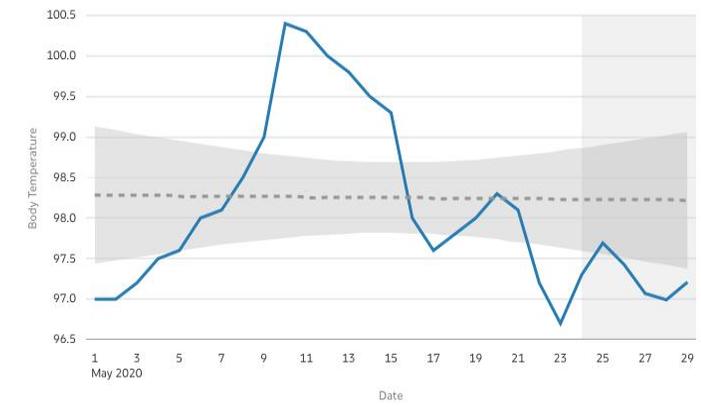
Age

39

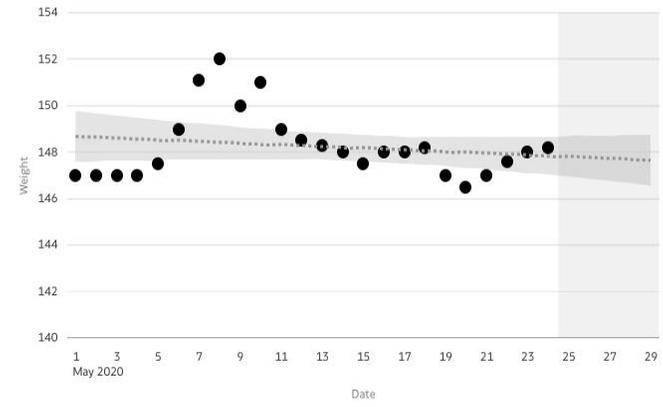
Pulse Rate by Date



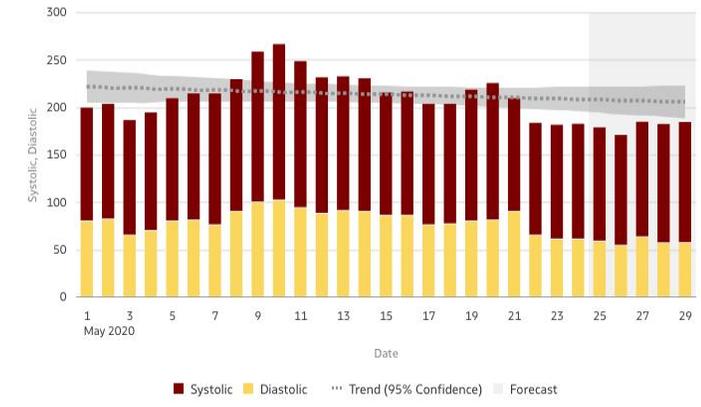
Body Temperature by Date



Weight by Date



Systolic, Diastolic by Date



Oracle Corporation Stock Analytics



Safra A. Catz
CEO



Larry J. Ellison
CTO

Oracle Corporation (ORCL) - NYSE - Currency in USD - Past 1-year analysis as of 09/30/2021 close

Stock Price

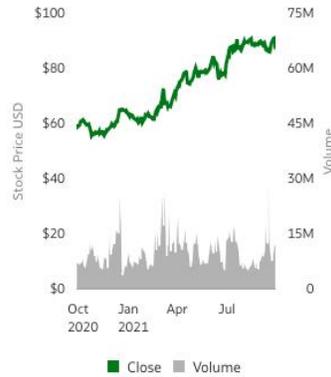
\$87.13

+\$27.45 YoY

Change % Past 1-Year

↑46.00%

Stock Price and Volume



Market Cap

\$238.19B

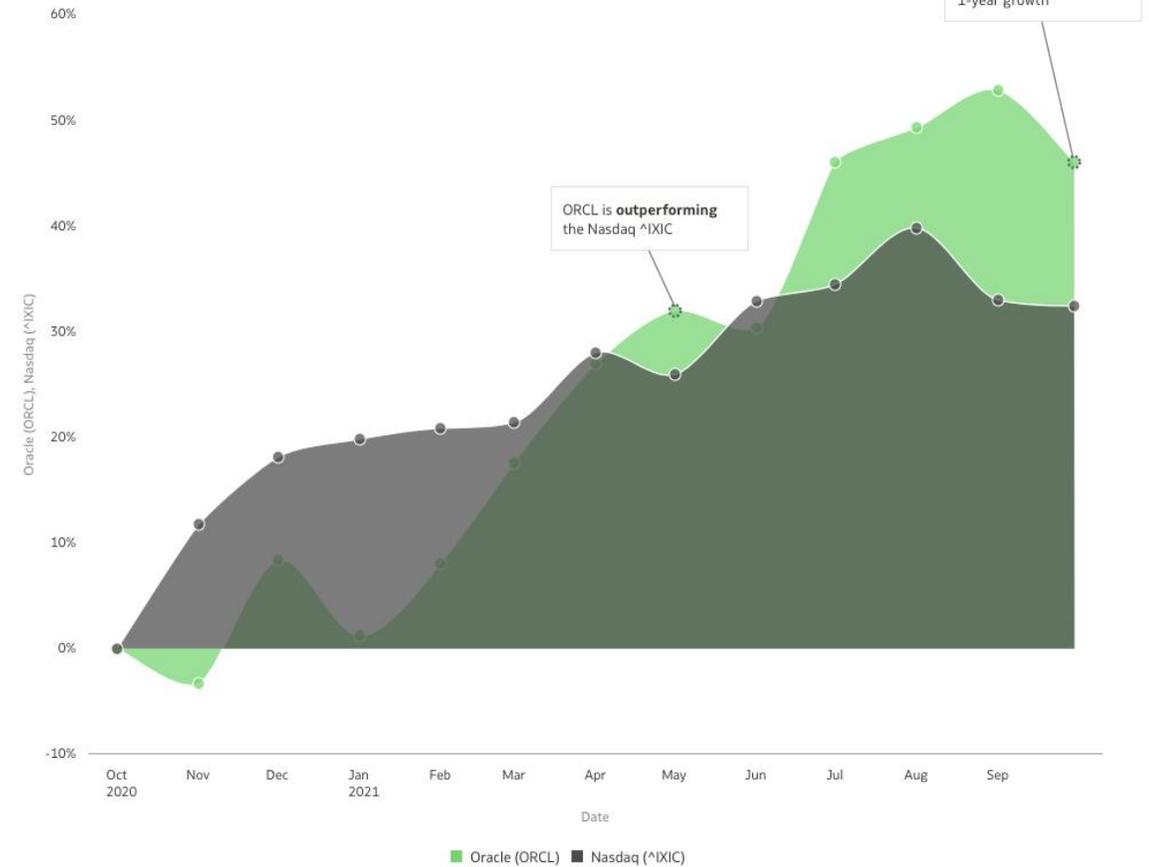
EPS

4.72

P/E ratio TTM

18.46

Oracle vs Nasdaq - 1-year growth % comparison



Stock Growth %

Stock Period: Past 1 year



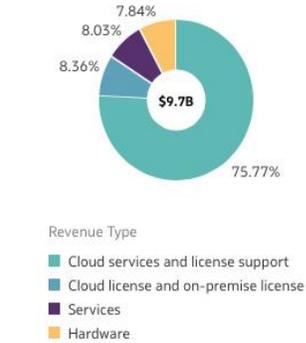
Geographic Revenues

Period: FY Q1 2022



Revenue Allocation by Type

Period: FY Q1 2022



Demonstration

Oracle Analytics

Oracle Leaders Panel



ORACLE