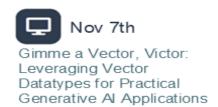


Unlocking Insights: Mastering Data Storytelling with Oracle Analytics

Philip Godfrey



Future & Past TechCasts:



Presented by Jim Czuprynski



Backup, Cloning and DR for Oracle Analytics Cloud

Presented by Jason Lester



Unlocking Insights: Mastering Data Storytelling with Oracle Analytics

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TechCast Archive

	2024	2024 2023		2021 2020		2019	
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Nov 7	Gimme a Vector, Victor: Leveraging Vector Datatypes for Practical Generative AI Applications			Jim Czuprynski		Video	Slides
Oct 17	Our Favorite New Features in OAC			Dan Vlamis, Wayne Van Sluys, Cathye Pendley, Tim Vlamis, Mystery Guest: Gautam Pisharam		Video	Slides
Oct 3	Harnessing Oracle GoldenGate 23ai with Al Automation: A New Era of Intelligent Monitoring, Building, and Diagnostics			Bobby Curtis		Video	Slides
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Sept 5	Oracle CloudWorld 2024 Session Analysis and Expert Agenda Recommendations			Roger Cressey, Dan Vlamis, Jim Czuprynski, Tim Vlamis, Cathye Pendley		Video	Slides
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The Oracle Analytics

Data Visualization Challenge 2025

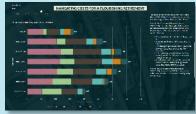
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www.andouc.org/analytics-and-data-summit-2025/





Unlocking Insights:

Mastering Data Storytelling with Oracle Analytics

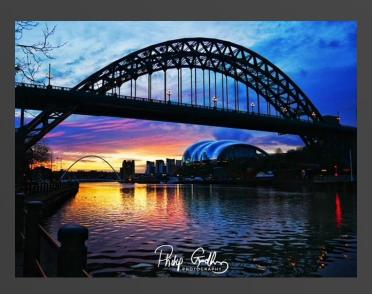
By: Phil Godfrey

Introductions

Bio

- Principal Data Analytics & Al Consultant at Vertice.
- Over 10 years' experience working with data across various business sectors including finance, HR and healthcare.
- Data Science & Machine Learning experience across roles in Vertice and NHS Business Services Authority.
- Oracle ACE Associate.
- Outside of work I'm a keen photographer and set-up a photography business in January 2021.
- https://www.etsy.com/shop/pgodfreyphotography





Partne

Who We Are





Engage the Customer. Enhance the Data. Enable the Solutions.



What We Do



DATA TRANSFORMATION

- Data Analytics
- New Data Platform
- Oracle Financial Services Analytical Applications
- Data Lakehouse
- Data Warehouse
- Data Mesh

DATA DIGITAL SERVICES

- AI, ML, Data Science
- Cloud Native
- Apps Modernisation Enablement
- DevOps and ML Ops







DATA PLATFORM

- Cloud Strategy
- Multi-Cloud (OCI, Azure & AWS)
- Hybrid Deployment
- Cloud@Customer (ExaC@C)
- SaaS Integration

DATA MODERNISATION

- Technology Debt
- Client Modernisation
- Database Consolidation
- Cloud Back-up / DR
- Cyber Security (Partner)



Aim

• Explain and demonstrate

What is Data Storytelling

Why it's important

How Oracle Analytics can help



Definition

Data storytelling is the art of transforming complex data sets into compelling narratives that resonate with audiences.

The 3 components of data storytelling



1. Data



The data set is the base of a data story.



Data presented on its own rarely communicates meaning for itself.



The storyteller gathers accurate data and analysis from other research, surveys, charts, graphs and dashboards.

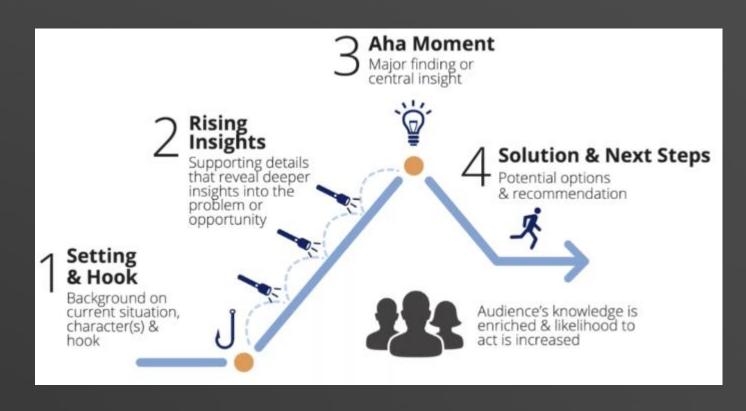


2. Narrative

 This is a verbal or written storyline that uses data to communicate insights effectively.

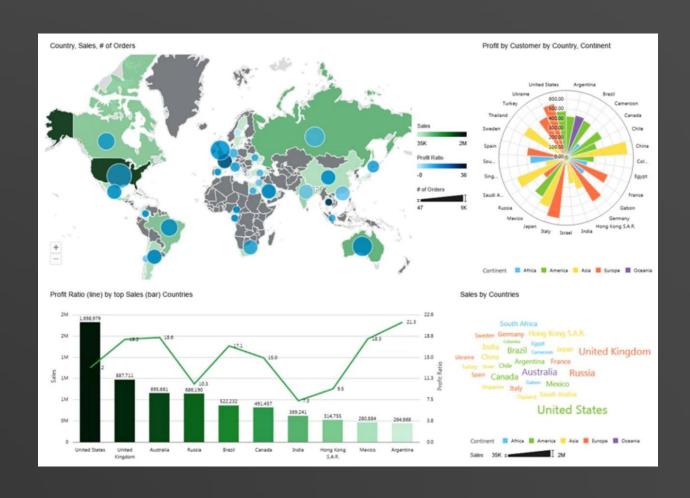
• The narrative should be within the context of the data.

 Provide a clear explanation of what the data means and its importance.



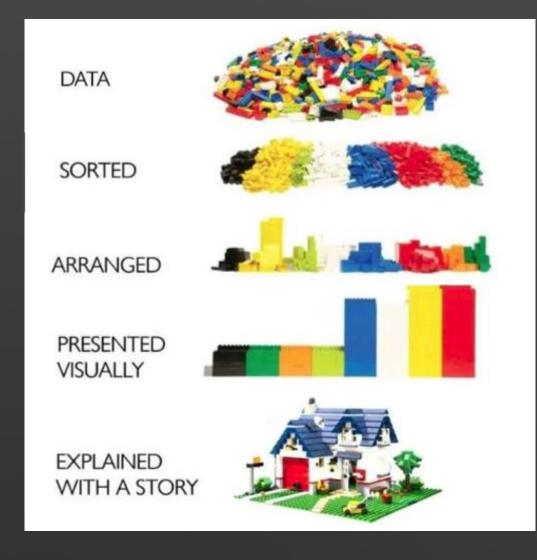
3. Visualisations

- Representations of the data (and the narrative).
- Are used to communicate the story more clearly.
- Visualizations include graphs, charts, diagrams, videos and photos.





Source: Oracle Analytics (X)



Data

- Hundreds of Lego pieces, unordered and messy.
- It needs to be sorted and arranged to help create the narrative.

Narrative

 Hundreds of Lego pieces can feel overwhelming, but when you add in some order, you can understand the pieces (data) you have to work with and can start to be creative to build a story.

Visualisation

 In our example it's a graphic, but in business terms could be a graphic, dashboard, charts, with a key takeaway (data storytelling)

5 reasons why Data Storytelling is important?

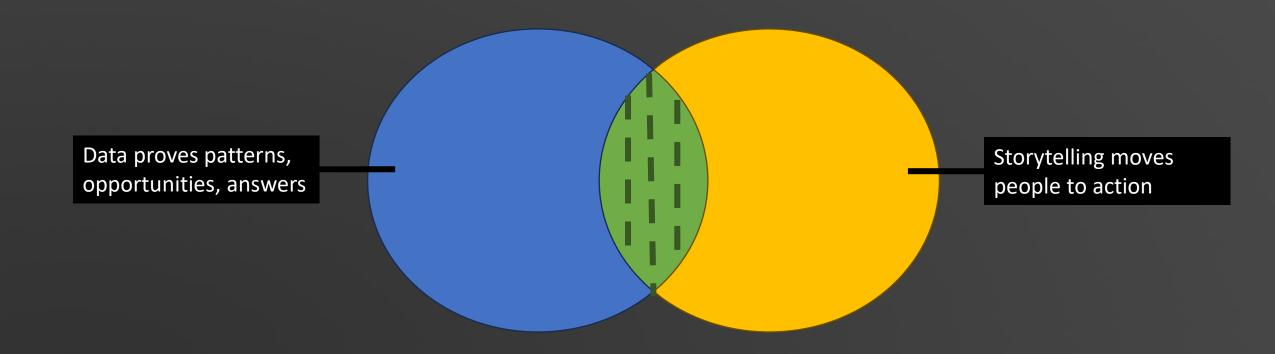
1: Data presented on its own rarely communicates meaning for itself

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 ID": "789d89cb-bfa8-4e7d-8047-498454a1
onMillis":"7"}{"timestamp":"2017-06-0311
```



2: Data and Narrative are sweet-talkers for change

 The point of sharing findings from data is to move from identifying a problem or opportunity toward a resolution or action.



3: Data stories emphasize key insights

Highlighting important findings.

• Ensuring they stand out and resonate with the audience.

4: Help foster information retention

 Increases memorability of data through storytelling techniques.

Aids long-term retention of information.



5: Data stories compliment automated, augmented insights

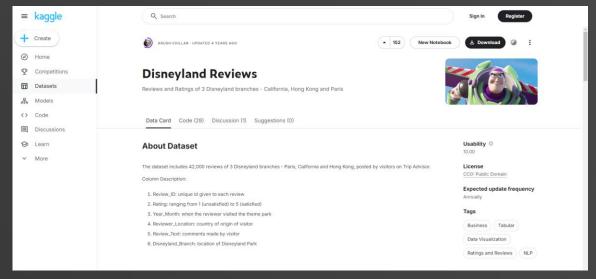
- Analytics solutions includes a rich set of features to help:
 - Streamlined Al
 - Automation
 - Machine learning capabilities



Disney Review Data

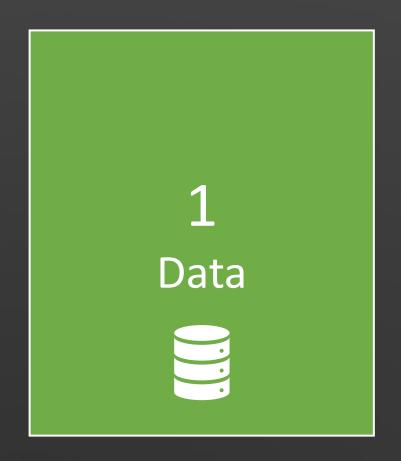
- Includes 42,000 reviews posted by visitors on Trip Advisor.
- Dataset is freely available.
- Can be downloaded <u>here</u>







The 3 components of data storytelling



Narrative



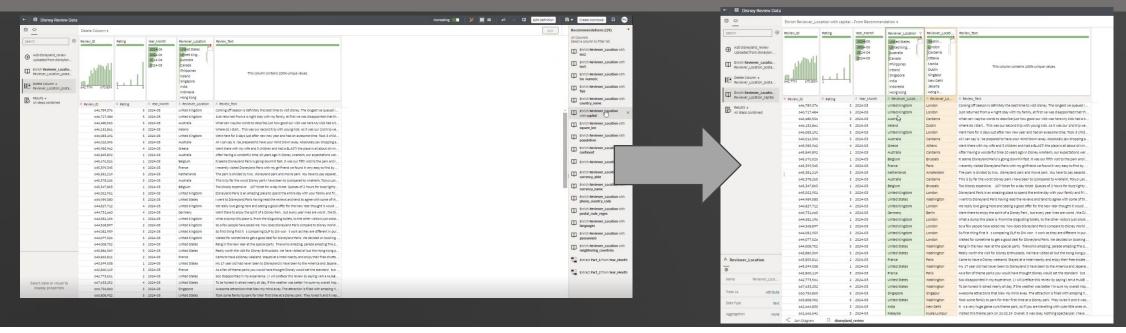
Oracle Analytics: Data Recommendations

Oracle Analytics Cloud (OAC) incorporates powerful data preparation capabilities that enables Data Storytelling.

Data Preparation: Recommendation

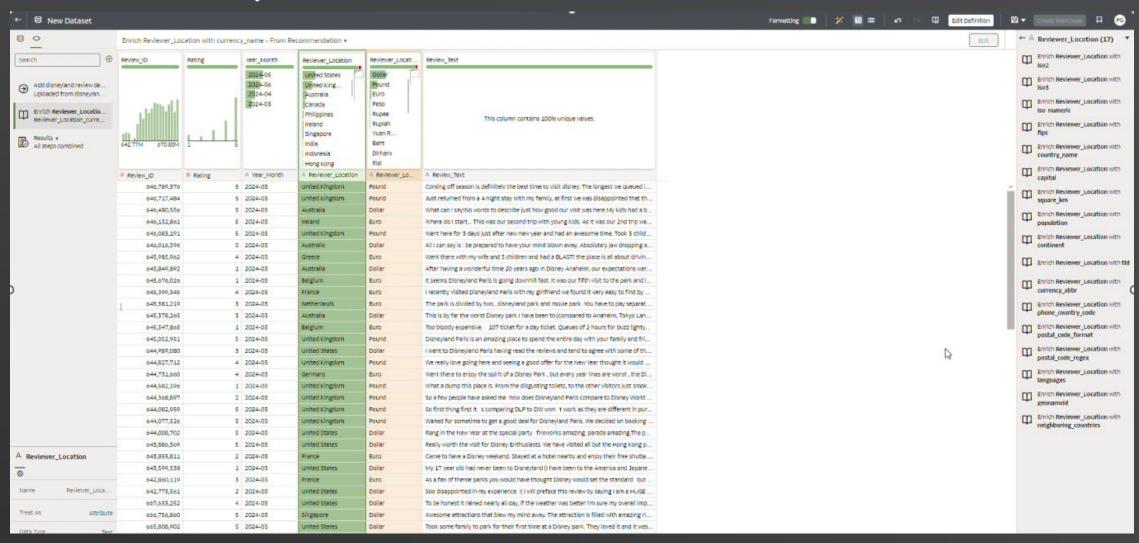
Provides a list of in-built data recommendations which can enrich our dataset.

This can include **exploding dates** into days / months / quarters / weekends etc or adding **geo-spatial features** such as Longitude and Latitude coordinates.

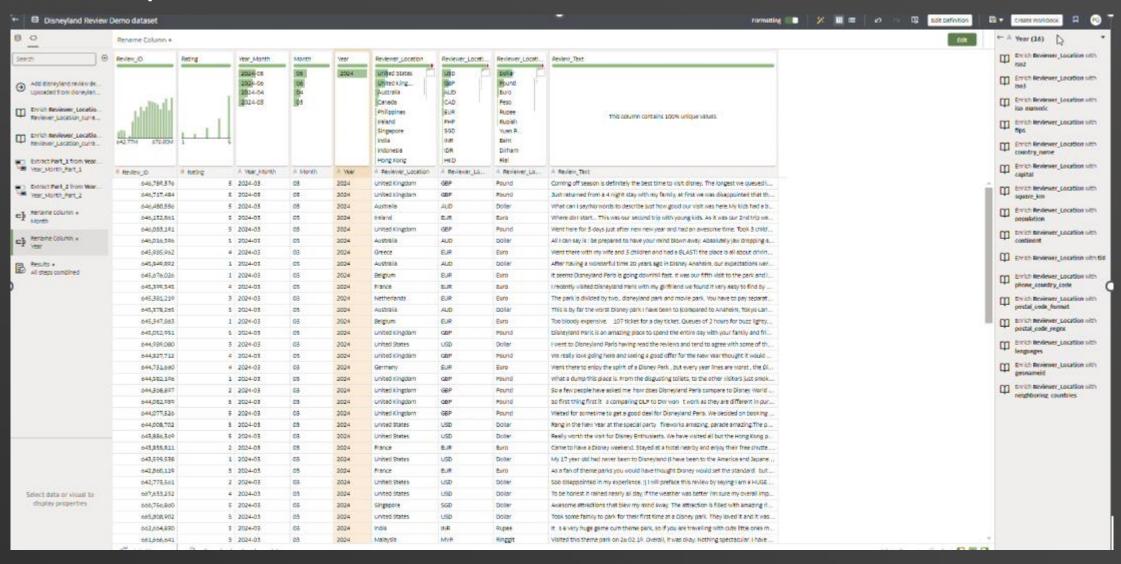




Oracle Analytics: Data Recommendations



Data Prep can be iterative...





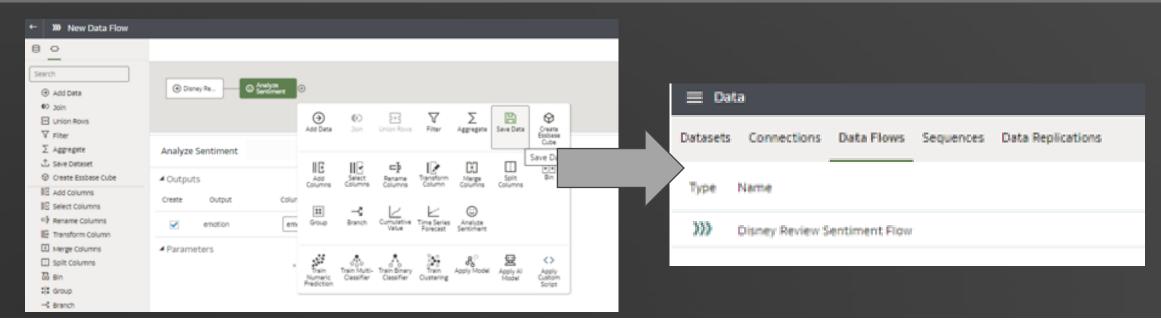
Oracle Analytics: Data Flow

Oracle Analytics Cloud (OAC) incorporates powerful data preparation capabilities that enables Data Storytelling.

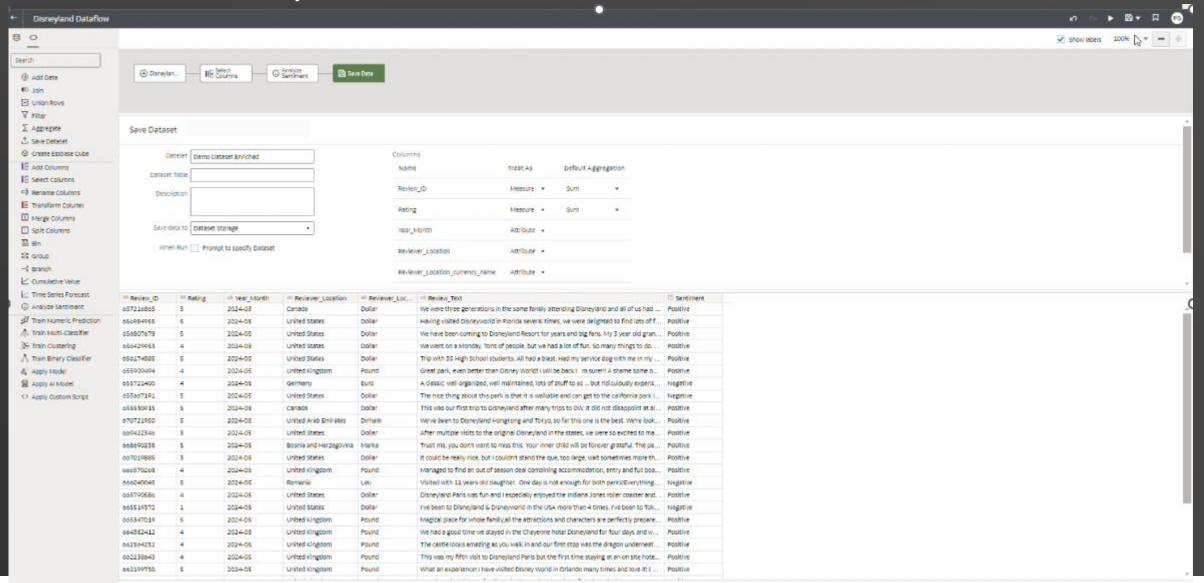
Data Preparation: Data Flow

Provides ability to create a data flow to help order, filter and enrich our dataset.

This can include **joining datasets** together, as well as **filtering / renaming columns**, and this can then be saved into a dataset once the Data Flow has been executed.



Oracle Analytics: Data Flow



The 3 components of data storytelling



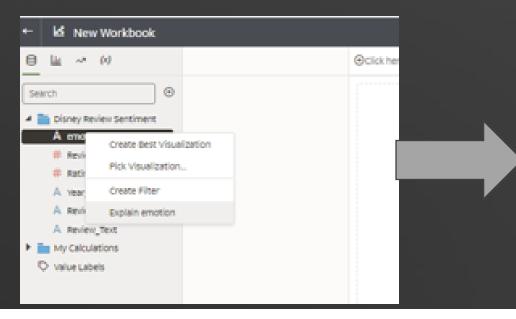
Oracle Analytics: Explain

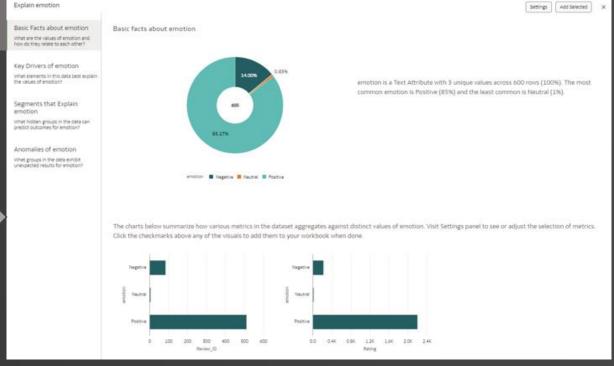
Oracle Analytics Cloud (OAC) incorporates powerful AI capabilities that enables Data Storytelling.

Augmented Analytics: Explain

OAC leverages augmented analytics to automate data preparation, discovery, and visualization.

Right click on the field of interest and select **Explain**





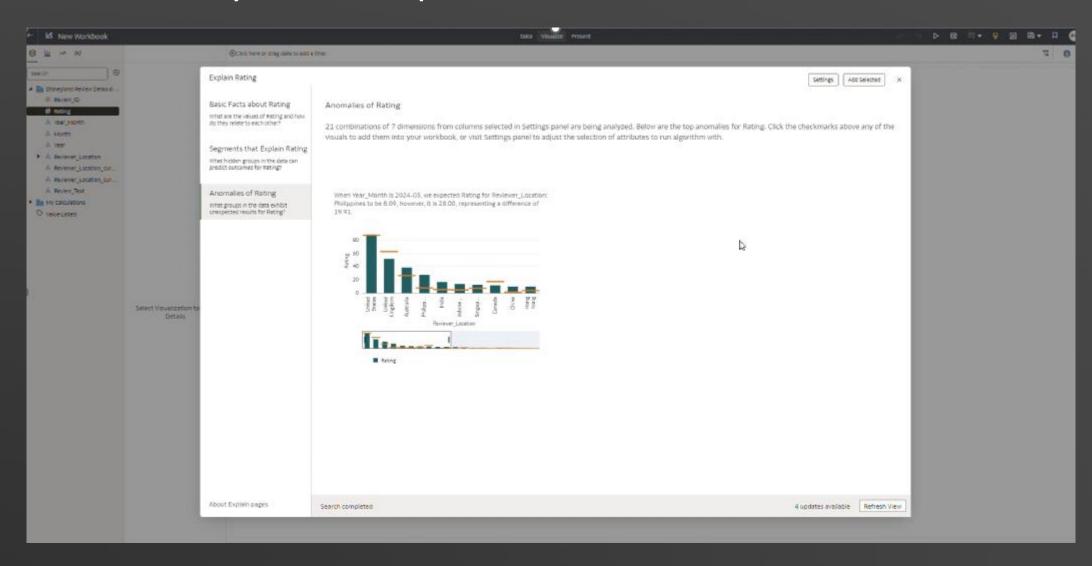
Oracle Analytics: Explain

These insights are generated utilizing Machine Learning algorithms.

Out of the box, this will provide us with information on:

- Basic Facts think of these as summary statistics and key insights.
- Key Drivers what in the dataset is the most important features that impacts that given column.
- **Segments** are there any segments or clusters of data that are of interest.
- Anomalies are there any outliers or unusual data points that have been identified.

Oracle Analytics: Explain



The 3 components of data storytelling



Narrative



Oracle Analytics: Auto-Insights

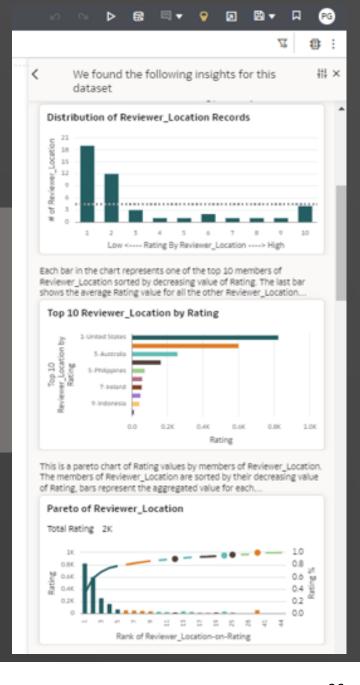
Oracle Analytics Cloud (OAC) incorporates powerful Al capabilities that enables Data Storytelling.

Augmented Analytics: Auto-Insights

Auto-Insights is an artificial intelligence-powered feature that automatically generates insights and recommendations based on the data in a workbook.

It makes use of Machine Learning algorithms to analyse data and identify patterns, trends, and correlations, and then presents the insights in a visual format.

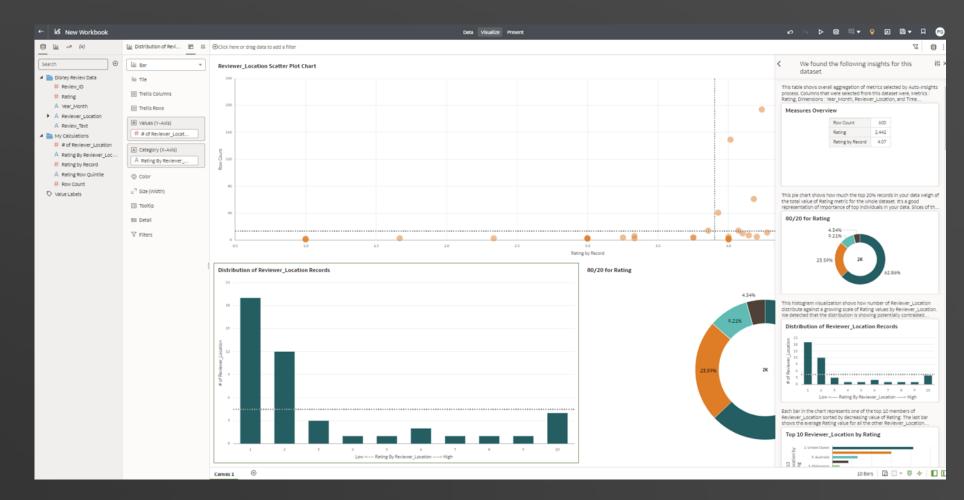




Oracle Analytics: Auto-Insights

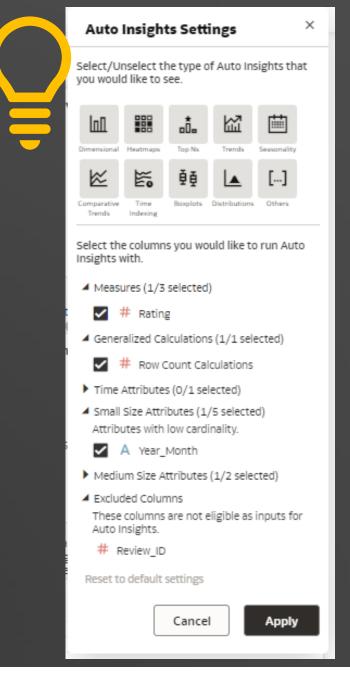
Oracle Analytics Cloud (OAC) incorporates powerful AI capabilities that enables Data Storytelling.

- You can add multiple visualisations to your canvas.
- Then re-position the data visualisations where you want them to help tell your data story.

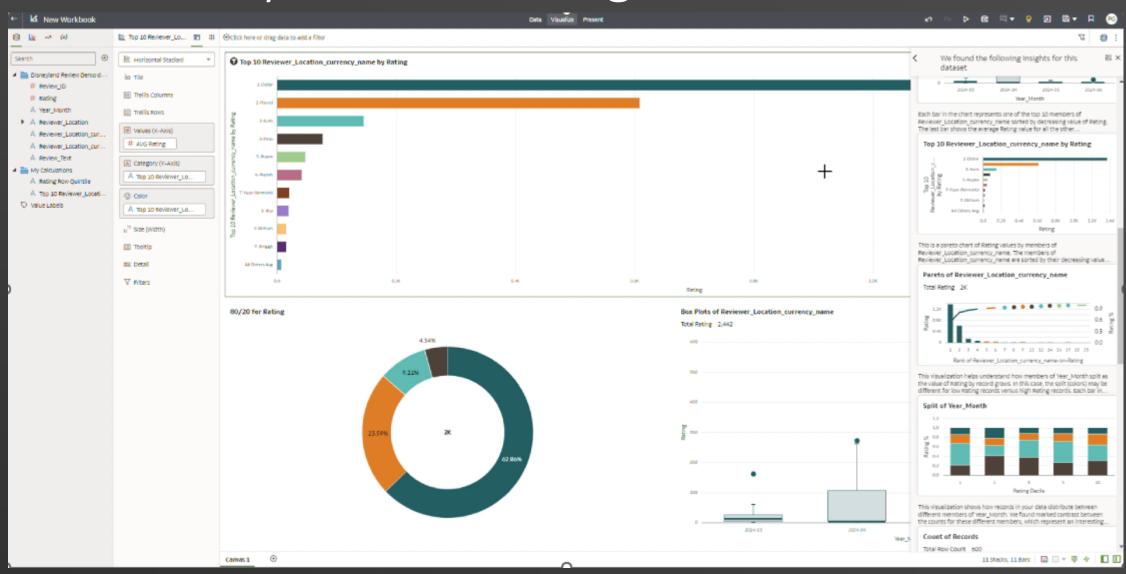


Oracle Analytics: Auto-Insights

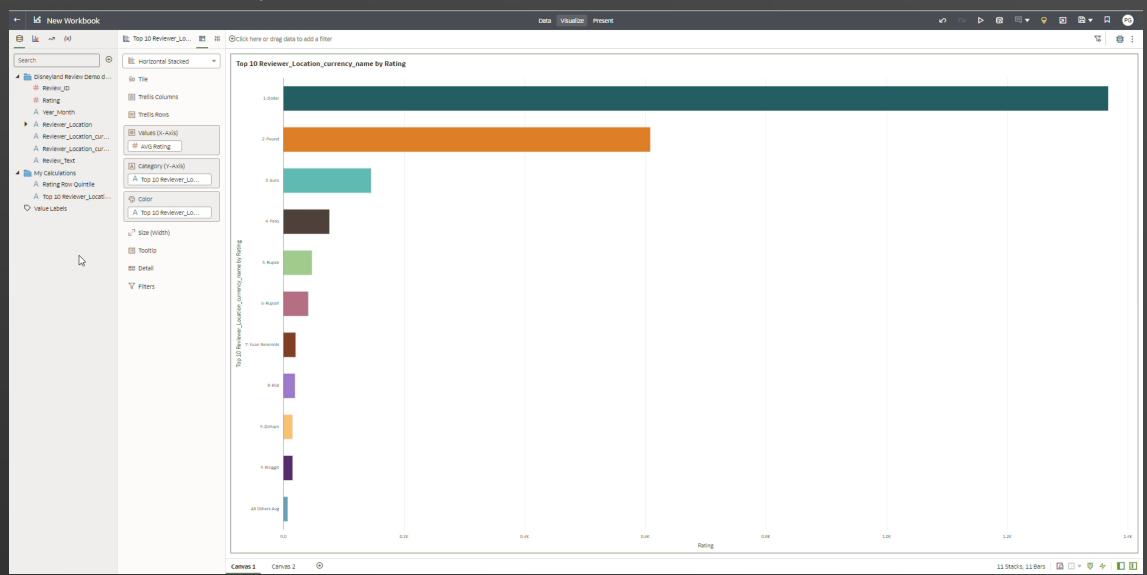
- Another helpful offering is Auto-Insight Settings.
- Toggle fields you are interested in (or not interested in):
 - Include / Exclude certain types of charts
 - Which Attributes you want to include
 - Which **Measures** you want to include
 - Calculations
 - ...
 - Any columns that have been excluded by Oracle Analytics.



Oracle Analytics: Auto-Insights



Oracle Analytics: Custom Calculations



The 3 components of data storytelling



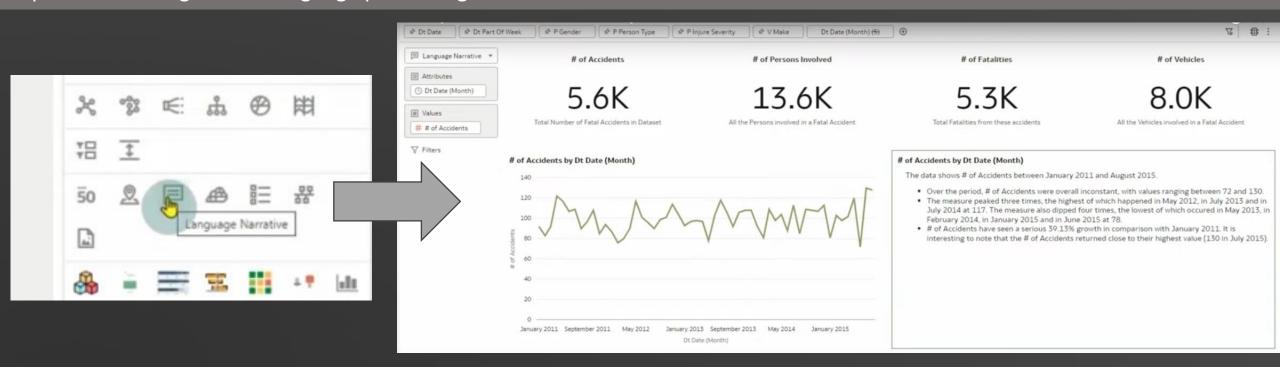
Narrative



Oracle Analytics Cloud (OAC) incorporates powerful AI capabilities that enables Data Storytelling.

Machine Learning & AI: Language Narrative

OAC leverages machine learning and artificial intelligence to transforms data insights into easily understandable written explanations using natural language processing.





Oracle Analytics Cloud (OAC) incorporates powerful AI capabilities that enables Data Storytelling.

Key Points

- Level of Detail: Sliding scale between 1 and 7
 - 1: Short summary of visualisation
 - 4: More detailed, but easily consumed
 - 7: Lowest level of detail



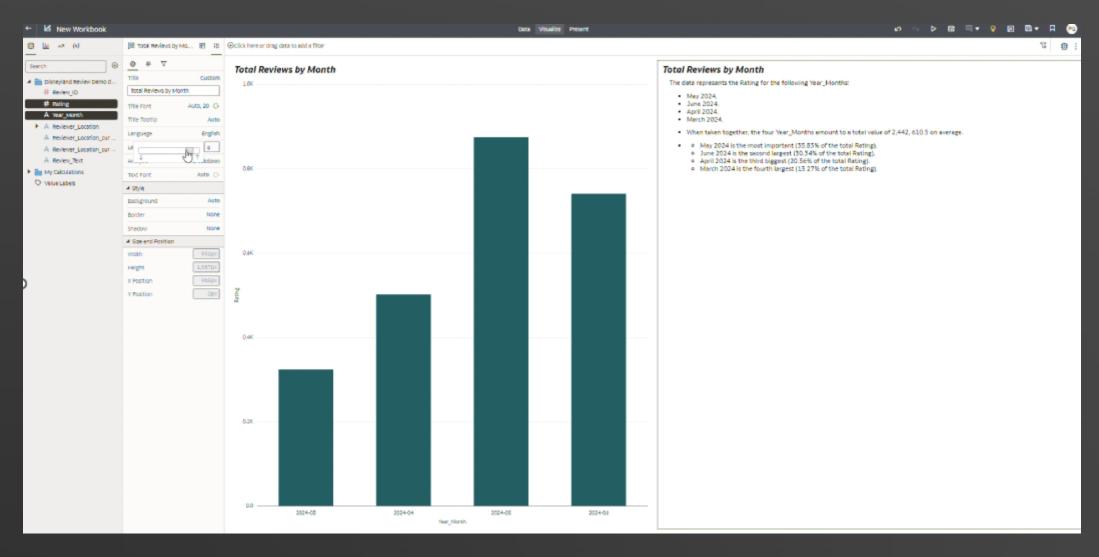
Oracle Analytics Cloud (OAC) incorporates powerful AI capabilities that enables Data Storytelling.

Key Points

Analysis Selections: users can select either Trend or Breakdown

• Language Selection: users can select either English or French





Al Assistant: Visualising data with Natural Language





How to Tell a Great Data Story



Determine what question you want answered

Make sure that the problem the company needs to solve is clearly articulated.



Determine what data is needed to answer the question:

If your company employs data scientists or analysts, take advantage of their expertise and knowledge of business data.



Identify your data sources

As discussed, stories needn't be limited to internal data.



Determine your visualization options

Present data in customizable charts. The key is to work with the person who will be writing the narrative so the visuals support the story.



Construct the narrative

Once you've collected your data and put together some useful charts, adding a creative written or spoken narrative is the final step in creating your data story.



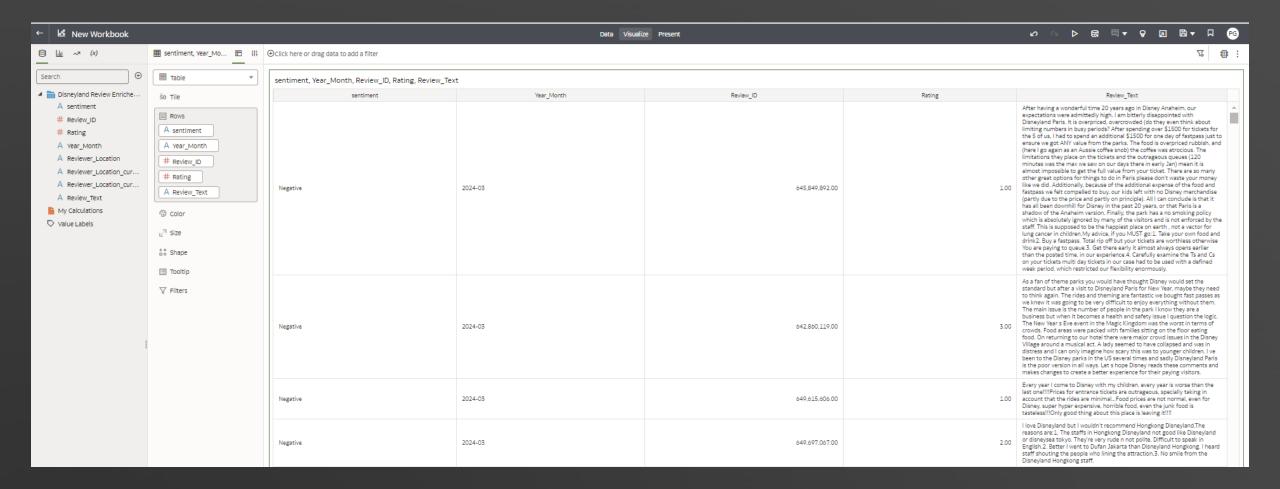
Oracle Analytics: Interactive Data Storytelling



Raw Data

DATA





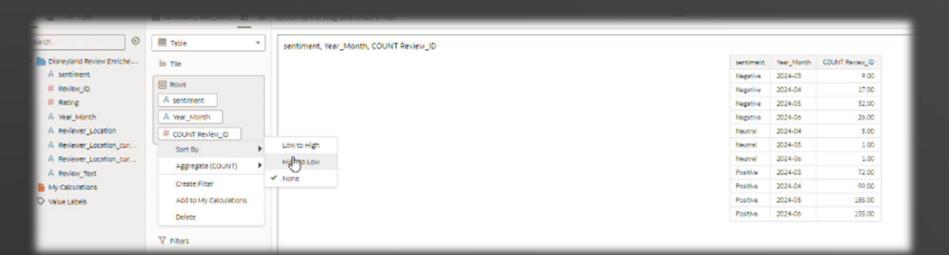
Sort and Arrange our Data

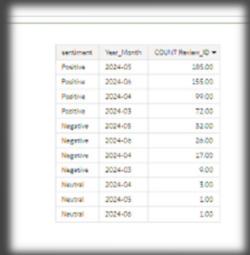
SORTED



ARRANGED

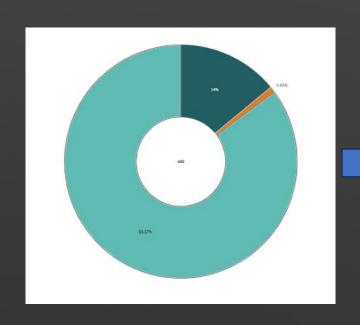




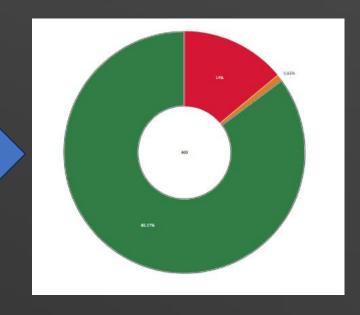


Visualise our Data

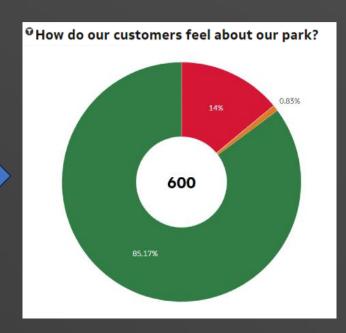




Donut Chart Added



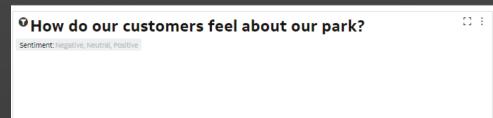
Colour coded review sentiment (positive / negative / neutral)

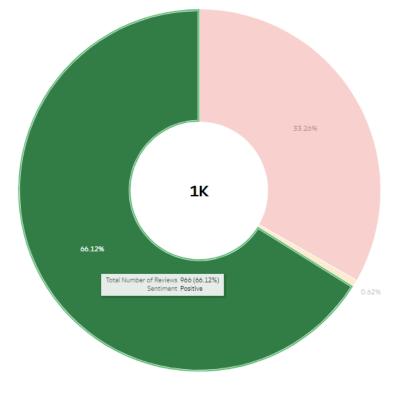


- Formatted labels to stand highlight key point
- Added question / title to the chart

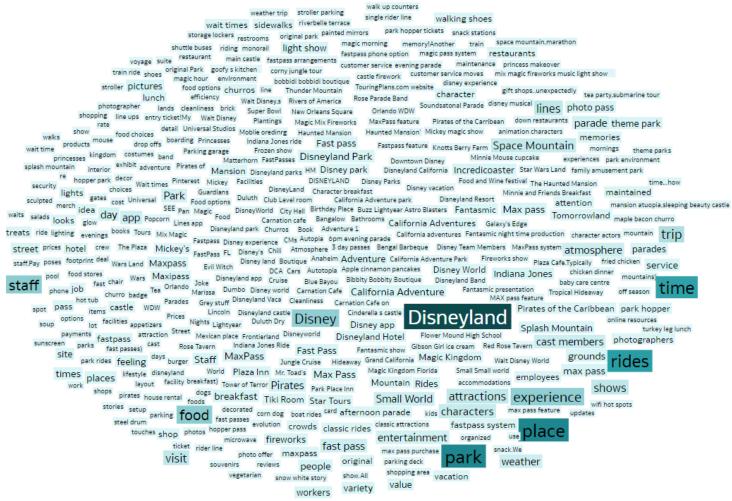






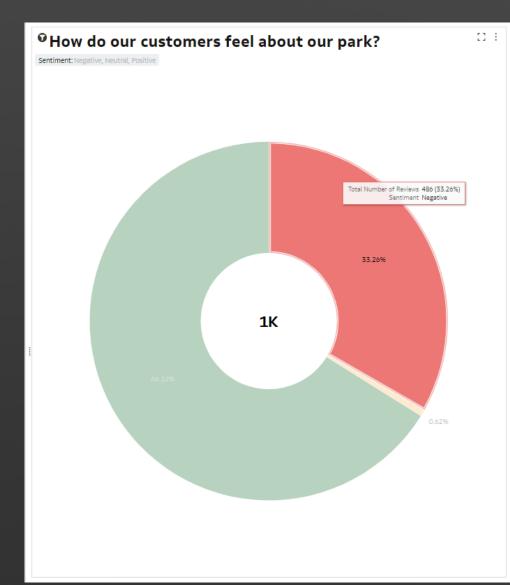


What do our customers tell us?

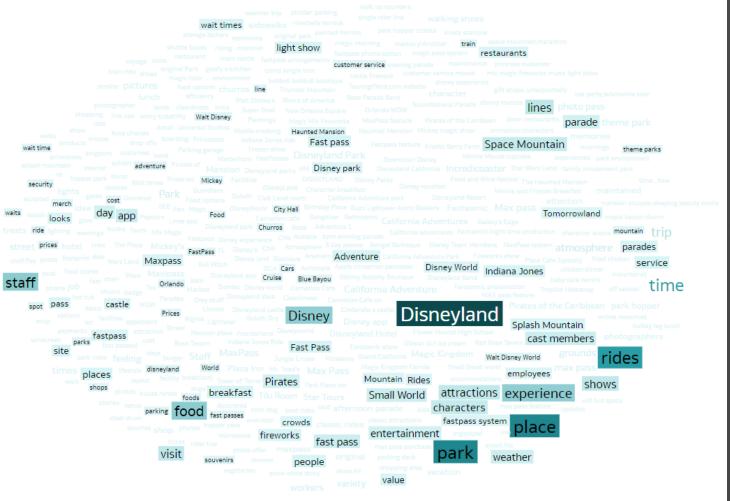






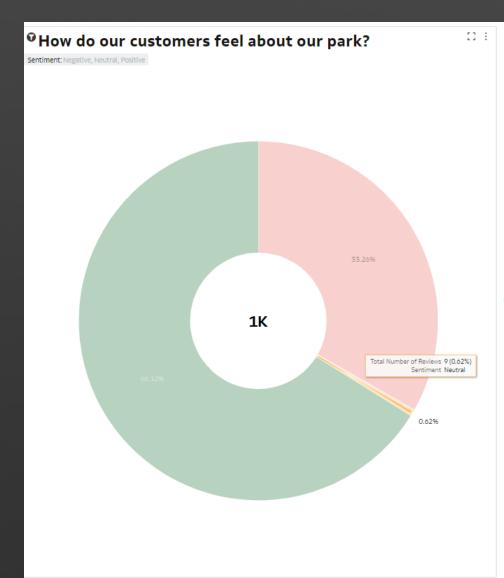


What do our customers tell us?

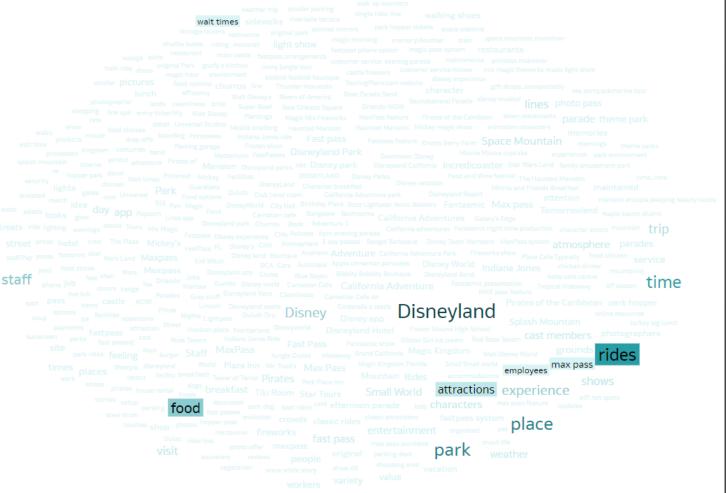








What do our customers tell us?



Oracle Analytics: Tailored Data Storytelling



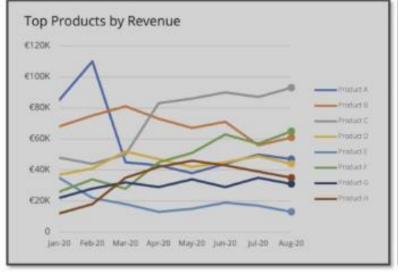
Top tips to keep in mind: Visualisations

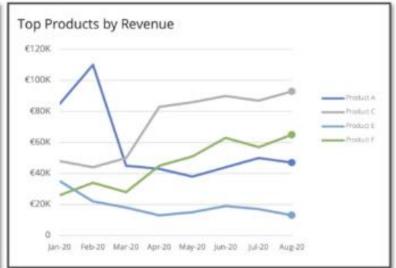
Present the **key points only** in your chart,
keep **what is essential.**

This helps make your data story as easy to follow as possible.

Ask yourself **what is essential** to making your point. Remove what's unnecessary.

Top Products by Revenue

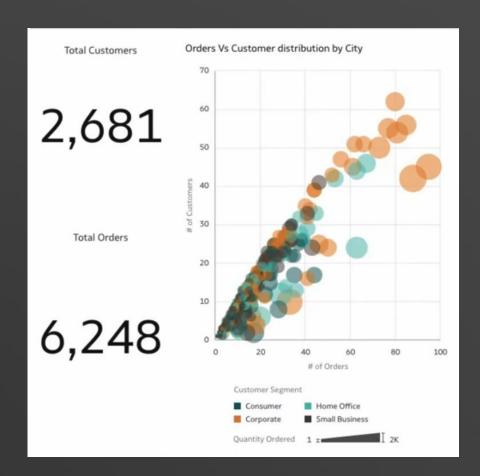




Top tips to keep in mind: Audience at the forefront

Tailor your message based on the audience's knowledge, interests, and needs.

Assess their familiarity with data and adjust complexity accordingly.





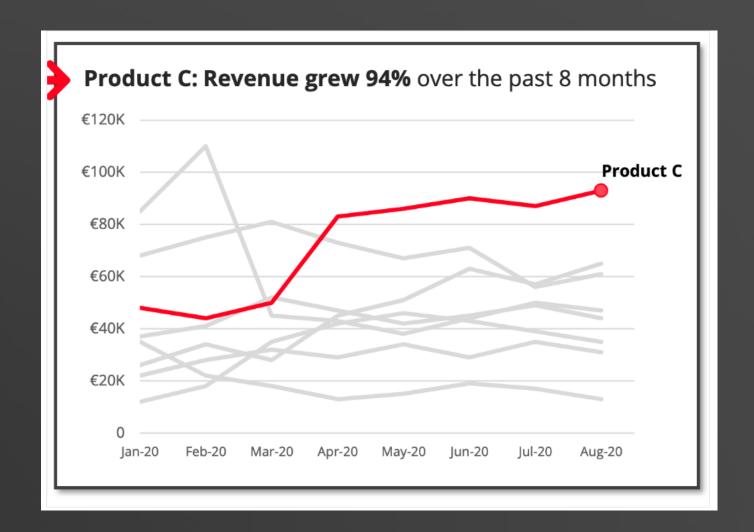




Top tips to keep in mind: Narrative & Visualisations

Include the **key message narrative**, along with your **visualisation** if possible.

This helps explain your data, they key points, and helps to tell your data story.

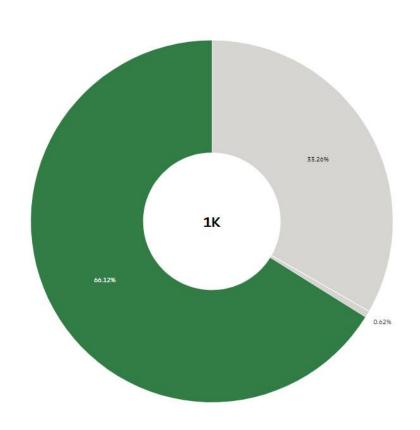




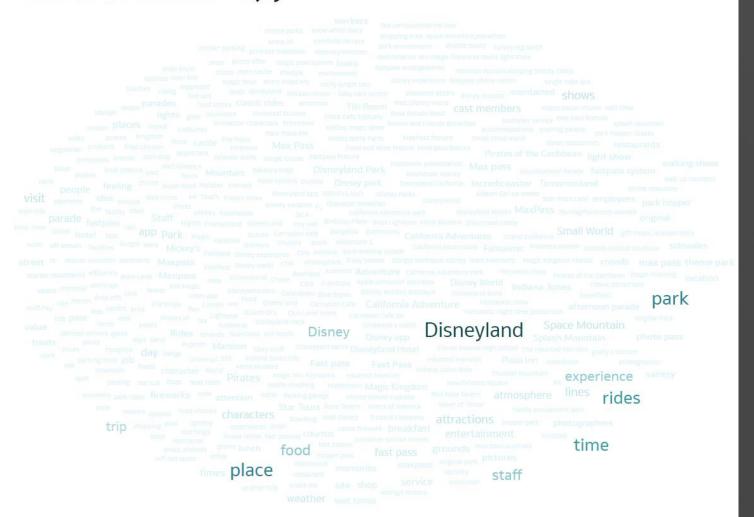


6 in 10 customers enjoy our theme park

Sentiment: Negative, Neutral, Positive



What do our customers enjoy?



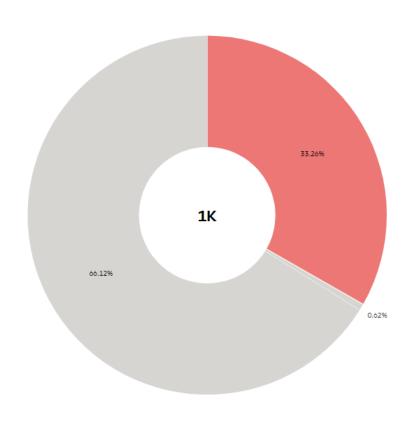




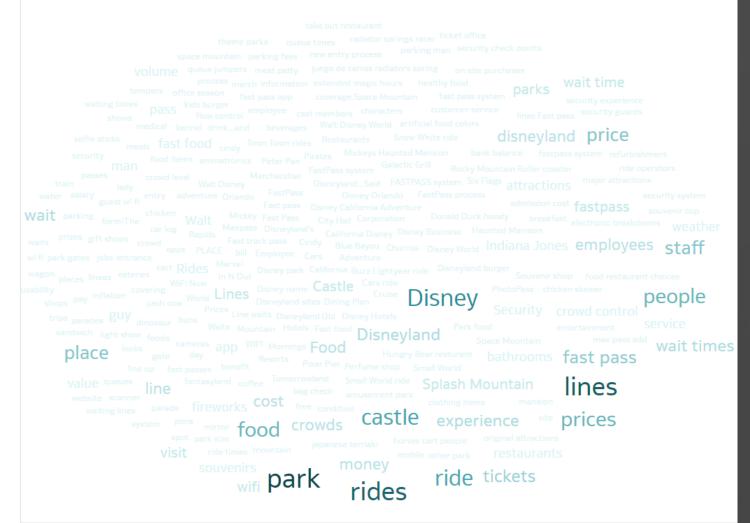


3 in 10 customers think we can improve

Sentiment: Negative, Neutral, Positive



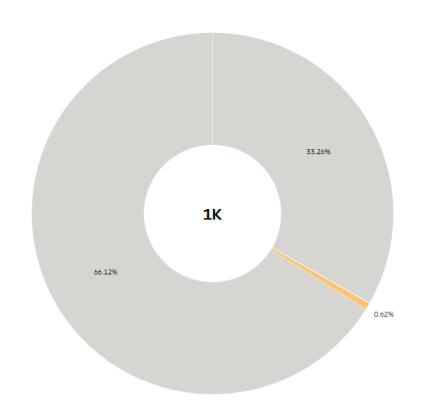
What do our customers want us to improve?







1% of our customers are neutral



What opportunities do we have to improve CX?

fast pass system rides attractions queues Ride times food employees wait times max pass

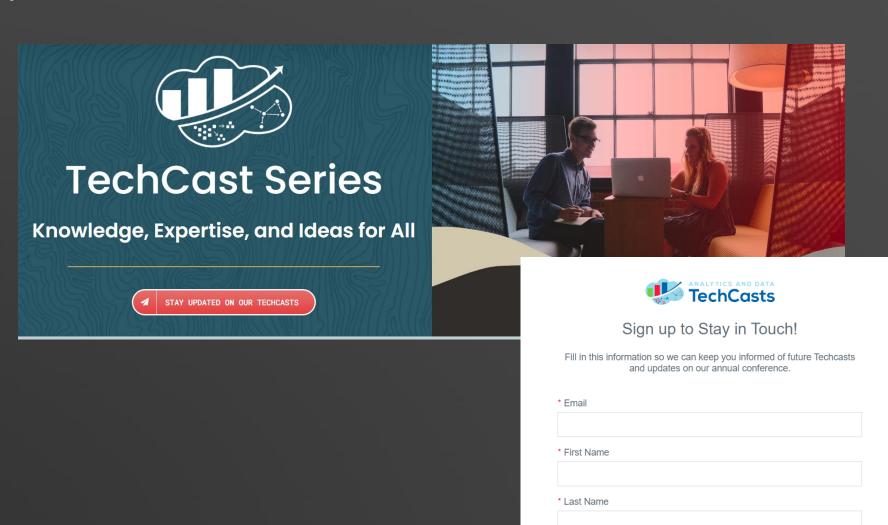
Data Storytelling: Al Avatars



Top tips to keep in mind: Call to Action

Conclude with a clear call to action or next steps for your audience.

Encourage them to act based on the insights gained from the data.



The Oracle Analytics

Data Visualization Challenge 2025

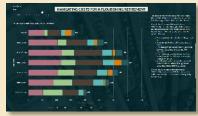
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Summary



Data Storytelling is absolutely a skill that can be mastered.



Provided knowledge of how to tell effective data stories.



Shown how Oracle Analytics provides a suite of tools to help enable the data storyteller.

Helpful Links

DISNEYLAND REVIEW DATA

https://www.kaggle.com/datasets/arushchillar/disneyland-reviews/data

AI AVATARS – TELL DATA STORIES WITH ORACLE ANALYTICS AND SYNTHESIA

https://blogs.oracle.com/analytics/post/putting-a-face-to-data-stories-with-ai-avatars-oracle-analytics-synthesia -

ORACLE AUTONOMOUS CLOUD – FREE TIER

https://cloud.oracle.com/tryit

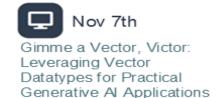
ORACLE ANALYTICS HANDS ON LAB FOR DEVELOPERS

https://learn.oracle.com/ols/course/lab-getting-started-with-oracle-analytics-cloud/89350/101941/152826

ORACLE ANALYTICS CLOUD

Examples: https://www.oracle.com/solutions/business-analytics/data-visualization/examples.html

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Presented by Jim Czuprynski



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Sept 19	Discovering Oracle Fusion Data Intelligence			Peter Koutroubis & Jai Gangwani		Video	Slides	
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Save the Date

Analytics and Data

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Registration is now **open!**

April 8-10, 2025 Oracle Conference Center Redwood Shores, California

www.andouc.org/analytics-and-data-summit-2025/