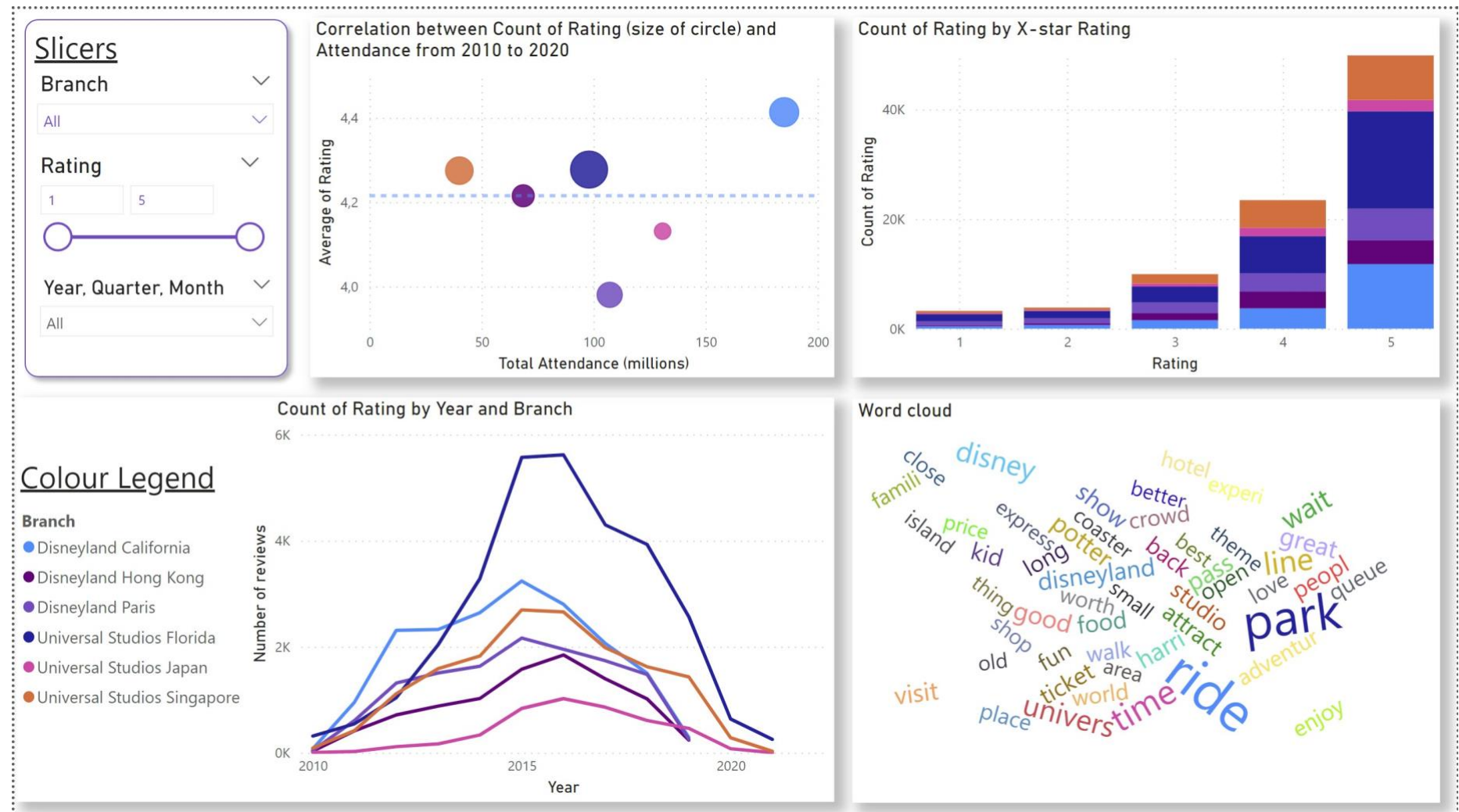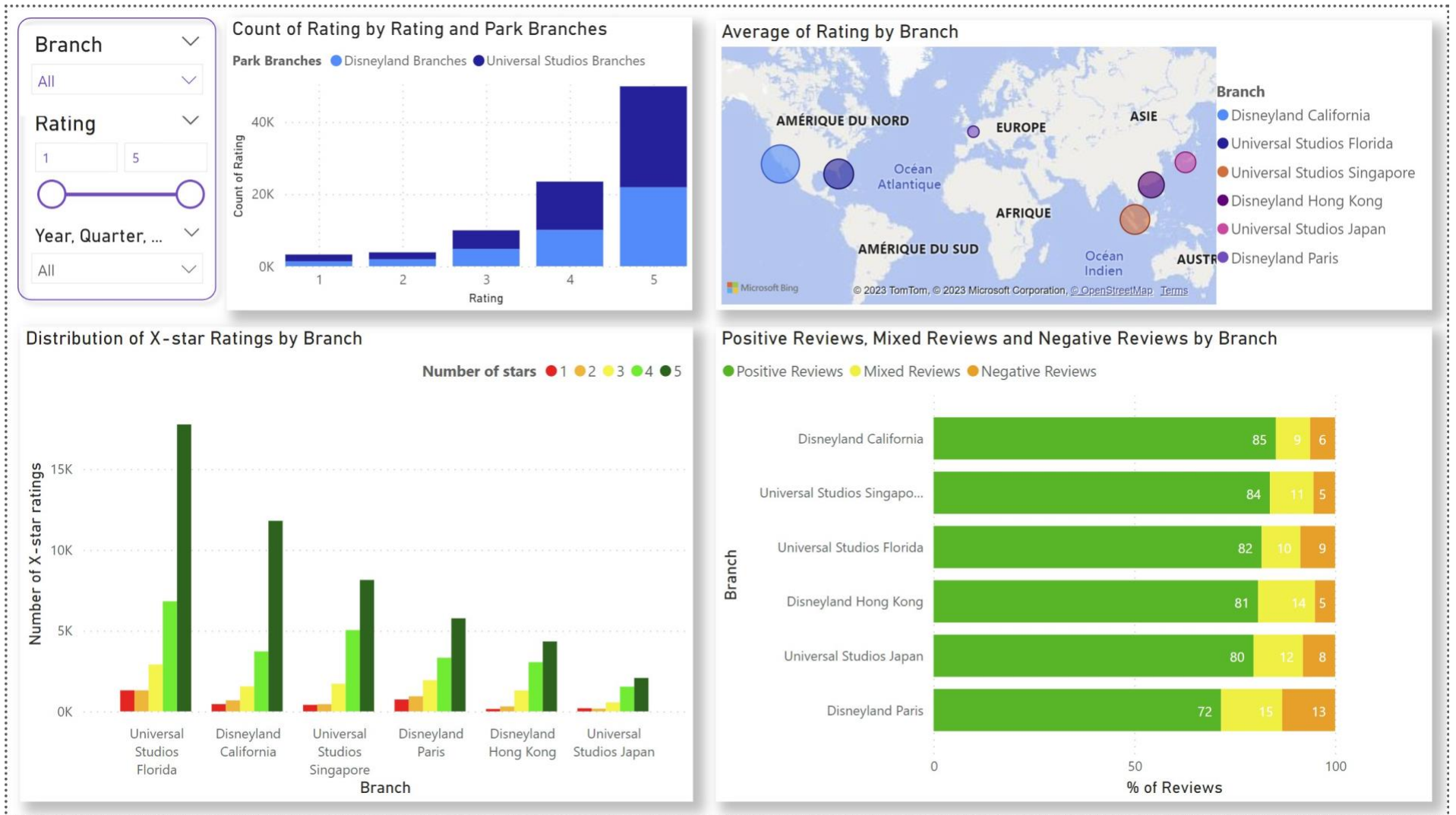# Phase 3 Part B: Data Visualization Report

The 2-page dashboard below contains relevant visuals to better understand trends and dependencies between different attributes. The first page mainly focuses on the count of reviews. This measure is correlated with the park attendances, its scaling distribution (from 1 to 5 stars) and its evolution through time. The second page shows each individual park's performance by displaying the distributions of the ratings and the percentage of positive, mixed, and negative reviews.

In the Power BI file, you will be able to navigate through the dynamic dashboard and consult other graphs that were made but were not selected to be part of the final dashboard. For example, the tab "Seasonal analysis" contains the "Count of Rating by Year and Branch" line graph below, as well as by *Quarter* and *Month*. Analyzing data from a yearly graph to a quarterly graph is considered drilling down because more details are displayed.

Count of Rating by Rating and Park Branches

Park Branches ● Disneyland Branches ● Universal Studios Branches

Average of Rating by Branch

Branch
● Disneyland California
● Universal Studios Florida
● Universal Studios Singapore
● Disneyland Hong Kong
● Universal Studios Japan
● Disneyland Paris

Distribution of X-star Ratings by Branch

Number of stars ●1 ●2 ●3 ●4 ●5

Positive Reviews, Mixed Reviews and Negative Reviews by Branch

● Positive Reviews ● Mixed Reviews ● Negative Reviews

Branch	Positive	Mixed	Negative
Disneyland California	85	9	6
Universal Studios Singapo...	84	11	5
Universal Studios Florida	82	10	9
Disneyland Hong Kong	81	14	5
Universal Studios Japan	80	12	8
Disneyland Paris	72	15	13

Both pages contain a purple panel board that is connected between the pages. The first slicer allows to filter and select multiple specific *Branches*, the second one allows to range between *Ratings* from 1 and 5, and the last one enables to filter through *time*: specific year(s), quarter(s), and month(s) can be selected.
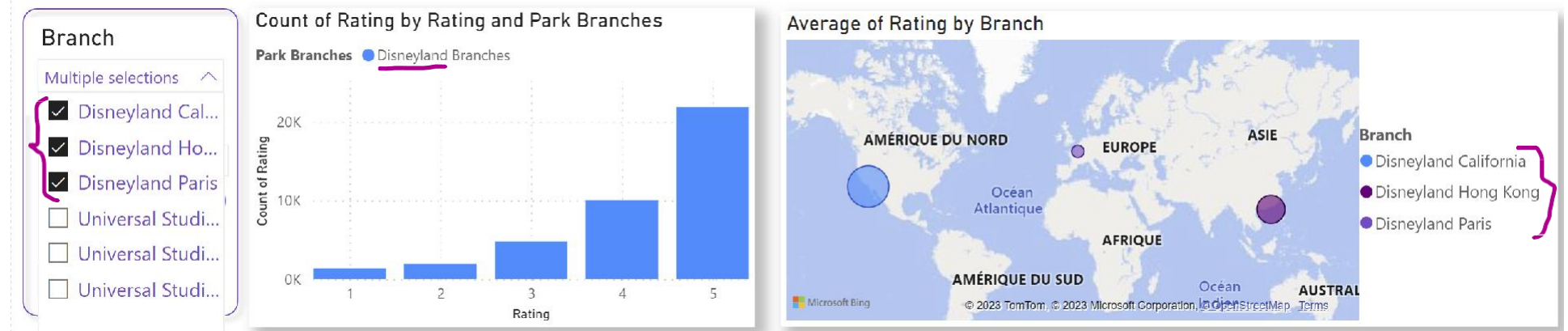
Drill Down (more details) and Roll Up (less details)
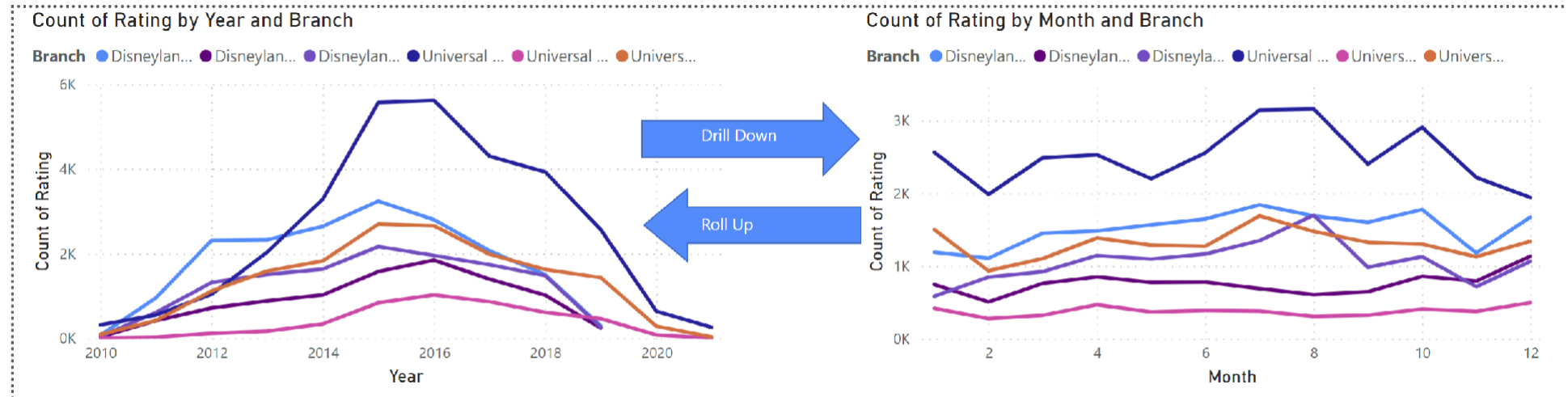
Drilling down could also mean filter on dimensions!

Slice: query only one dimension

Example here: consider only Disneyland reviews.

Dice: filter multiple dimensions

Example: consider 3-to-5 stars reviews of Universal Studios branches from 2013 to 2019.

TopN: iceberg query

Example: display the n=15 most used words in all reviews. We were not able to create a dynamic filter, so to achieve this filtering, select the Word Cloud visual and open the "Visualizations" pane on the right-hand side of the Power BI report. Select the middle icon, "Format visual" (the one with the paintbrush). Under Visual > General, there will be the "Max number of words" field. Enter the desired value, and the Word Cloud will display accordingly.

From our visualizations, we saw that our dataset is heavily skewed toward positive (particularly 5 star) reviews.

While Universal Studios Florida may have the highest number of positive (4 or 5 star) reviews across all branches, Disneyland California has the highest percentage of positive reviews. So, while Disneyland California may have fewer reviews in total than Universal Studios Florida, a greater proportion of its reviews are positive.

The number of reviews/ratings declined significantly in 2020-2021; we attribute this to a real-life event: COVID-19 (which caused the parks to close or operate under heavy restrictions).