Workshop on Dashboarding and Storytelling with PowerBI

Case Study

Bengaluru is home to restaurants from all over the world. You can find all types of cuisines in this place, from the United States to Japan, Russia to Antarctica. You name it, Bengaluru has it: delivery, dine-in, pubs, bars, drinks, buffets, and desserts. Restaurants are becoming more numerous every day and the number currently stands at 12,000. Having so many dining establishments, this market has not yet reached saturation. Additionally, new eateries are appearing every day. They now find it challenging to compete with restaurants that have already achieved success. The main problems that they continue to face include high real estate prices, rising food prices, a lack of qualified workers, a disjointed supply chain, and over-licensing.

The Zomato dataset will assist new restaurants in selecting their theme, menus, cuisine, price, etc. for a certain area. Additionally, it looks for culinary similarities among Bengaluru neighborhoods. Reviews for each restaurant are also included in the dataset, which will aid in determining the establishment's overall grade. The data is accurate to that available on the Zomato website until 15 March 2019.

Source: https://www.kaggle.com/datasets/himanshupoddar/zomato-bangalore-restaurants

Task: In order to gather insights using Power BI, create the following sets of reports:

1. A Location-specific Report/Dashboard that displays the following information:

- Locations (listed in) with the highest number of restaurants in Bangalore. A top 5 list can be highlighted.
- The average restaurant ratings of the top 5 locations were obtained in the first visual.
- The percentage of the types (listed in) of all the restaurants in the city.
- The top 10 locations are based on the Average Approximate Cost (for two people).

2. A Rating-specific Report/Dashboard that displays the following information:

Note: Create two distinct categories of restaurants: “High-Rated” and “Low-Rated”. A “High-Rated” restaurant has a rating that is higher than the average rating while a “Low-Rated” restaurant has a rating lower than the average rating.

- The number of High-Rated and Low-Rated restaurants along with the average rating of all the restaurants.
- Top 10 locations with the highest rated restaurants and their average approximate cost.
- Top 10 popular cuisines of High-Rated restaurants (in percentages).
- Top 10 High-Rated Restaurants.
- The number of High-Rated restaurants that provide reservation facilities as well as online ordering.

3. A Restaurant-type Report/Dashboard that displays the following information:

- Top 10 locations with the largest number of High-Rated restaurants for each type (as listed in).
- Top 10 High-Rated Restaurants for each type (as listed in).

- Popular cuisines of High-Rated restaurants for each type (as listen in).

4. A Pricing-specific Report/Dashboard that displays the following information:

Note: Create two distinct categories of restaurants namely “High-Priced” and “Low-Priced” based on the average approximate cost, such that restaurants in the former category have priced their menu higher than the average cost while the latter have listed the prices lower than the average cost.

- The number of High-Priced and Low-Priced restaurants along with the average rating of each of these categories.
- The number of High-Priced restaurants which offer reservation facilities and online ordering.
- Top 5 popular cuisines of High-Priced restaurants (in percentages).
- Top 10 High- and Low-priced restaurants based on their average rating.

Workshop Session Plan

In the workshop, you will work with your team to create meaningful reports using PowerBI and present them to the class.

Activity
For the task given above, create reports using Power BI and present them to the class.

Day 1 Session Plan: Introduction and Preparation

1. Introduction to the workshop. (15 minutes)
2. Meet your team in the breakout room – 4 teams.
3. Analyze the case and the expected outcomes. (30 minutes)
4. Brainstorm your techniques and solutions. (30 minutes)
5. Prepare your reports. (120 minutes)

Day 2 Session Plan: Presenting Your Report

1. Plan and rehearse your report presentation. (60 minutes)
2. Present the reports to the class. (20 minutes)
3. Solution discussion with the faculty. (40-45 minutes)

Submission Requirements

1. Place your reports in a folder and zip it.
2. Recommended file/folder name is “Workshop_PowerBI_<batch number cohort number>_<datemonth>_<TeamNumber>. *For example, “Workshop_PowerBI_B1C1_7Jan_Team1*
3. In the submission, include team members’ names.
4. Go to the course page on vLearn and submit your reports to the workshop submission page.

Guidelines for the Report Creation and Presentation

1. All members of a team must contribute towards the report creation.
2. All members must participate/present the final class presentation.
3. Make sure to present your reports within 20 minutes.