



TECH SAKSHAM

Case Study Report

Data Analytics with Power BI

“360-DEGREE BUSINESS ANALYSIS OF ONLINE DELIVERY APPS USING POWER BI”

“APC MAHALAXMI COLLEGE FOR WOMEN”

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ABSTRACT

The age group of the users are mostly 18–40 years. In this age group, users are mostly busy and engrossed in their work. So going through all the discounts and price ranges are difficult and time consuming. Users prefer to order food during their lunch time which is of a very small duration mostly 40 mins. Users likes to order the food that they are comfortable with. So, a detailed ingredients list is a plus point, in case the users are prone to allergies of a certain element. Users also prefers those food joints which provide faster and smoother delivery. Users would also like to have a no-cancellation guarantee before they place their order. This would build a trust between the users and the food joints. Users would like to trust the food joints by seeing the review (probably by stars) and (feedback) Users also prefers re-ordering their orders. So once the orders are placed, the order history must be saved in the app.



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CHAPTER 1

INTRODUCTION

1.1 PROBLEM STATEMENT

Whenever we visit any restaurant or a food shop then we generally have an issue of waiting queue that most of us are not used to entertain and, Nowadays generally customers prefer their food to be delivered online at their home safely. The current food delivery applications provide different discounts on the same item but in different platform. It is also seen that delivery time of an item is not same in all the applications. Adding all the discounts and estimated delivery time of different food joints under a single interface will be economical and less time consuming. Food delivery applications are a huge market all over the world.

1.2 PROPOSED SOLUTION

Through our system the customers would be easily able to place orders as they like using the online meal ordering system, which sets up a food menu online. Online shoppers can also simply track their orders. The management keeps the customer information up to date and enhances the meal delivery service. Additionally, this system has a feedback feature that allows users to rank the food products. Additionally, the suggested system can suggest restaurants and hotels based on the ratings provided by the user. The hotel personnel will also be advised of any quality and improvement issues.

1.3 FEATURE

Recommended food sections: Highlight popular dishes based on user preferences to assist customers who are looking for tried-and-tested options.

Easy Add to Cart functionality: Implement visible and easily accessible buttons next to each menu item, so users can add items with a single tap.

Search and filter options: Search functionality helps users locate specific dishes or cuisines quickly.

In addition, provide filters based on dietary preferences, price ranges, or food types to streamline the selection process.

Real-Time Order Tracking: Hungry customers want their meals delivered fast. As such, integrating delivery order tracking into your online food ordering app is a must.

1.4 ADVANTAGES

User-Friendly Interface: The apps are designed in as a user-friendly interface so that your customers can find it easy and place the orders effortlessly.

Various Payment Options: Apps are generally developed with having a wallet balance, net banking payment, credit/debit card payment, etc. This gives the customers leverage to choose a payment option for the orders they place.

Free and cheap marketing: You can gain a strong online presence in front of your customers without spending more on media advertising and billboards. Yes, the Internet can do all the possible work for you.

1.5 SCOPE

In current formal dining environment, some form of physical static menu is utilized to convey the available food and beverages choices to customers. Said menus are generally paper based and hence impose restrictions on the textual real estate available and the ability a restaurateur has to update them.



CHAPTER 2

SERVICES AND TOOLS REQUIRED

2.1 Services Used

- **Data Collection and Storage Services:** Online apps need to collect and store customer data in real-time. This could be achieved through services like Azure Data Factory, Azure Event Hubs, or AWS Kinesis for real-time data collection, and Azure SQL Database or AWS RDS for data storage.

- **Data Processing Services:** Services like Azure Stream Analytics or AWS Kinesis Data Analytics can be used to process the real-time data.

- **Machine Learning Services:** Azure Machine Learning or AWS Sage Maker can be used to build predictive models based on historical data.

2.2 Tools and Software used

Tools:

- **Power BI:** The main tool for this project is Power BI, which will be used to create interactive dashboards for real-time data visualization.

- **Power Query:** This is a data connection technology that enables you to discover, connect, combine, and refine data across a wide variety of sources.

Software Requirements:

- Power BI Desktop:** This is a Windows application that you can use to create reports and publish them to Power BI.

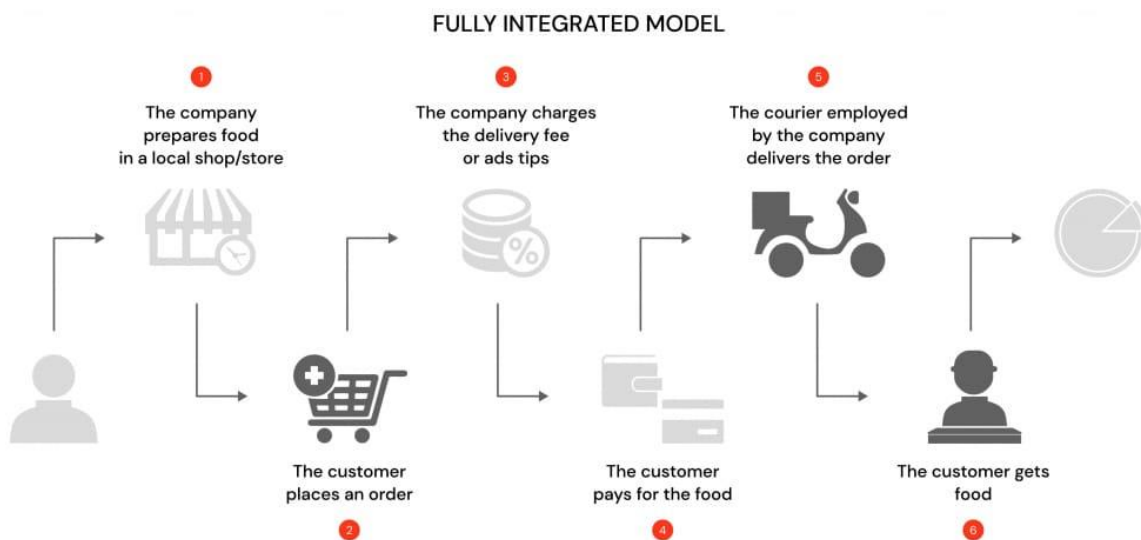
- Power BI Service:** This is an online SaaS (Software as a Service) service that you use to publish reports, create new dashboards, and share insights.

- Power BI Mobile:** This is a mobile application that you can use to access your reports and dashboards on the go.



CHAPTER 3

PROJECT ARCHITECTURE



Here's a high-level architecture for the project:

Restaurants: This table will store information about restaurants, including their id, address, country code, locality, city.

Latitude: This table stores information about the latitude in which the restaurants is present.

Longitude: This table stores information about the longitude in which the restaurants is present.

CUISINES: This table stores information about the food available in the restaurants.

This architecture provides a comprehensive solution for barriers in online food delivery apps.

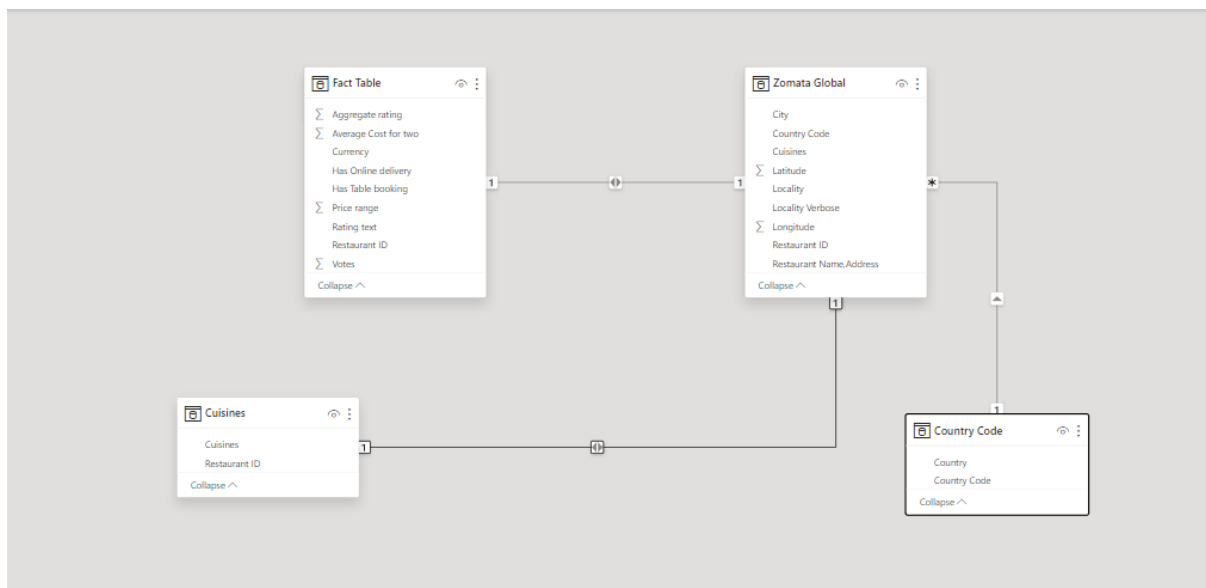


CHAPTER 4

MODELING AND RESULT

DATA MODELLING

Manage relationship



Manage relationships

Active	From: Table (Column)	To: Table (Column)
<input checked="" type="checkbox"/>	Zomato Africa (Restaurant ID)	KPIs (Restaurant ID)
<input checked="" type="checkbox"/>	Zomato Asia (Restaurant ID)	KPIs (Restaurant ID)
<input checked="" type="checkbox"/>	Zomato Europe (Restaurant ID)	KPIs (Restaurant ID)
<input type="checkbox"/>	Zomato Global (Latitude)	Zomato Oceania (Latitude)
<input checked="" type="checkbox"/>	Zomato Global (Restaurant ID)	KPIs (Restaurant ID)
<input checked="" type="checkbox"/>	Zomato NAM (Restaurant ID)	KPIs (Restaurant ID)
<input checked="" type="checkbox"/>	Zomato Oceania (Restaurant ID)	KPIs (Restaurant ID)
<input checked="" type="checkbox"/>	Zomato SAM (Restaurant ID)	KPIs (Restaurant ID)

New...Autodetect...Edit...Delete

Close

Edit relationship



Select tables and columns that are related.

Zomato Africa

Restaurant ID	Country Code	City	Restaurant Name,Address	Locality
18395463	189	Cape Town	The Butcher's Wife,15 Belgravia Road, Athlone, Cape T...	Athlone
18337845	189	Cape Town	Coco Safar,Ground Floor, Cavendish Square, Claremont...	Cavendish Square, C
6401732	189	Cape Town	La Parada,107 Bree Street, CBD, Cape Town	CBD

KPIs

Restaurant ID	Average Cost for two	Currency	Has Table booking	Has Online delivery	Price range
18433852	300	Indian Rupees(Rs.)	No	No	1
18465871	300	Indian Rupees(Rs.)	No	No	1
18471268	300	Indian Rupees(Rs.)	No	No	1

Cardinality

Cross filter direction

One to one (1:1)

Both

☒ Make this relationship active

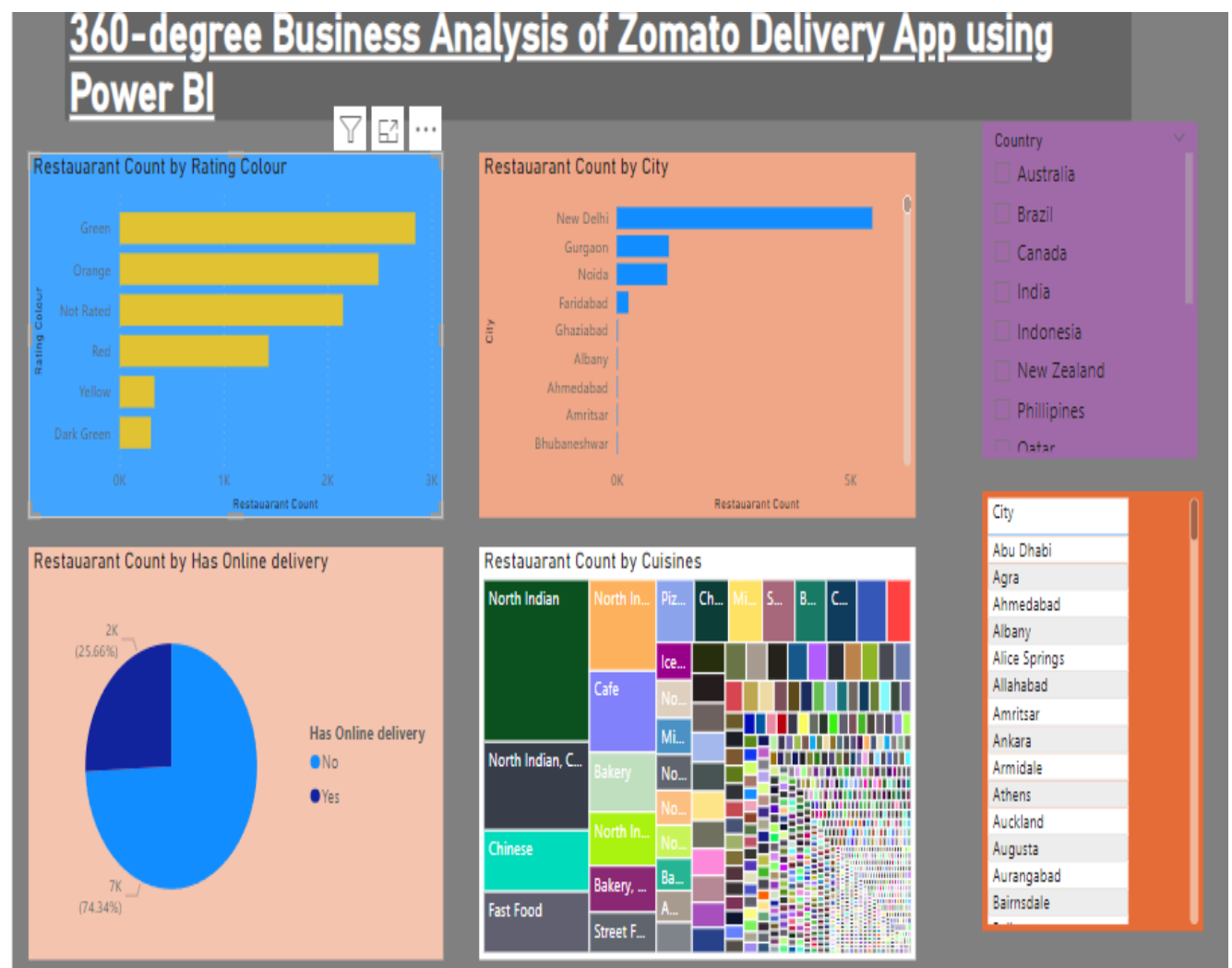
☐ Assume referential integrity

OK

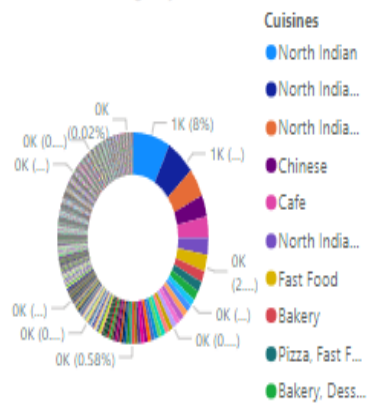
Cancel



Dashboard

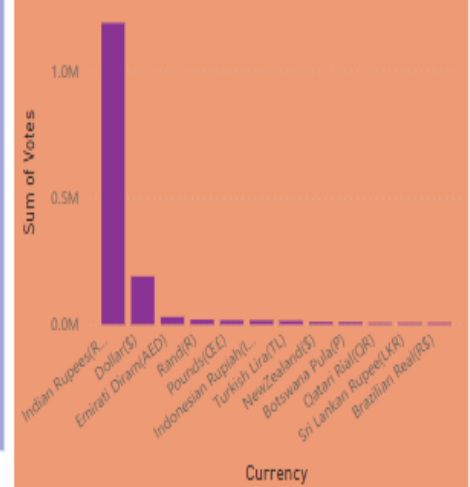


Sum of Price range by Cuisines

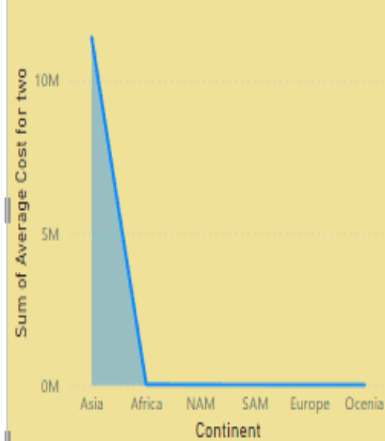


9551
Count of Country Code

Sum of Votes by Currency

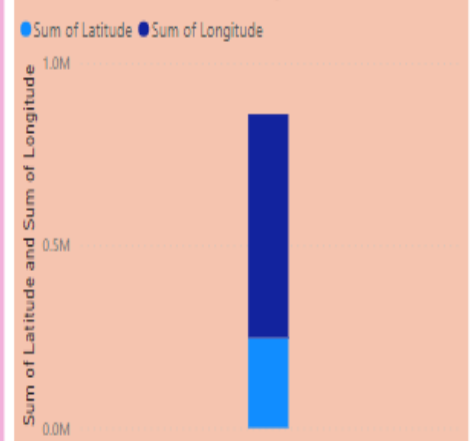


Sum of Average Cost for two by Continent



246.94K
Sum of Latitude

Sum of Latitude and Sum of Longitude





Conclusion

In conclusion, the future of online delivery apps presents a vast landscape of opportunities driven by data analytics and insights. By harnessing the power of tools like Power BI for a comprehensive business analysis, companies can gain a deeper understanding of their operations, customers, and market dynamics. With predictive analytics, enhanced customer experiences, optimized supply chains, and strategic expansion, online delivery apps can stay ahead in a competitive market. Moreover, by addressing challenges such as risk management and regulatory compliance, businesses can build trust and credibility among customers and stakeholders. Overall, the future scope for online delivery apps is promising, with data-driven strategies playing a crucial role in shaping their success and sustainability in the evolving digital economy.



Future Scope

Market Expansion: Identifying new market segments or geographic areas with potential for growth based on data-driven insights.

Partnership Opportunities: Analyzing data to identify potential partnerships with local businesses or other service providers to enhance offerings and reach new customer segments.

Risk Management: Using data to identify and mitigate risks such as fraudulent activities, delivery delays, or market fluctuations.

Regulatory Compliance: Ensuring compliance with regulations and standards related to data privacy, food safety, and labor laws through continuous monitoring and reporting.

Overall, the future scope lies in leveraging data analytics to drive innovation, improve efficiency, and enhance the overall value proposition of online delivery apps in a competitive market landscape.



Reference

<https://medium.com/analytics-vidhya/analysis-of-bank-customers-using-dashboard-in-power-bi-a366f2b3e563>

