Tech Saksham

Case Study Report

Data Analytics with Power BI

“360-Degree Business Analysis of Online Delivery Apps”

“K.R. College of Arts & Science”

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ABSTRACT

This data analytics report provides a comprehensive examination of the online delivery app industry, offering valuable insights into consumer behavior, market trends, and operational strategies. Leveraging real-time, trend, and predictive analyses, the report equips businesses with actionable intelligence to thrive in the competitive landscape of online delivery services. From understanding shifting consumer preferences to anticipating future market dynamics, this report serves as a roadmap for strategic decision-making, empowering stakeholders to capitalize on opportunities and mitigate risks effectively in the dynamic world of online delivery apps.

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CHAPTER 1

INTRODUCTION

1.1 Problem Statement

The surge in online delivery apps has revolutionized the way consumers access goods and services, presenting businesses with unprecedented opportunities and challenges. However, amidst this proliferation of options, understanding the intricacies of the online delivery app landscape is crucial for businesses aiming to thrive in this competitive environment. The lack of comprehensive analysis and insights into consumer behavior, market trends, and operational dynamics poses significant hurdles for businesses seeking to make informed strategic decisions. Therefore, there is a pressing need for a data-driven approach to unravel the complexities of online delivery apps, enabling stakeholders to identify key trends, capitalize on emerging opportunities, and address underlying challenges effectively. This report seeks to address this gap by providing a thorough business analysis of online delivery apps, thereby empowering businesses to navigate the digital delivery landscape with confidence and clarity.

1.2 Proposed Solution

To address the complexities and uncertainties surrounding the online delivery app ecosystem, this data analytics report proposes a comprehensive business analysis approach. By harnessing the power of data analytics, our solution aims to provide stakeholders with actionable insights into consumer behavior, market trends, and operational dynamics. Through a systematic examination of data sources such as transaction records, user engagement metrics, market surveys, and competitive intelligence, our analysis seeks to uncover patterns, correlations, and opportunities within the online delivery app landscape. By leveraging advanced analytical techniques, including predictive modeling and machine learning algorithms, our solution will enable businesses to anticipate customer preferences, optimize delivery operations, and gain a competitive edge in the rapidly evolving digital marketplace.

This report serves as a roadmap for businesses looking to navigate the complexities of online delivery apps with data-driven precision and strategic foresight.

1.3 Feature

- **Real-Time Analysis**: The dashboard will provide real-time analysis of restaurants in data.
- **Customer Segmentation**: It will segment Restaurants based on various parameters.
- **Trend Analysis**: The dashboard will identify and display trends in restaurant behavior.
- **Predictive Analysis**: It will use historical data to predict future restaurant behavior.

1.4 Advantages

- **Data-Driven Decisions**: Online Delivery Apps can make informed decisions based on real-time data analysis.
- **Improved Customer Engagement**: Understanding customer behavior and trends can help Online Delivery Apps engage with their customers more effectively.
- **Increased Revenue**: By identifying opportunities for cross-selling and up-selling, Online Delivery Apps can increase their revenue.

1.5 Scope

The realm of online delivery apps has witnessed an unprecedented surge in recent years, revolutionizing how goods and services are accessed and delivered. In light of this transformative shift, this data analytics report aims to provide a comprehensive analysis of the business landscape surrounding online delivery apps. By delving into various facets including consumer behavior, market trends, operational efficiencies, and technological advancements, the report offers valuable insights to stakeholders navigating this dynamic industry.

CHAPTER 2

SERVICES AND TOOLS REQUIRED

2.1 Services Used

- **Data Collection and Storage Services**: Banks 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 SageMaker can be used to build predictive models based on historical data.

2.2 Tools and Software used

Tools:

- **PowerBI**: The main tool for this project is PowerBI, 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:

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

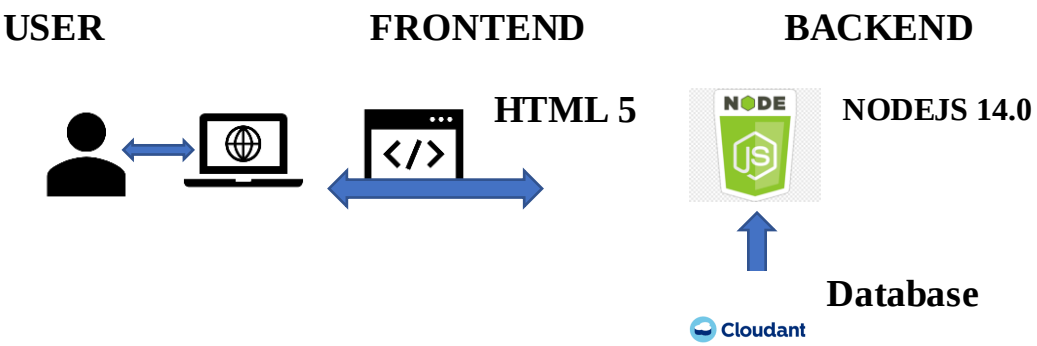
- **PowerBI Service**: This is an online SaaS (Software as a Service) service that you use to publish reports, create new dashboards, and share insights.

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

CHAPTER 3

PROJECT ARCHITECTURE

3.1 Architecture



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

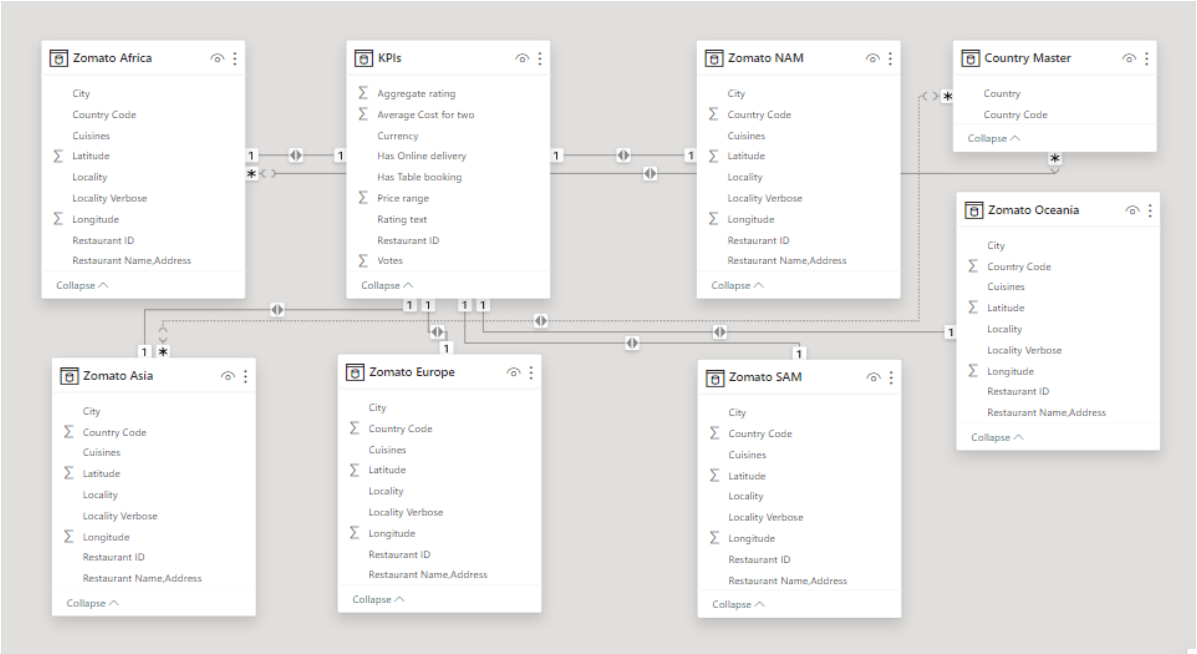
1. **Data Collection**: Real-time customer data is collected from various sources like bank transactions, customer interactions, etc. This could be achieved using services like Azure Event Hubs or AWS Kinesis.
2. **Data Storage**: The collected data is stored in a database for processing. Azure SQL Database or AWS RDS can be used for this purpose.
3. **Data Processing**: The stored data is processed in real-time using services like Azure Stream Analytics or AWS Kinesis Data Analytics.
4. **Machine Learning**: Predictive models are built based on processed data using Azure Machine Learning or AWS SageMaker. These models can help in predicting customer behavior, detecting fraud, etc.
5. **Data Visualization**: The processed data and the results from the predictive models are visualized in real-time using PowerBI. PowerBI allows you to create interactive dashboards that can provide valuable insights into the data.
6. **Data Access**: The dashboards created in PowerBI can be accessed through PowerBI Desktop, PowerBI Service (online), and PowerBI Mobile.

CHAPTER 4

MODELING AND RESULT

Manage relationship

The “KPI’s” file will be used as the main connector as it contains most key identifier which can be use to relates the 8 data files together. The “district” file is use to link the client profile geographically with “Country Code”

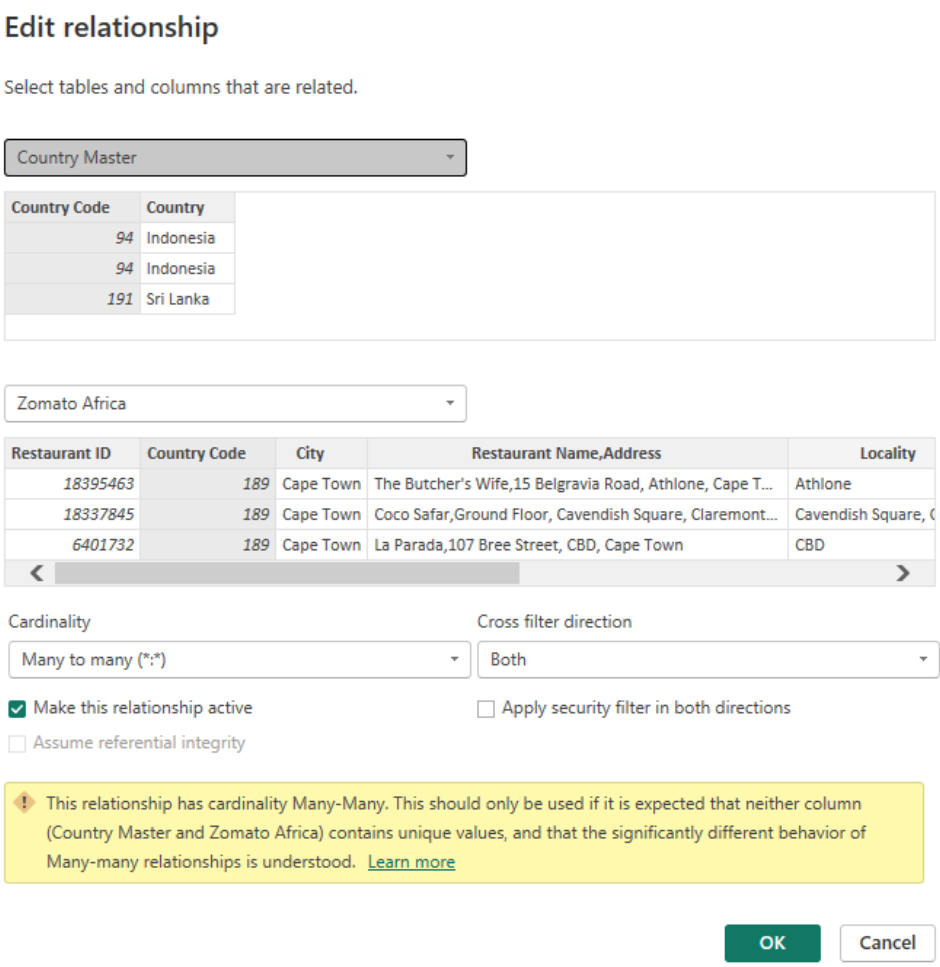


Manage relationships

Active	From: Table (Column)	To: Table (Column)
☑	Country Master (Country Code)	Zomato Africa (Country Code)
☐	Country Master (Country Code)	Zomato Asia (Country Code)
☑	Zomato Africa (Restaurant ID)	KPIs (Restaurant ID)
☑	Zomato Asia (Restaurant ID)	KPIs (Restaurant ID)
☑	Zomato Europe (Restaurant ID)	KPIs (Restaurant ID)
☑	Zomato NAM (Restaurant ID)	KPIs (Restaurant ID)
☑	Zomato Oceania (Restaurant ID)	KPIs (Restaurant ID)
☑	Zomato SAM (Restaurant ID)	KPIs (Restaurant ID)

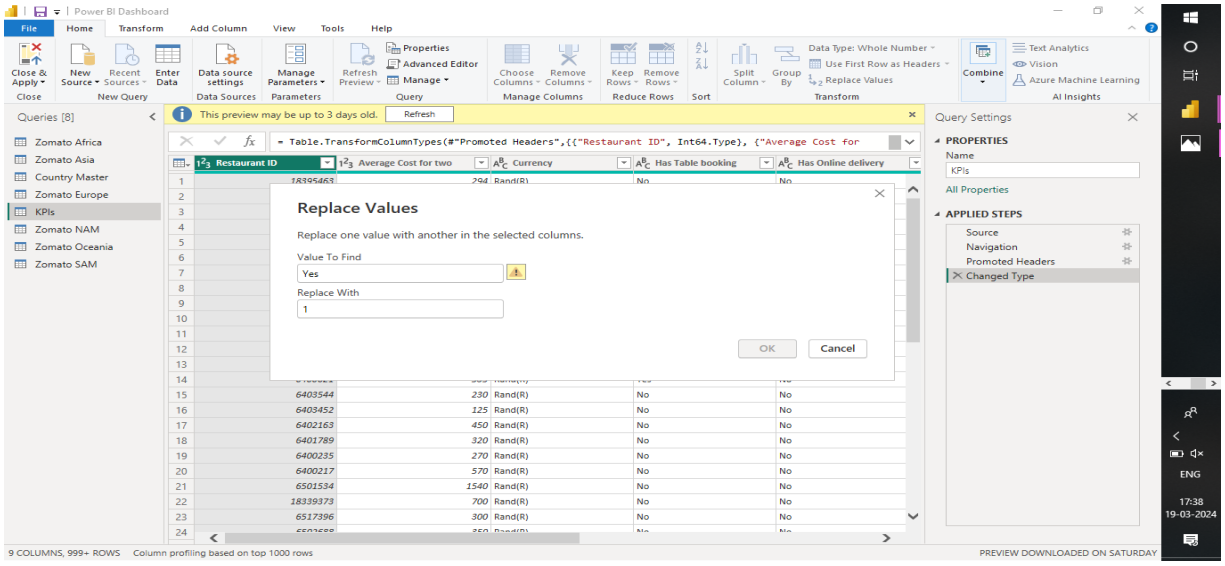
New... Autodetect... Edit... Delete

Close



Replacing values

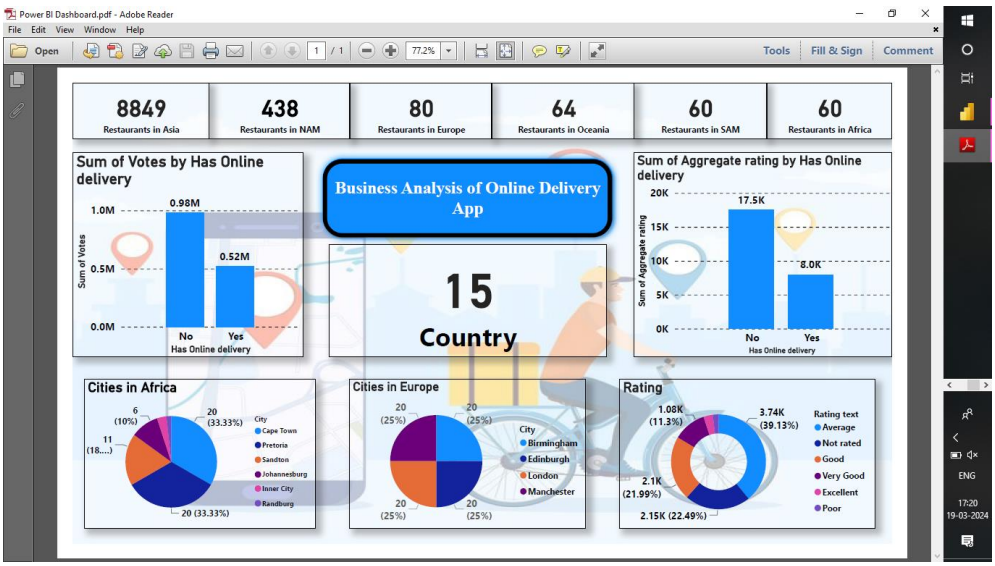
Set some fields to English for easy understanding, we replace values to English with the Power Query Editor.



OBJECTIVE :

Assess customer feedback, ratings, reviews to gauge overall satisfaction levels and pinpoint areas needing attention.

Dashboard



CONCLUSION

In conclusion, this data analytics report provides a comprehensive overview of the online delivery app industry, highlighting key insights into consumer behavior, market trends, operational efficiencies, and technological advancements. Through real-time analysis, trend analysis, and predictive analytics, stakeholders are equipped with actionable intelligence to navigate the competitive landscape and capitalize on opportunities for growth and innovation within this dynamic sector.

FUTURE SCOPE

The future scope of this project is vast. With the advent of advanced analytics and machine learning, PowerBI can be leveraged to predict future trends based on historical data. Integrating these predictive analytics into the project could enable the bank to anticipate customer needs and proactively offer solutions. Furthermore, PowerBI's capability to integrate with various data sources opens up the possibility of incorporating more diverse datasets for a more holistic view of customers. As data privacy and security become increasingly important, future iterations of this project should focus on implementing robust data governance strategies. This would ensure the secure handling of sensitive customer data while complying with data protection regulations. Additionally, the project could explore the integration of real-time data streams to provide even more timely and relevant insights. This could potentially transform the way banks interact with their customers, leading to improved customer satisfaction and loyalty.

REFERENCES

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

LINK

https://github.com/githubtraining/hellogitworld.git

