# Client Brief for Market Basket Analysis Project

# **Project Title:**

Understanding Customer Purchasing Patterns through Market Basket Analysis

Client:

Jomo Holdings

Prepared by:

Soweto Consultants

Date:

June 6, 2024

#### Introduction

Jomo Holdings has engaged Soweto Consultants to conduct a comprehensive market basket analysis. The aim is to gain insights into customer purchasing patterns to optimize inventory management, enhance marketing strategies, and increase sales through targeted promotions.

# **Project Objectives**

# 1. Identify Customer Purchase Patterns:

- Understand which products are frequently bought together.
- Identify high-margin product combinations that drive sales.

#### 2. Optimize Inventory Management:

- Determine the optimal stock levels for frequently bought-together items.
- Reduce stockouts and overstock situations.

# 3. Enhance Marketing Strategies:

- Develop data-driven marketing campaigns based on purchasing patterns.
- Create bundled offers to increase average transaction value.

#### 4. Personalize Customer Experience:

Implement personalized product recommendations.

Improve customer satisfaction and loyalty.

# **Scope of Work**

#### 1. Data Collection and Preparation:

- Gather transaction data from Jomo Holdings' POS systems.
- Clean and preprocess data to ensure accuracy and completeness.

#### 2. Descriptive Analysis:

- Provide an overview of the dataset including total sales, number of transactions, and customer demographics.
- Visualize overall sales trends and seasonal variations.

#### 3. Market Basket Analysis:

- Utilize association rule mining techniques to identify frequently co-purchased items.
- Generate association rules with support, confidence, and lift metrics.

#### 4. Pattern Identification:

- Highlight significant purchasing patterns and their implications.
- Segment customers based on purchasing behaviors.

#### 5. Actionable Insights:

- Develop recommendations for product bundling and cross-selling opportunities.
- Suggest inventory adjustments based on identified patterns.

# 6. Reporting and Visualization:

- Provide detailed reports and dashboards showcasing key findings.
- Conduct a presentation to discuss insights and recommended actions.

#### **Deliverables**

#### 1. Comprehensive Report:

- Detailed analysis of customer purchasing patterns.
- Data-driven recommendations for inventory and marketing strategies.

### 2. Interactive Dashboards:

• User-friendly dashboards for ongoing monitoring of purchasing patterns.

Tools for exploring data and generating ad-hoc reports.

# 3. Presentation of Findings:

- Summary of key insights and actionable recommendations.
- Q&A session to address any questions and discuss implementation steps.

#### **Timeline**

The project is estimated to take 8 weeks from the start date. Below is a tentative timeline:

- Week 1-2: Data Collection and Preparation
- Week 3-4: Descriptive Analysis and Initial Insights
- Week 5-6: Market Basket Analysis and Pattern Identification
- Week 7: Development of Reports and Dashboards
- Week 8: Presentation and Final Reporting

# **Project Team**

Project Manager: Lethabo Mokgale
Data Analysts: Thandolwethu Vezi
Data Scientist: Nokulunga Mashona

• Business Analyst: Ellen Carr

# **Client Responsibilities**

- Provide access to relevant data and systems.
- Timely feedback on interim reports and findings.
- Participation in review meetings and presentations.

# **Budget**

The estimated budget for this project is **ZAR 70,390**, covering all activities outlined in the scope of work.

Item	Cost (ZAR)
Data Collection and Preparation	ZAR 10,000
Descriptive Analysis	ZAR 10,000
Market Basket Analysis	ZAR 18,000
Pattern Identification and Insights	ZAR 12,000
Reporting and Visualization	ZAR 15,000
Project Management	ZAR 5,000
Software and Tools	ZAR 390
Total Estimated Cost	ZAR 70,390

### Conclusion

We are excited to partner with Jomo Holdings on this project. By leveraging our expertise in data analytics and market basket analysis, we aim to deliver valuable insights that will drive your business forward.

Please review this brief and let us know if there are any adjustments or additional considerations. We look forward to commencing this project and achieving impactful results together.

For any questions or further discussions, please contact +2711 765 9867.

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