MAMBILA ANALYTICS

Restaurant Orders Analysis

Restaurant Performance & Sales Analysis
International Cuisine Restaurant – Palo Alto, California

Prepared by Mambila Analytics | Data Analytics & Business Intelligence

Executive Summary

This project analyzes a quarter of transactional sales data from an international cuisine restaurant in Palo Alto, California. The objective was to identify revenue drivers, peak demand periods, and menu performance patterns to support data-driven operational and marketing decisions.

Our analysis reveals that a small group of top-selling items and categories contribute the majority of total revenue, with clear peak ordering hours between midday and early evening. These insights highlight opportunities for targeted promotions, staffing optimization, and menu engineering to increase profitability and improve customer experience.

Mambila Analytics delivered actionable insights, visual dashboards, and strategic recommendations to enable management to optimize operations, pricing, and future growth planning.

Client KPIs & Performance Metrics

The following key performance indicators (KPIs) were defined to evaluate business performance and guide strategic decision-making:

- Total Orders – Measures overall customer demand during the period
- Total Revenue – Assesses overall financial performance
- Average Order Value (AOV) – Indicates customer spending behavior
- Top-Selling Items – Identifies menu items driving order volume
- Top Revenue Items – Highlights items contributing most to revenue
- Category Performance – Compares demand and revenue across menu categories
- Peak Ordering Hours – Identifies high-demand periods for operational planning

Business Objectives

Mambila Analytics was engaged to analyze restaurant order data in order to:

- Understand overall sales and revenue performance
- Identify top-performing menu items and categories
- Analyze customer ordering behavior across different time periods
- Determine peak business hours for operational optimization
- Provide data-driven insights to support pricing, staffing, and menu decisions

Data Overview

The analysis was conducted using a quarter's worth of transactional restaurant order data from a restaurant located in Palo Alto, California.

The dataset consists of two primary tables:

- Menu Items Table
  - Menu item ID
  - Item name
  - Category
  - Price

- Order Details Table
  - Order detail ID
  - Order ID
  - Order date
  - Order time
  - Item ID

In total, the dataset captures customer ordering behavior across different menu categories and time periods.

Key Insights Overview

Our analysis of restaurant order data revealed clear patterns in customer preferences, revenue drivers, and peak ordering behavior.

Key insights focus on:

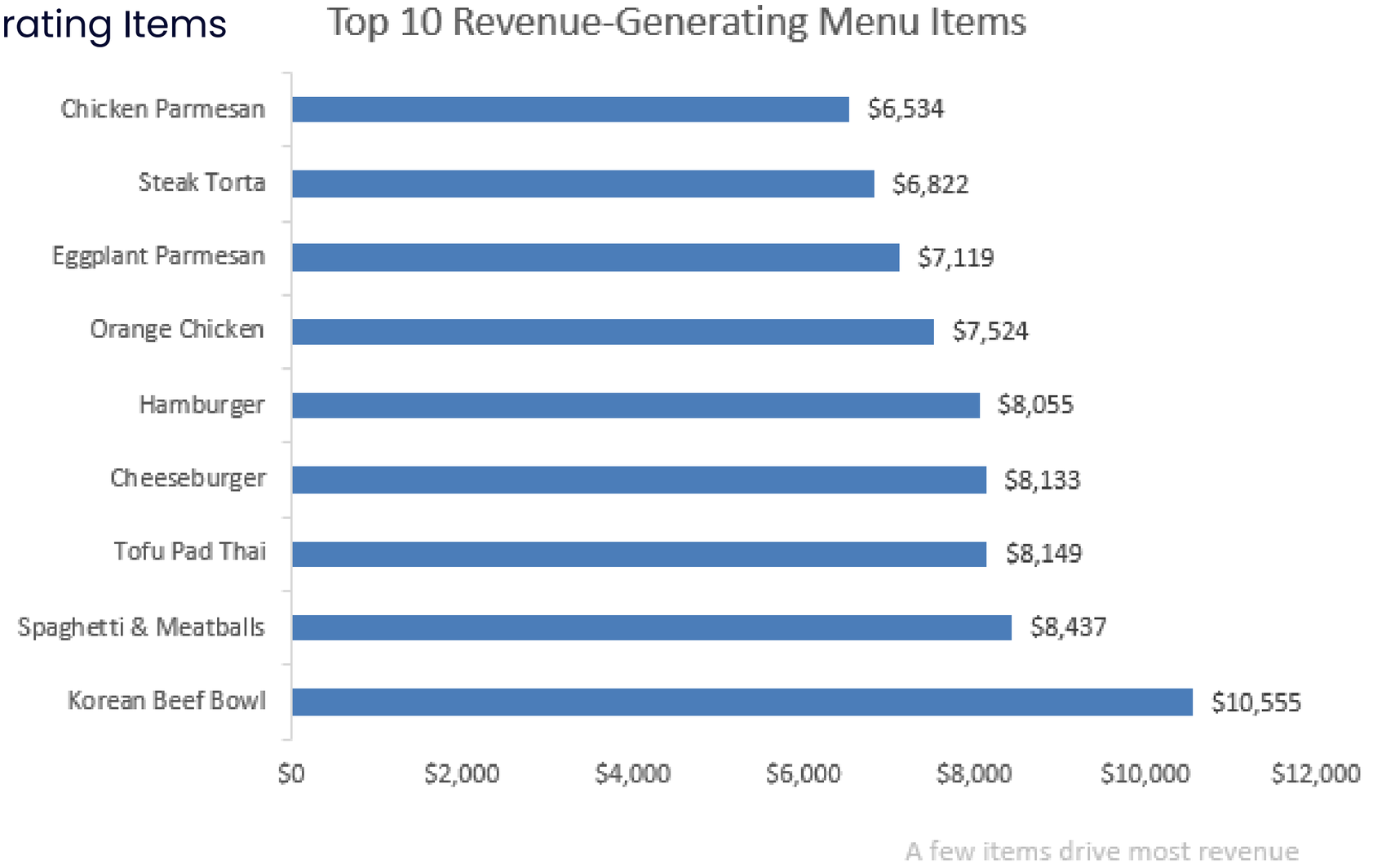
- Best-selling menu items by order volume
- Revenue contribution by menu category
- Customer demand patterns across hours of the day

These findings provide actionable guidance for menu optimization, staffing, and revenue growth strategies.

Top Items Ordered

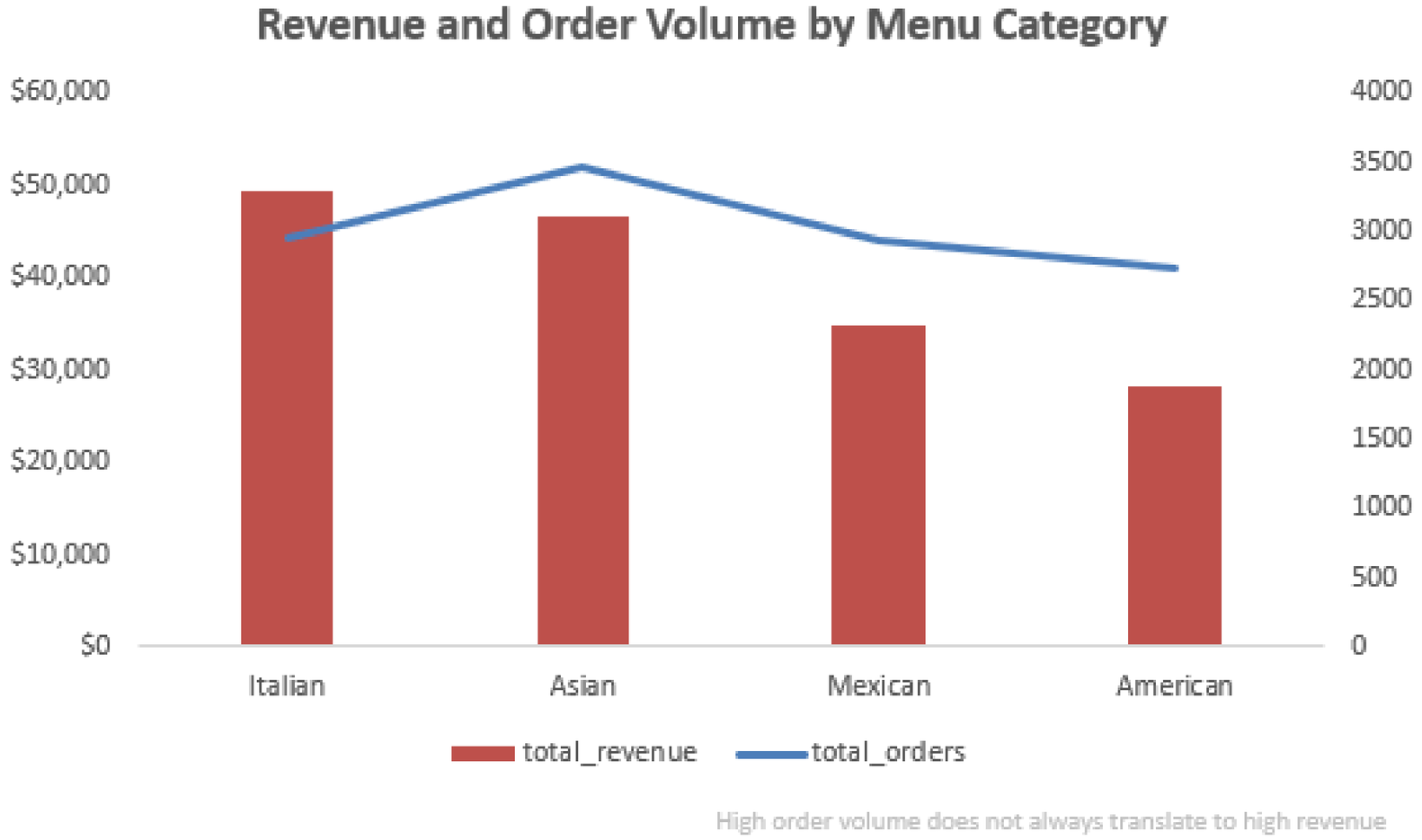
Insights: A small group of menu items accounts for a large share of total orders, indicating clear customer preferences and opportunities for menu optimization.

Top 10 Revenue-Generating Items



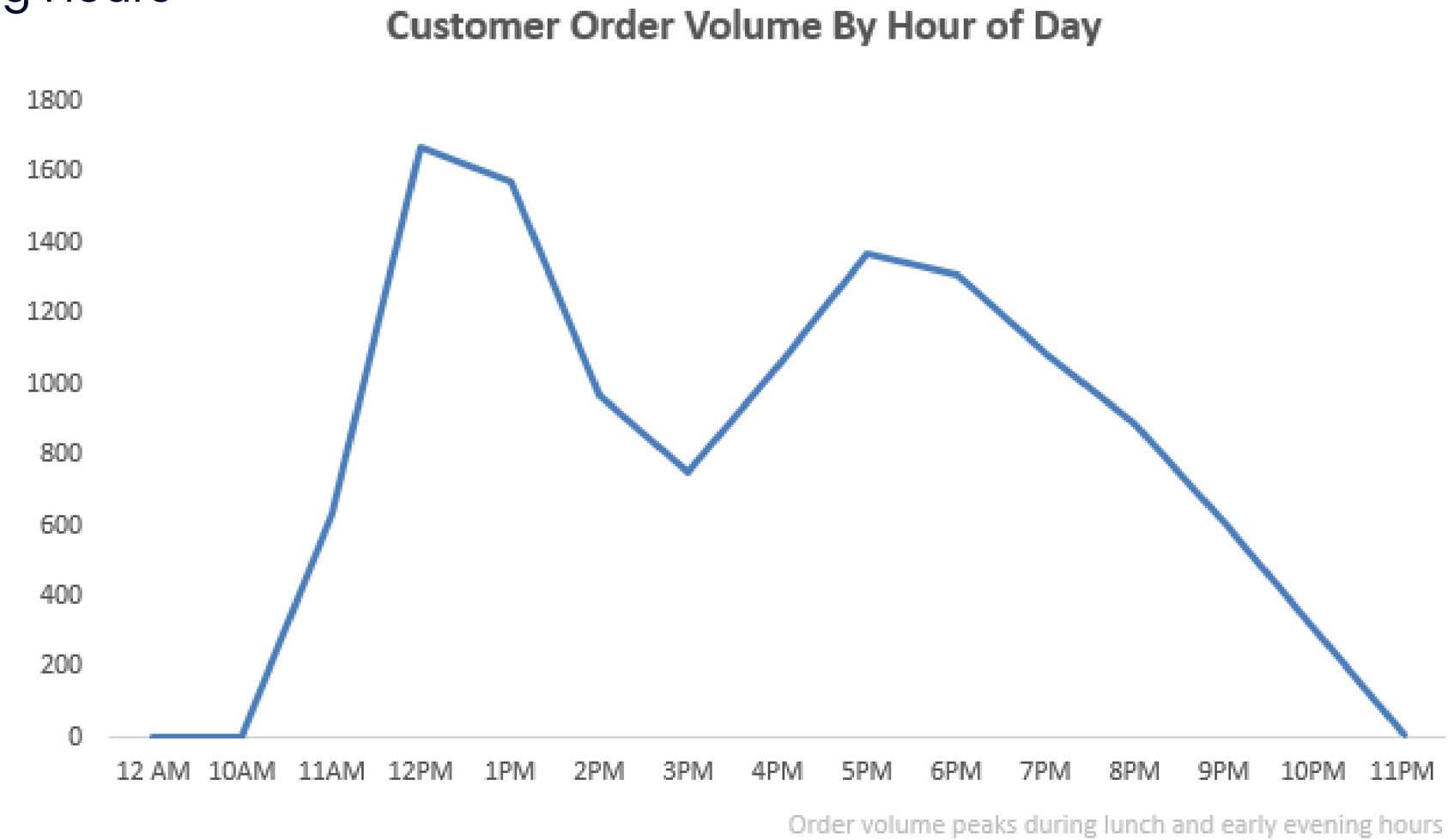
Insight: A small number of menu items contribute a disproportionately large share of total revenue, highlighting opportunities for focused promotions and menu optimization.

Revenue by Menu Category



Insight: Some menu category generate high order volumes but lower revenue, while others generate fewer orders at higher prices, highlighting differences in princing and customer purchasing behavior.

Peak Ordering Hours



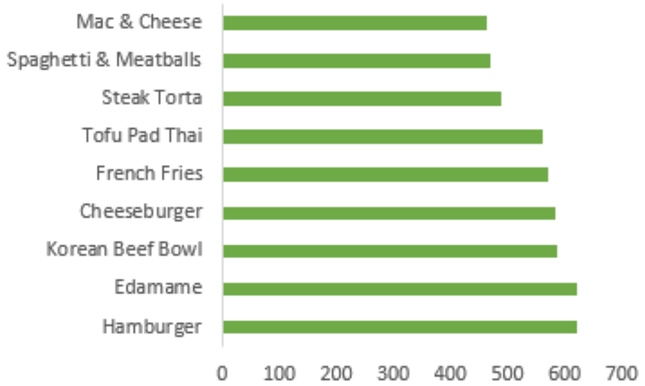
Order volume peaks during lunch and early evening hours

Insight: Customer demand peaks between 12pm and 7pm, with lunch hours driving the highest order volume, while late-night and early-morning hours shows minimal activity.

DASHBOARD

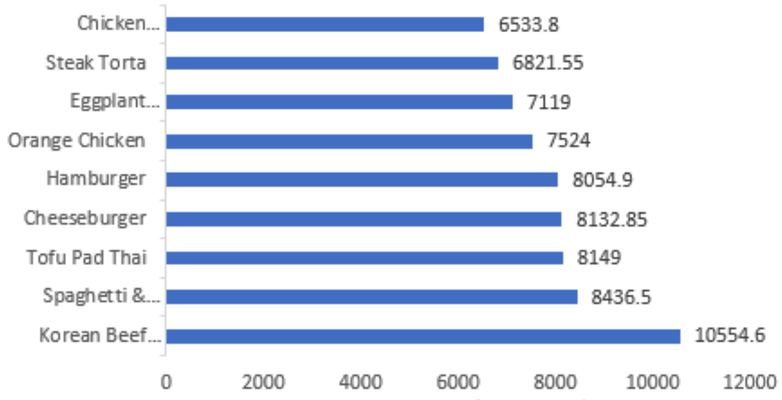
Restaurant Orders Performance Dashboard

Top 10 Most Ordered Menu Items



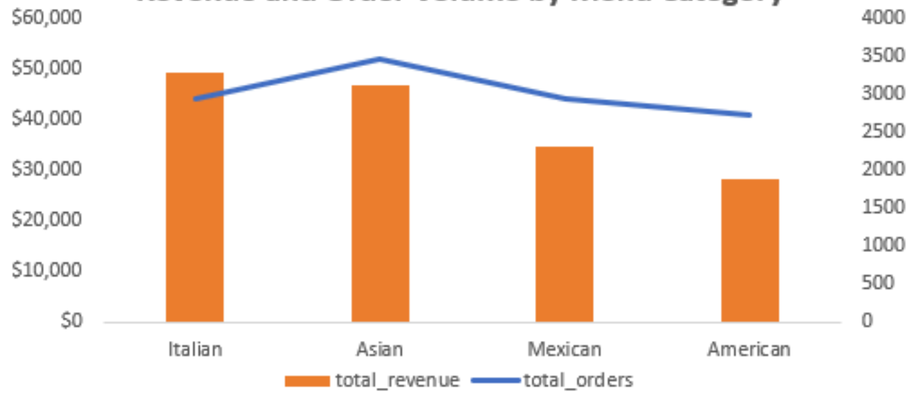
Customer demand is concentrated around a few highly popular items

Top 10 Revenue-Generating Menu Items



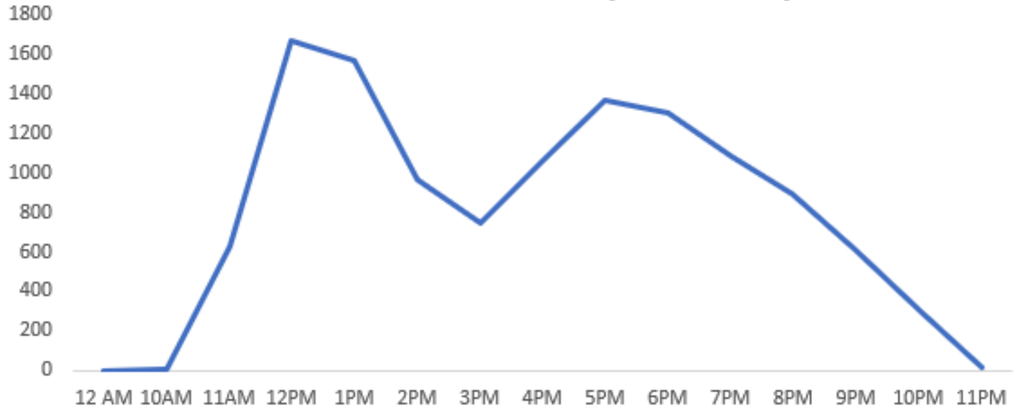
A few items drive most revenue

Revenue and Order Volume by Menu Category



High order volume does not always translate to high revenue

Customer Order Volume By Hour of Day



Order volume peaks during lunch and early evening

Executive Summary: customer demand is concentrated around a small number of popular menu items, while revenue is driven by higher-priced categories. Order activity peaks during lunch and early evening hours, guiding staffing and promotional strategies.

Key Findings & Recommendations

Key Findings

- Lunch hours (12PM – 2PM) generate the highest order volume
- A small group of menu items contributes a significant share of total revenue
- Main dishes outperform other categories in both revenue and order count
- Ordering activity remains strong during early evening hours (5 PM–7 PM)

Recommendations

- Increase staff and kitchen readiness during peak lunch and dinner periods
- Prioritize promotion of high-performing menu items to maximize revenue
- Bundle best-selling items with lower-performing categories to boost sales
- Use demand patterns to guide inventory planning and reduce waste

Next Steps & Action Plan

How the client can act on these insights

Operational Actions

- Increase staffing during peak hours (12 PM – 7 PM) to reduce wait time
- Prepare high-demand ingredients earlier in the day
- Optimize kitchen workflow for top-selling items

Marketing Actions

- Promote top 10 revenue-generating dishes in ads and menu highlights
- Launch time-based promotions for slow hours (late night, early morning)
- Use data-backed bundles for best-selling categories

Menu Optimization

- Review low-performing items for possible removal or repositioning
- Adjust pricing strategy based on revenue contribution
- Introduce upsell combinations using popular items

Menu Optimization

- Build a live sales dashboard (daily, weekly, monthly)
- Track revenue by hour, category, and item
- Monitor performance changes after implementing recommendations

MAMBILA ANALYTICS

Turning Data into Business Clarity

Who We Are

Mambila Analytics is a data analytics and business intelligence firm that helps startups, SMEs, and growing organizations make smarter decisions using data.

What We Do

We transform raw data into clear insights, actionable dashboards, and strategic recommendations that drive revenue growth, operational efficiency, and customer understanding.

Our Approach

- Business-first analytics
- Clear storytelling with data
- Practical, decision-ready insights

Core Services

- Business & Sales Analytics
- Dashboard & Reporting (Excel, Power BI, SQL, Python)
- Customer & Market Insights
- Operational Performance Analysis
- Data Automation & Forecasting

Industries

- Retail & E-commerce
- Restaurants & Hospitality
- Finance & FinTech
- Tech & Startups

MAMBILA ANALYTICS

Turning Data into Business Clarity

Get in Touch

Let’s discuss how data can drive your business growth

Mambila Analytics

Business Intelligence & Data Consulting

✉️ Email: mambilaanalytics@gmail.com

🌐 Instagram: Mambila Analytics

📊 GitHub: github.com/Mambila-Analytics

Ready to unlock insights from your data?

Book a free discovery call with Mambila Analytics.

+2349156483977