

PETER NGAMAU MWANGI

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Data Analyst with a portfolio of end-to-end projects spanning Python, SQL Server, and Power BI — from raw data ingestion through star-schema design, exploratory analysis, and business-facing dashboards. Experienced working with large, messy real-world datasets: analysed 10 years of Central Bank of Kenya mobile money data across 47 counties, built a full customer churn pipeline on 7,000+ records, and designed multi-source retail analytics covering store performance, product profitability, and customer behaviour. Brings 6 years of front-line retail operations experience that grounds every analysis in practical business context — understanding not just what the data says, but what it means for day-to-day decisions. Comfortable presenting findings to both technical teams and non-technical stakeholders in plain, actionable language.

CORE SKILLS

Languages	Python (pandas, NumPy, matplotlib, seaborn) · SQL (T-SQL, CTEs, joins, aggregations, window functions)
Visualisation	Power BI (DAX, calculated columns, interactive dashboards) · Tableau · Excel (PivotTables, charts)
Data Engineering	Star-schema database design · SQL Server · ETL pipeline development · data cleaning & validation
Analysis	Exploratory Data Analysis (EDA) · hypothesis testing · customer segmentation · KPI tracking · trend analysis
Soft Skills	Business insight communication · stakeholder reporting · cross-functional collaboration · problem framing
Tools & Workflow	Git & GitHub · Jupyter Notebooks · VS Code · Google Workspace · Microsoft Office 365

DATA ANALYSIS PROJECTS

Kenya Financial Inclusion & Mobile Money Analytics — *Python · SQL Server · Power BI*
github.com/peter-ngamau/Financial-Inclusion-In-Kenya

- Analysed 10 years of Central Bank of Kenya mobile money transaction data alongside seven waves of the FinAccess Household Survey (2006–2024) to track M-Pesa adoption, financial exclusion rates, and demographic access gaps across all 47 counties.
- Uncovered that M-Pesa transaction value grew approximately 7× over the decade; identified Tana River County as having the highest exclusion rate at 37.6%; found that people with no formal education were 4.6× more likely to be financially excluded than the national average.
- Loaded cleaned datasets into a SQL Server star-schema database, wrote exploratory T-SQL queries (CTEs, aggregations, window functions), and built a four-page Power BI dashboard with an interactive county map, demographic breakdown, and transaction trend visuals.

Retail Sales Analysis — End-to-End Pipeline — *Python · SQL Server · Power BI*

github.com/peter-ngamau/Retail-Sales-Project-End-to-End-

- Built a complete analytics pipeline from raw CSV files to published dashboards: cleaned five datasets in Python (pandas), designed a SQL Server star-schema database, wrote exploratory T-SQL queries, and published three interactive Power BI dashboards covering store performance, product profitability, and customer behavior.
- Found that a small segment of stores and loyalty program members drove the majority of revenue — translated findings into clear business recommendations embedded directly in the dashboard for non-technical stakeholders.
- Validated data integrity end-to-end by cross-checking recorded versus calculated revenue figures across all tables before publishing, ensuring zero discrepancies in reported KPIs.

Customer Churn Analysis — IBM Telco Dataset — *Python · pandas · matplotlib · seaborn*

github.com/peter-ngamau/Telco-Customer-Churn-Analysis

- Built a five-task Python EDA pipeline on ~7,000 customer records across 21 features — covering data loading, cleaning, univariate and bivariate analysis, and visualisation — to identify the key drivers of customer churn for a telecommunications business.
- Found that month-to-month contract customers churned at significantly higher rates than annual subscribers, early-tenure customers (first 12 months) showed the highest churn risk, and electronic check payment correlated strongly with attrition — each finding backed by supporting charts.
- Packaged results as actionable business recommendations: incentivise annual contracts, introduce proactive early-tenure engagement programmes, and migrate high-risk customers to auto-pay options.

Hypothesis Testing — Men's vs Women's Football Scores — *Python · pandas · scipy · matplotlib*

github.com/peter-ngamau/Hypothesis-Testing-with-Men-s-and-Women-s-Soccer-Matches

- Cleaned and merged two international football result datasets, performed exploratory analysis comparing scoring patterns, win rates, and performance trends across men's and women's matches, then applied formal hypothesis testing to determine whether observed differences in goal averages were statistically significant.

PROFESSIONAL EXPERIENCE

Retail Data & Operations Analyst

September 2021 – Present

Chandarana Foodplus Supermarket · Nairobi, Kenya

- Tracked product movement and customer purchase patterns across departments, translating sales data into shelf placement and aisle flow decisions that reduced time-to-find for top-selling SKUs.
- Monitored inventory records daily and flagged emerging demand trends to the purchasing team, reducing both stockout incidents and overstock situations in high-velocity product lines.
- Prepared regular management reports on stock levels, product performance, and seasonal demand — presenting data findings in plain language to non-technical stakeholders including department heads and buyers.
- Coordinated stock receiving, backroom organisation, and front-of-store operations in a high-volume retail environment, maintaining inventory accuracy across thousands of active SKUs.

Cashier & Customer Service Associate

2017 – 2020

Tuskys Supermarket · Nairobi, Kenya

- Handled high daily transaction volumes with consistently low till-reconciliation error rates, building accuracy habits that now underpin my approach to data validation.
- Managed customer complaints and refund requests, consistently keeping satisfaction scores above store targets in a fast-paced retail setting.
- Gained hands-on exposure to point-of-sale transaction reporting systems and end-of-day reconciliation processes — an early introduction to operational data tracking.

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

Deloitte Australia — Data Analytics Job Simulation · *Forage* · April 2026

Forensic technology simulation involving Tableau dashboard development and Excel-based data classification to support business conclusions in a consulting context.

DataCamp — Data Analyst Track · *In Progress*

Structured learning path covering Python (pandas, NumPy), SQL, Power BI, and statistical analysis — directly applied across portfolio projects.

ALX Africa — Virtual Assistant Certification · 2024

Remote collaboration, productivity tools, and project coordination in distributed team environments.

EDUCATION

Bachelor of Science, Agribusiness Management · Kisii University · 2012 – 2015

Kenya Certificate of Secondary Education (KCSE) · Rongai Boys High School · 2007 – 2010