Incorporated in 2017 as Treplex Data Hub Ltd, we are a Pan African first and only comprehensive one stop platform and center of excellence for Data Science based in Nairobi, Kenya and Johannesburg, South Africa from where we serve clients across the East and South African region. Our mission is to empower the next generation of business leaders and innovators in Data Science. We are Big Data Lab founded against the backdrop of rising need of Data driven Business Solutions.

Guided by this three needs, we have designed tools to be able to provide impact to businesses across various industries including, Retail, Media, Manufacturing, Hospitality, Telco, Technology, Insurance and Banking.

There are three core areas where data matters to a business:

- Improving decision making
- Improving operations
- Monetization of the data

Our Partners

[Image of partner logos]
As the drive toward the 4th industrial revolution takes centre stage it is imperative that talents are realigned to meet the demand of the emerging landscape. We offer training courses for Retooling, Reskilling and Upskilling on the 3 verticals below.

### TECHNICAL VERTICAL
- Introduction to Data Science IDS
- Intermediate Data Science InDS
- Advanced Data Science ADC
- Statistics For Data Science
- Data Engineering DE
- Data Visualisation DV
- Data Governance DG
- Open Data OD
- Decision Science DC
- Anthropology AT
- Data Strategy DST
- SQL Databases SQL
- Model Deployment MD
- Robotic Process Automation RPA
- Blockchain and Encryptions BLK

### INDUSTRY VERTICAL
- Banking Analytics (BAN)
- Manufacturing Analytics (MAN)
- Retail Analytics (RET)
- Telecommunication Analytics (TELC)
- Agriculture Analytics (AGRI)
- Government Analytics (GOV)
- Healthcare Analytics (HEA)
- Media & Ent Analytics (MED)
- Insurance Analytics (INS)
- Real Estate
- Sports
- Education (EDU)
- Security

### PROFESSIONAL VERTICAL
- Human Resource √ (FR)
- Finance Analytics (FIN)
- Marketing Analytics (MAR)
- Sales Analytics (SA)
- Supply Chain Analytics (PROC)
- Information Technology Analytics (IT)
- Data Leaders (BM)
- Actuaries Analytics (ACT)
- Healthcare professions Analytics (DOC)
- Legal Analytics (LG)
- Public Relations Analytics (PR)
- Academia & Research Analytics (ACD)
- Business Intelligence Analytics
- Operations Analytics

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Data Strategy and Advisory Consulting

**TALENT**
a. Data Science Talent Recruitment and Management
b. Data Science as a Service – Talent outsourcing
c. Hackathons
d. Data Reculturization
e. Benchmarks and Exchange Programs
f. Engagement and Evangelism

**BUSINESS**
a. Fourth Industrial Revolution Business Strategy
b. Platform Business Model Re-Engineering
c. Procurement Sandbox- How to procure Data Science Tools
d. Consumer Data Protection Product Alignment

**INFRASTRUCTURE**
a. Alignment to Data Protection Principles & Data Subject Rights as prescribed in the Kenya Data Protection Act (2019), GDPR and any other relevant laws as per clients jurisdiction.
b. IT infrastructure Audit and Big Data Readiness
c. Data Governance

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## Predictive Analytics Softwares

Softwares for Various Industries and Professions that leverage Machine Learning, Deep Learning, Computer Vision Algorithms.

| Industry Custom Enterprise scalable solutions including Banking Analytics Box, Insurance Analytics Box, Retail Analytics Box, Telcom Analytics Box and Manufacturing Analytics Box |
| Risk and Fraud Pattern Recognition |
| Customer Churn Prediction |
| Credit Scoring |
| Lead Generation |
| Telcom Network Optimisation |
| Price Engineering |
| Spend Analytics |
| Robotic Process Automation |
| Smart Grids - Energy Analytics |
| Autonomous Cars |

| Route Optimization |
| Demand Forecasting |
| Retail Distribution Recommendation Engines |
| Advertising coverage analytics |
| Chat bots |
| Insurance Claims Analytics |
| Customer Retention |
| Cross Sell and Upsell |
| Digital Engagement |

Co-Robots: Softwares that work alongside your workforce to improve efficiency through enhanced decision making.
HR ANALYTICS
Our software’s ingest following types of data: Employee surveys, Telemetric Data, Digital footprint metadata, Employee Attendance records, Multi-rater reviews, Salary and promotion history, Employee work history, Demographic data, Personality/temperament data, Recruitment process, Employee database, Employee Social Media Data and Office Floor Plans.

Using this we calibrate our algorithms to deliver enable decision making in following areas: Workload Analysis.

Performance Management Modelling  Employee Churn
Interaction Analytics               Recruitment Analysis
Pay structure and Compensation Analysis  HR Dashboard

SUPPLY CHAIN ANALYTICS
Supply planners need to understand what’s happening in the supply chain in real time, so they can create accurate supply forecasts. In order to avoid shortages and stock-outs leading to lost revenue, it’s necessary to be able to run what-if scenarios and ensure they are making the most informed decisions.

Sales and operations planning (S&OP) managers need a single version of the truth to make better business decisions and meet revenue goals. Easy-to-use data visualization, flexible plans that adapt to market demands and fast, what-if scenario assessments are crucial.

Our Supply chain software’s enable quick responsiveness while maintaining accuracy and integrity. Our systems can analyze huge amounts of data quickly from diverse sources both structured and unstructured using Natural Language Processing Algorithms. This enables prediction amidst increasing number of variables such as weather, regulations, disasters etc.
FINANCE ANALYTICS
Enables a shift from Detection and Repair to Predicting and Preventing
Our Software enables

Drive Strategic Decision Making:
Be able to help organizations bring together financial and operational data from various siloed sources, providing a unified view of information that enables you as a finance professional and your entire business partners to make better strategic decisions.

Timely Reporting.
A custom dashboards that enable your finance department to quickly arm business managers with accurate, timely financial reporting so they can make more data-driven decisions and run a more profitable business.

Manage Risks.
You will be equipped with tools that will enable your organizations to proactively uncover suspicious trends and helps them navigate the risks associated with operations, finances, fraud, and regulations with a greater degree of confidence and efficiency.

Enable Financial Planning and Analysis.
You will be provided with Analytics tools that enables FP&A teams to leverage real-time internal and orthogonal data to improve financial performance, increase profitability, and capitalize on growth opportunities.
We help organisations establish a data/analytics sharing platform/architecture that's flexible enough to accommodate diverse technology needs across the enterprise is critical; you may be stuck with legacy systems that don't meet your needs, or face disagreement on where to invest the resources.

We set up Data Lakes to Break down data silos so data becomes a readily shared and trusted enterprise resource, and determining how to best harness the data you have and continue to grow the volume of data.

**Data Ops:** Establish processes and technologies to collect data from diverse sources and distribute to the right users to generate data products

**Data Management:** Establish processes and practices to ensure data is accurate, timely, and properly shared and managed throughout its lifecycle

**Data Sourcing:** Set data terms, definitions, methodologies, MOUs, and service level agreements to support performance monitoring

**Data Governance:** Establish roles and responsibilities, policies, and procedures to ensure accountability and effective management of data

**Data/Analytics Platform:** Coordinate across stakeholders to build a platform that's based on a reference architecture and is flexible with the evolving discipline (e.g., open source, catalogue of options, cloud or self-service capabilities); use analytics demand to build a business case for technology investment
## Technologies We Use

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# Quick Links

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Our Senior Faculty Member Chris Orwa Lecturing A Data Science Class at the Intercontinental Hotel

Jamal Mohamed Leading a Group Discussion

A Data Coaching Clinic Session for Saracen OMD

A HR Data Science Data Open Day Event

Judy Gilhaiga a HR Manager Safaricom following proceedings of Lab Session

Cohort 4 students Innocent Lyambila Manager at Coca Cola and George Adeka Engineer at Safaricom in a lab session
**Past Events**

- Data Coaching Roundtable for Kenya Tourism Board Executives
- Isaac Okello Sales Manager Safaricom and George Adeka Engineer Manager at Safaricom in a Lab session
- Dr Sammy Ole (R) of Nutrition International and Dr Beatrice Kariuki (L) of Palladium being guided on Python Programming by Dennis Kevogo our Lab assistant
- Dennis Kinuu of BAT and Sanjay Mehta of Craft Silicon in an active Python Programming Lab session
- Dennis Gatuku Safaricom, Dennis Kinuu BAT, Mueller Bosire Ipsos and Sanjay Mehta Craft Silicon in a lab brainstorm session
- Teresia PWC, Elsie Asinati ABSA and Dennis Kinuu BAT in a lab discussion session
Algorithmic Marketing Masterclass

Successful Marketing starts with Analysis

COURSE FACILITATORS

Lenny Nganga
Co-Founder and CEO
Saracen OMD

Timothy Orieta
Founder of Predictive Analytics Lab

Chris Harisson
Afar Partner of The Brand Inside

Algorithmic Marketing Class offered in Conjunction with our Partners

Past Events

Founder Timothy Orieta hosting a Lab session

1st Data Science HR Open Day
9th October 2019

www.events.predictiveanalytics.co.ke
Predictive Analytics
Drilling sense out of data

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