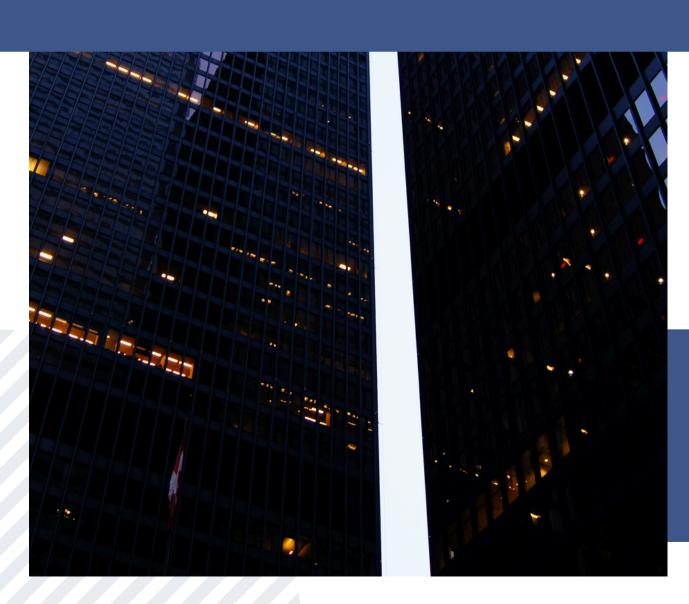
# INSIGHTS

Transforming data into insights



## About



Tyto Insights Ltd is a data science company dedicated to helping businesses harness the power of data.

Our mission is simple, transform complex data into actionable insights that drive business success.

Founded in 2023, we have already delivered positive outcomes for a number of clients.



# Our Expertise

## **Core Competencies**

- Data Capturing
- Data Delivery
- Data Engineering
- Data Analytics
- Machine Learning
- Al

## **Industries Served**

- Healthcare
- Tech
- Education
- Agriculture
- Retail

# Our Services

#### Data Analysis and Visualisation

Turning raw data into meaningful insights.

We provide end-to-end data pipeline solutions, from data collection, through analysis, and finally data delivery - ensuring your data works for you.

#### **Custom Solution Development**

Tailoring solutions to meet specific business needs.

We focus on practical, data-driven solutions, not just trends. While we keep up with AI and ML developments, we don't see them as one-size-fits-all. We analyse each problem to find the most effective solution, whether it's innovative technology or trusted methods.

#### **Predictive Modelling**

Anticipating future trends and behaviors.

We help you stay ahead of the curve and discover new areas for growth through predictive models built for your data.

#### **Business Intelligence Solutions**

Enhancing decision-making processes.

We deliver the right data to the right people at the right time, empowering you and your clients with real-time insights. Our tailored solutions turn complex data into clear, actionable intelligence, driving strategic decisions and business growth.



#### **Client Collaboration**

- Client-Focused: We prioritise your needs, tailoring our solutions to address your specific challenges.
- **Bespoke Solutions:** We adapt our approaches to fit your problems, rather than forcing your problems to fit pre-defined solutions.

#### **Innovation and Technology**

- **Embracing Innovation:** We integrate the latest technologies to keep you ahead, continuously exploring innovative tools that enhance your project outcomes.
- **Technology-Driven Solutions:** Our use of advanced technology ensures that our solutions set new standards in efficiency and effectiveness, empowering your business goals.

#### **Data-Driven Decision Making**

- Insightful Analytics: Our insights are grounded in rigorous data analysis, ensuring your strategies are backed by solid evidence.
- Strategic Data Utilisation: Data is at the core of our business, driving clarity and innovation to deliver results that align with your objectives.

# Projects

# Enhancing Data Integrity and Reporting for DNS Africa

We partnered with DNS to tackle data inconsistencies following multiple system migrations. Through a collaborative approach, we deep-dived into DNS's data, identifying key issues and designing a rule based system to rebuild historical data from logs. This setup enhanced the querying efficiency, enabling the rapid generation of precise reports.

We further developed a customised datamart, focusing on essential functionalities without the complexity of a full-scale data warehouse. This solution significantly automated and refined DNS's reporting capabilities, thus improving their data confidence and operational efficiency.

# Enhancing Digital Capabilities of compounds residue analysis lab

We partnered with a leading compound residue analysis lab to bring insights to their clients through a custom analytics portal.

After thoughtful discussion with the client and within Tyto we decided to expand their backend API to include a host of reporting endpoints that would provide valuable data to end-users.

We further included custom reporting dashboards including interactive and filterable graphs and charts. These dashboards were hand-crafted in close collaboration with the client ensuring that they distilled the new data provided by the API into a valuable decision making tool which delivers actionable insights to end-users.

# Projects cont.

# **Medicount**Medical Accounting Software

We developed a bespoke medical accounting software designed to streamline the process of generating invoices and providing detailed statistical insights for healthcare providers. Leveraging industry-standard accounting practices and advanced data analytics, we crafted a solution that automates the invoicing process, ensuring accuracy and compliance with medical billing standards.

This system presents billing information and financial statistics in a user-friendly interface, allowing healthcare providers to efficiently manage their financial operations. By integrating comprehensive reporting tools, we simplified the process of tracking financial performance, eliminating the need for manual calculations and enhancing overall efficiency.

## **Brand Watch**

We developed an advanced anti-phishing product designed to identify and flag potential phishing or impersonation websites targeting your brand. Leveraging algorithms like Levenshtein distance and Soundex compression, alongside Al and machine learning techniques such as vector embedding and cosine-similarity clustering, we crafted a solution that efficiently detects phishing domains based on the domain name.

This system presents the findings in a user-friendly interface, allowing customers to quickly identify and report malicious sites, safeguarding their brand reputation. By integrating risk factors and indicators, we have streamlined the process, eliminating the need for manual searches and enhancing brand protection capabilities.



#### **Innovation and Growth**

- Utilisation of cutting-edge technology to tailor unique, forward-thinking solutions.
- Proactive learning to stay ahead in the evolving data landscape.
- Agile adaptation to new challenges and technologies



## **Dynamic Partnership**

- Strong focus on collaboration, viewing our relationship with clients as a strategic partnership.
- Commitment to learning and adapting alongside our clients' evolving industries.



## **Dynamic and Dedicated Team**

- Enthusiasm for overcoming challenges and driving success.
- Dedicated team with a passion for tackling complex data challenges.
- Over 30 years combined experience.

# Our Core Team

Your Partners in Navigating the **Data-Driven Future.** 

#### Mark Botros

Co-Founder

Image Processing Software Engineering Integration Engineering

#### Inge Odendaal

Co-Founder

Data Science, Data Engineering, ML Engineering

#### Gilles Teuwen

Co-Founder

R&D, Service Engineering, NLP Engineering

#### Ed Pascoe

Senior DevOps Manager

Database Architecture and Management, Solutions Architect

#### David Kinnes

Senior Software Developer

Full Stack Software
Development, Solutions
Architect

#### Louis Ferreira

Senior Product Manager

Full Stack Web Development, UX/UI, Business Strategy, Data Analysis

# Our Tech Stack

While these are the technologies we use most often, we prioritise understanding your business needs and are committed to learning and adapting to the best tools for the job. In this fast-paced industry, our flexibility and eagerness to upskill ensure we stay ahead of the curve.

## Languages

- Rust
- Java
- C++
- Python
- C#
- R
- PHP
- Typescript
- Javascript
- NodeJS
- SQL

## Frameworks

- NestJS
- React with NextJS
- Django
- Angular
- JQuery
- Bootstrap

## CI/CD

- Docker
- Github Actions
- Sentry
- Grafana

## Database Systems

- Postgres
- MySQL
- SQLite
- MongoDB
- Redis
- Neo4J

## **Cloud Services**

- Superbase
- Firebase
- Snowflake



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