

# **SAI KENYA: GEARED TOWARDS DATA DRIVEN AUDITS**

**SAI INNOVATIONS FRAMING WEBINAR 2022**

# Presentation Outline

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# Introduction

- Advancement in and adoption of technology by public entities has resulted into processing of large volumes of data, which is in different formats. This transformation is harnessing the value of data
- The data-driven world has an impact on the auditors' approach towards financial statement audits.
- Data analytics therefore provides the opportunity to make valuable insights and discover hidden patterns.

# Enabling environment: Governance



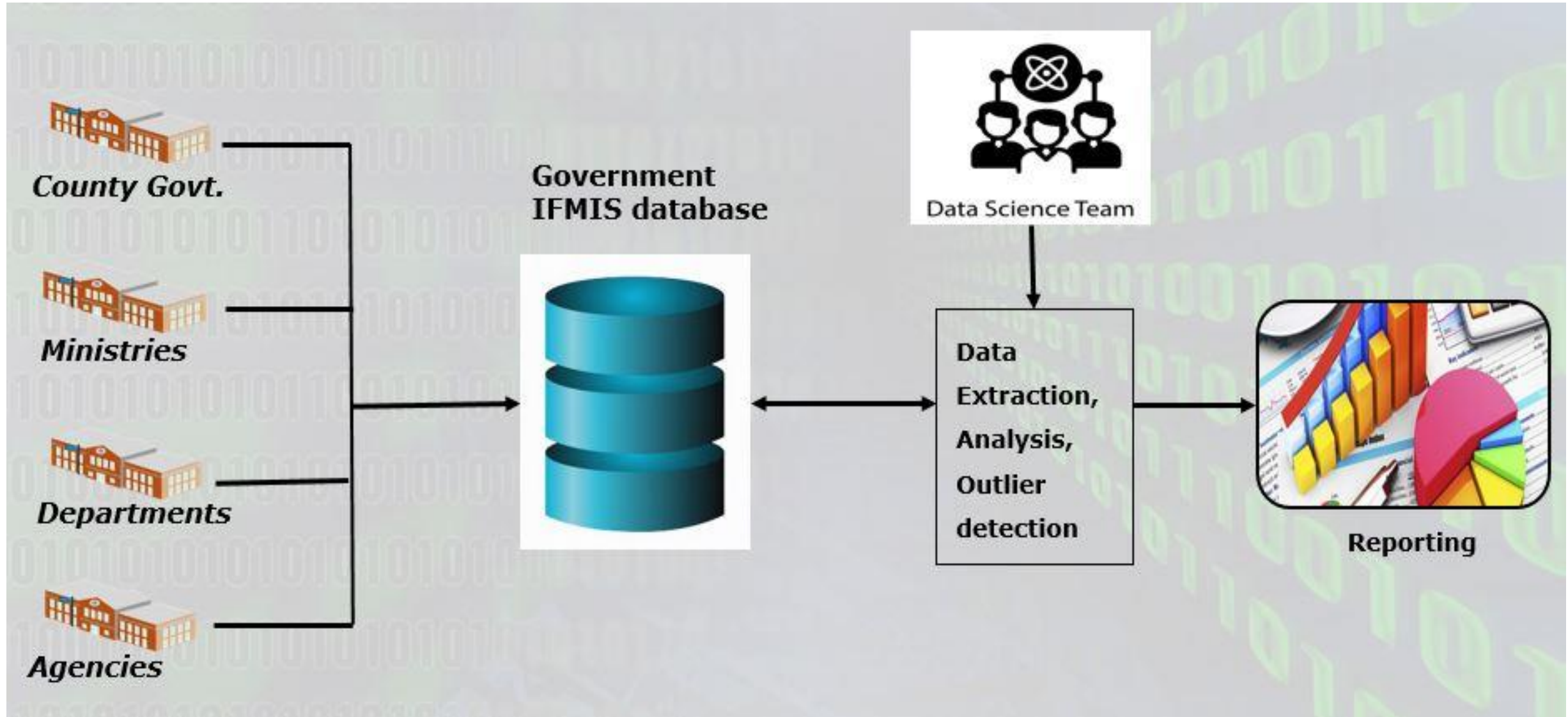
## Strategic focus

### 2021-2026

- Enable OAG to be a SAI offering efficient client-focused audit services based on ***data, risk*** and ***intelligence***

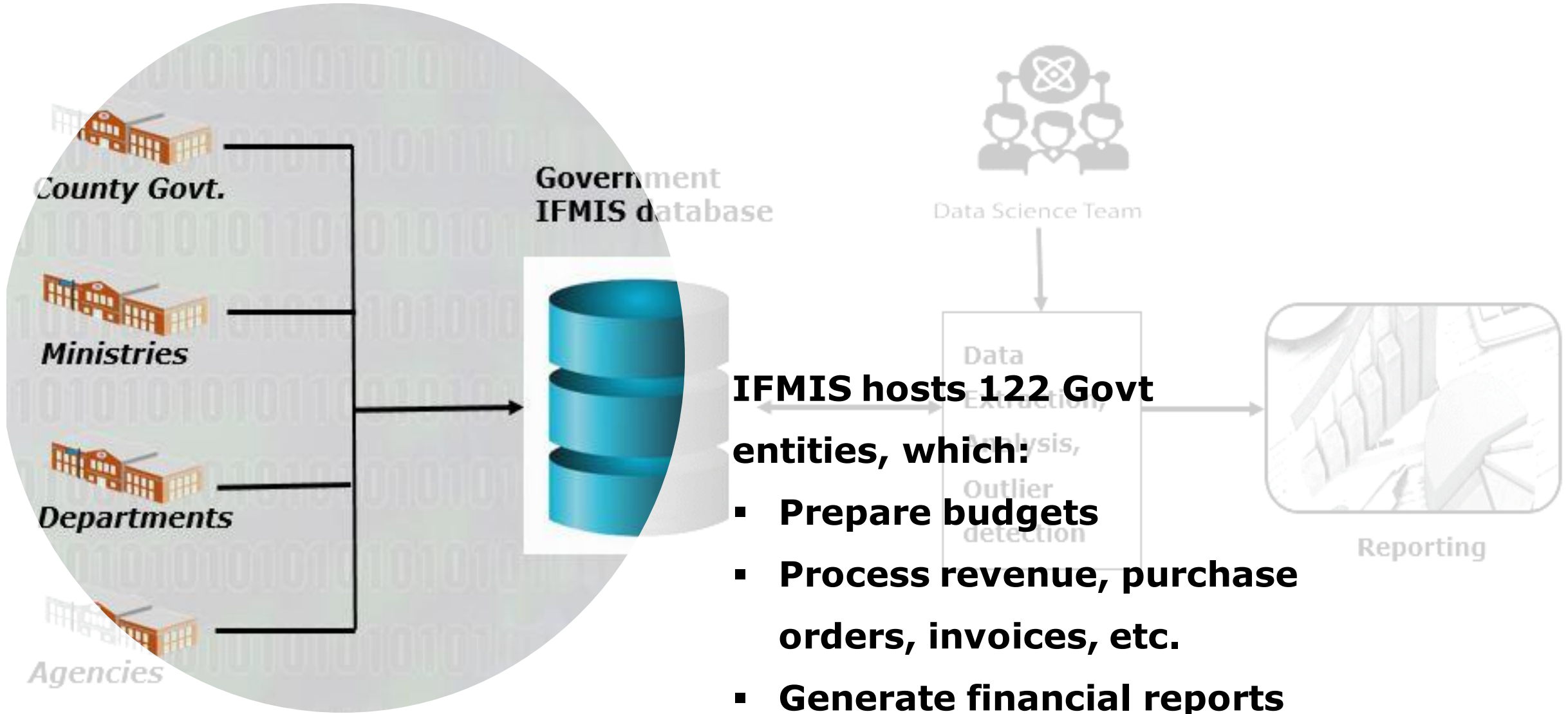
- Dedicated ***Data Science*** unit within the organization structure
- Ability to specialize

# Data analytics: our success story





# Data analytics: our success story



# Data analytics: our success story

Data analysis tools are used to identify exceptions and make valuable insights including:

- Invoices not matched with purchase orders
- Unusual transactions
- Irregular patterns using Benford analysis
- Trend analysis on budgets to detect anomalies

County Govt.

Ministries

Departments

Agencies

Government IFMIS database



Data Science Team

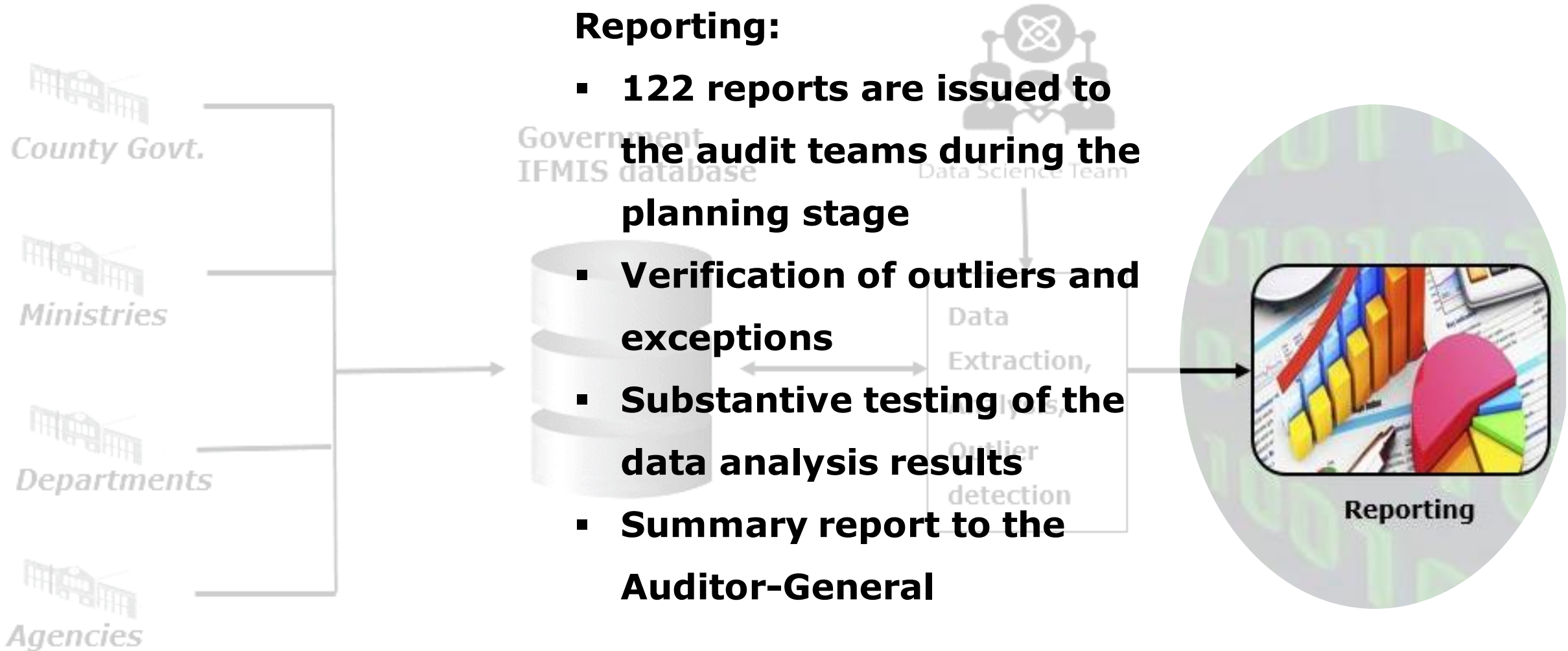
Data  
Extraction,  
Analysis,  
Outlier  
detection

Reporting

# Data analytics: our success story

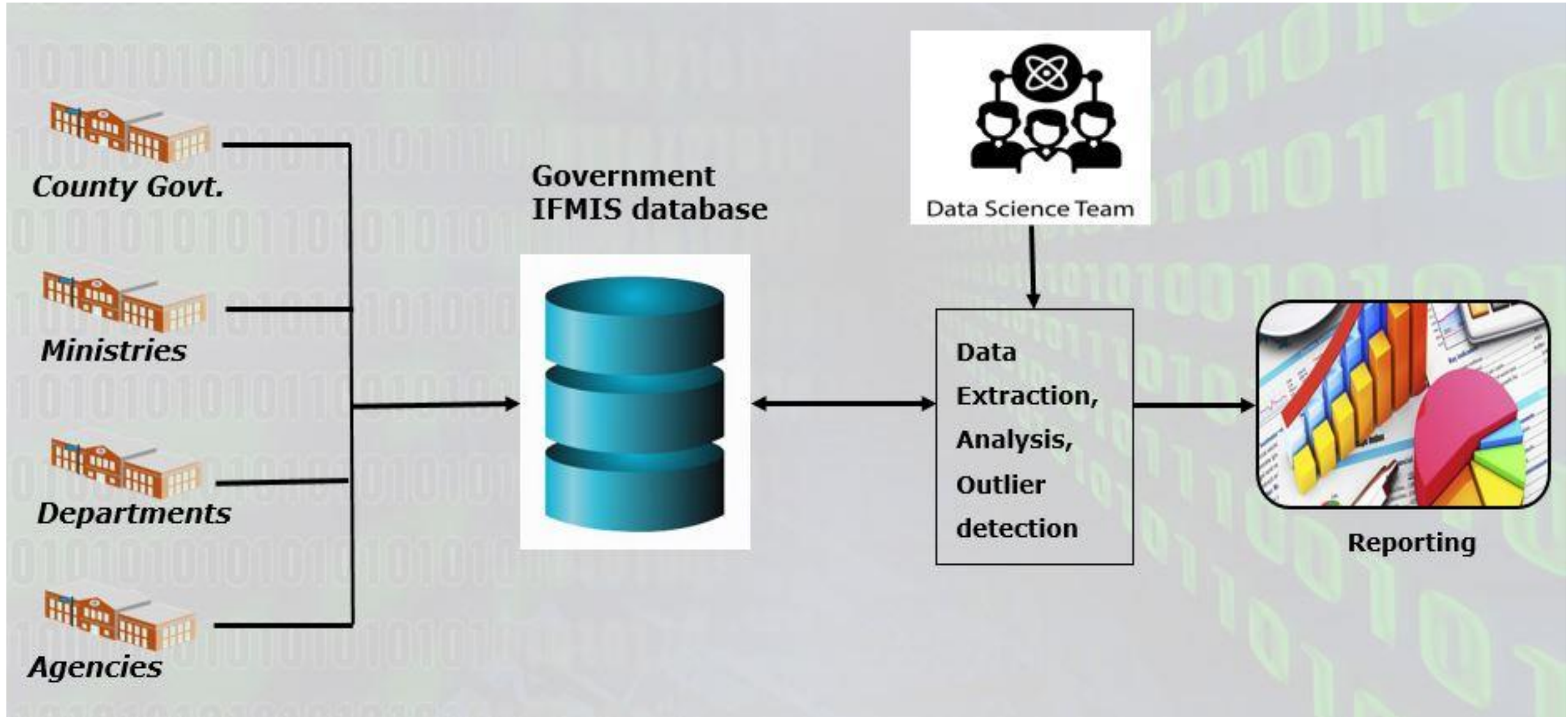
## Reporting:

- 122 reports are issued to the audit teams during the planning stage
- Verification of outliers and exceptions
- Substantive testing of the data analysis results
- Summary report to the Auditor-General





# Data analytics: our success story



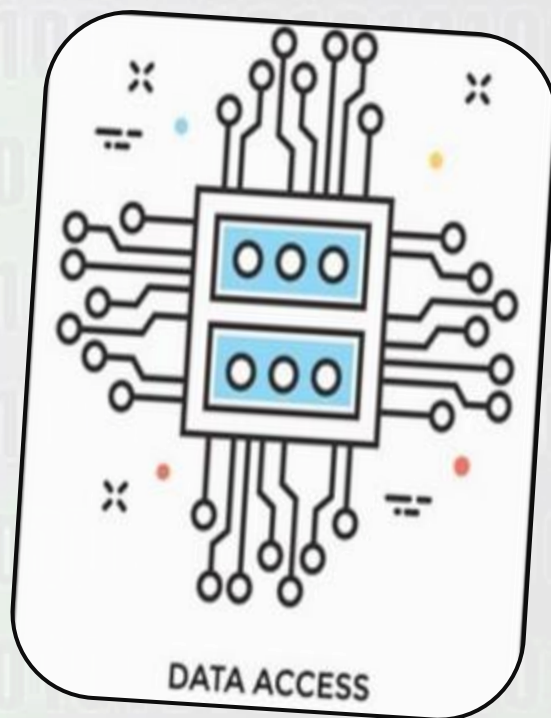
# Benefits of data analytics

- ***Higher level of assurance*** – all transactions are tested thus obtaining assurance on the entire population
- ***Improved audit quality*** – high quality evidence is obtained
- ***Insights gained*** – trends and correlations provides more insights on the financial data
- ***Enhanced efficiency*** – in terms of time taken to conduct data analytics and reporting

# Future outlook

## Access to data outside IFMIS

- Entities have different IT platforms and data formats
- Need to have an **ETL platform** to access these data



## Use of Science in Auditing

- Deploy machine learning techniques to move from **descriptive** to **predictive** analytics
- Expected valuable insights:
  - ✓ clustering
  - ✓ Fraud detection



# Conclusion

“The goal is to turn data into information, and information into insight.”

*Carly Fiorina, ex CEO of Hewlett-Packard*