

The background of the slide is a cityscape at dusk or dawn. A prominent feature is a tall, dark, cylindrical tower with a spire at the top, which is the Telkom Tower in Johannesburg. The sky is a mix of light blue and orange, suggesting the time is either early morning or late evening. The city buildings are densely packed and vary in height and color, with some showing signs of wear and others being more modern.

# DIGITAL GOVERNMENT

## Data Platform and Advanced Analytics Solution Snapshot

May 2023

# Why Government Need Modern Data Platforms?

## Data-Driven Decision-Making:

A data platform enables government organizations to harness the power of data and transform it into actionable insights. Advanced analytics and machine learning techniques can uncover hidden patterns, trends, and correlations in large and complex datasets. By leveraging these insights, government officials can make informed decisions based on evidence, leading to more effective policies, resource allocation, and service delivery.

## Policy Formulation and Evaluation:

Governments face a wide range of complex challenges, and data-driven analytics can play a crucial role in policy formulation and evaluation. A data platform enables government organizations to analyze the impact of existing policies, identify areas for improvement, and develop evidence-based policies that address societal needs. By evaluating the effectiveness of policies through data analysis, governments can continuously adapt and refine their strategies to achieve desired outcomes.

## Efficient Resource Allocation

Government organizations deal with limited resources and a diverse range of responsibilities. A data platform allows for advanced analytics to optimize resource allocation. By analyzing data on citizen needs, demand patterns, and resource utilization, governments can allocate resources more efficiently. This helps prioritize investments, target interventions, and ensure that resources are allocated where they are most needed, ultimately maximizing the impact of public spending.

## Fraud Detection and Risk Management:

Government organizations are susceptible to various forms of fraud, corruption, and financial risks. A data platform equipped with advanced analytics and machine learning algorithms can identify suspicious patterns, anomalies, and potential risks. By analyzing vast amounts of data across multiple systems and detecting deviations from normal behavior, governments can proactively detect and prevent fraud, financial mismanagement, and mitigate risks.

## Improving Public Services:

Government organizations strive to deliver high-quality public services to citizens. A data platform enables the analysis of citizen feedback, service utilization data, and performance metrics to identify areas for improvement. By understanding citizen needs and preferences through data analytics, governments can enhance service delivery, tailor services to specific demographics, and optimize the allocation of resources for better citizen satisfaction.

## Predictive Insights and Early Warning Systems:

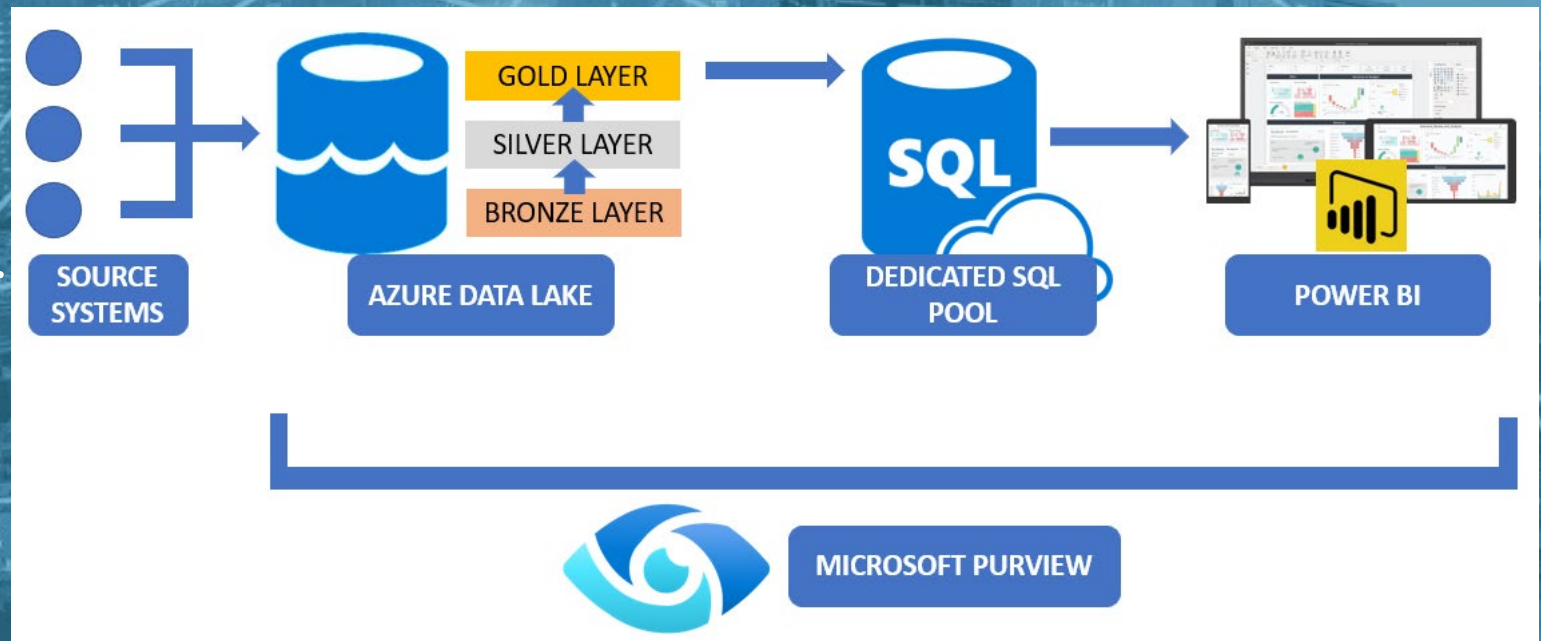
Advanced analytics and machine learning on a data platform can provide governments with predictive insights and early warning systems. By analyzing historical and real-time data, governments can forecast trends, anticipate potential challenges, and implement preventive measures. This proactive approach helps mitigate risks, improve disaster management, and enhance public safety.

# Data Platform Solution Overview

Microsoft Azure Data Lake – will ingest and consolidate data from all sources, including data quality checks and data cleansing.

Microsoft Dedicated SQL Pool – will model and prepare data for downstream analytics and reporting uses.

Microsoft Power BI – will visualise and present data for intuitive analysis and insights generation.





Thank you



*Create tomorrow*