

**UNITED CITIES AND LOCAL GOVERNMENT OF AFRICA
(UCLG-A)**

**PRESENTATION AND FACILITATION OF FINANCIAL AND FISCAL ANALYSIS
OF CITIES AND TERRITORIES FOR THE CHIEF FINANCIAL OFFICERS
INITIATIVE**

**ABIDJAN
20 SEPTEMBER 2022**

**MODULE 3: FINANCIAL AND FISCAL ANALYSIS: DETECTING AND
MANAGING FINANCIAL DOWNSIDE RISKS**

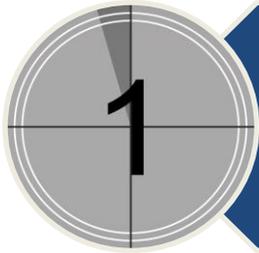
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UCLG AFRICA
United Cities and Local Governments of Africa
Cités et Gouvernements Locaux Unis d'Afrique
CGLU AFRIQUE



MODULE CONTENT



Presentation of the key concepts of financial analysis for local authorities



Understanding and monitoring the financial performance of local governments:
Balances and financial ratios to watch



Building a financial forecast for local governments

This module comprises of 3 courses focused on good governance and financial management

ABOUT AKHILE

WE DELIVER INTEGRATED MANAGEMENT TOOLS & PLATFORMS

Enabling clients to deliver services sustainably through data driven & informed decision making.

WE ENABLE & ENHANCE

Data driven, informed decision making & improve efficiency of key processes.

WE BELIEVE IN TECHNOLOGY DRIVEN SOLUTIONS

As a key contributor to business enhancement & development.

WE INTEGRATE THE RIGHT PARTNERS & TECHNOLOGIES

To develop sustainable solutions.



WE ARE A LEVEL-1
BBBEE CONSULTING
COMPANY



WE HAVE 15+ YEARS OF EXPERIENCE IN THE PUBLIC SECTOR

Focusing on providing practical, innovative & sustainable solutions to the public sector, with special focus on municipalities.

WE HAVE PROVEN EXPERIENCE & TRACK RECORD

Financial & asset management including revenue management & enhancement.

WE HAVE A WEALTH OF EXPERIENCE

Our team & strategic partners are experts in their fields of specialization.

WE ADD VALUE

Through implementable & sustainable solutions, by providing excellent client service & quality delivery of assignments.

MODULE OBJECTIVES

Feeding the municipality, city or territory

Building the municipality, city or territory

Providing the municipality, city or territory with basic services and amenities

Ensuring the upkeep and maintenance of the basic infrastructure and equipment of the municipality, city or territory

Governing and administering the municipality, city or territory



To assist CFOs' in their role in the improvement of municipalities, cities and territories capabilities to deliver on the five key outcomes expected from them

COURSE 1

PRESENTATION OF THE KEY CONCEPTS OF FINANCIAL ANALYSIS FOR LOCAL AUTHORITIES



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FACTORS INDICATING FINANCIAL PROBLEMS OR CHALLENGES



Identifying indicators of financial problems and responding accordingly is critical to address sustainability in municipalities, cities and territories – early warning systems

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (1/10)

BUDGETS WHICH ARE NOT CREDIBLE

Budgets do not reflect realistic revenues and expenditures.

Inaccurate, unfunded and unrealistic budgets will likely result in financial problems.

Preparation of a credible and funded adjustment budget.

Adjustment to rates and tariffs.

Reductions in expenditure.

Investigate alternate revenue sources.

Ineffective policies to inform the budget on free basic services and indigent support.

May have unfunded budgets or unrealistic revenue estimates.

Assess appropriateness and affordability of free basic service packages.

Under-provision for bad debts.

Adverse impact on financial position i.e. insufficient cash from revenue to fund the budgeted expenditure.

Base revenue budgets on realistic recoverable revenue estimates.

Ensure that adequate provision is made for the non-payment by debtors.

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (2/10)

INSUFFICIENT CASH FLOW (1/2)

Continued reliance on bank overdrafts, or bank overdraft facilities are exceeded.

Indicates underlying financial problems.

Develop a daily, weekly and monthly cash flow forecast and ensure that reliance on overdrafts reduces over time.

This will emanate from a number of initiatives that are illustrated in this course.

Statutory payments (PAYE, UIF, pension contributions) are not paid over on time or are delayed.

Indication of financial problems. Relatively easy to defer or underpay and which in many instances will not be easily detected.

Ascertain the extent of under-payment and develop a payment plan to repay amounts in a relatively short period of time.

Creditors and suppliers are not paid timeously.

Delayed payments to creditors due to severe financial problems.

Develop a payment plan that eliminates the need to further delay the payments to creditors and which ensures that the time period that is required to pay creditors reduces over time.

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (3/10)

INSUFFICIENT CASH FLOW (2/2)

Capital expenditure programmes suspended or reduced or heavy reliance on grant funding.

Research indicates that significant under-spending on the capital budget, or low levels of capital budgets relative to size of the municipality, city or territory, are amongst others due to cash flow challenges.

Understand why;
Reprioritise capital expenditure to focus on critical backlogs in infrastructure and revenue generating initiatives; and
Assess funding sources and reliance on grant funding.

Conditional grants not used in accordance with the conditions of the grant or there is increased dependency on grant funding.

Conditional grants advanced by a sphere of government are required to be used for specific purposes. Where financial problems are encountered, these conditional grants may be used for other purposes.

Plan to reinstate the cash used “illegally”;
Action plan to fulfil the conditions of the grant; and
Focus on mechanisms to increase own revenue and reduce grant dependency.

Creative service delivery options undertaken to fund the provision of basic municipal services.

The municipality, city or territory may undertake Public Private Partnerships (PPP) and other outsourcing options to fund and externalise basic service delivery.

Review current service delivery mechanisms, where appropriate, for the provision of basic services; and
Restructure agreements, if necessary, in light of the challenges encountered.

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (4/10)

INADEQUATE DEBTORS' MANAGEMENT

Debtors' balances are growing in accordance with increases in revenue.

Significant percentage increase in debtors' balances each year will likely result in financial problems.

Understand why debtors' balances are increasing; and Development and implementation of free basic services or Indigent packages (see budgets above).

Interest is charged on irrecoverable debtors' balances overstates revenue and debtors' balances are inflated.

Arrear debtors' balances may be charged interest, regardless of whether recoverable or not. Interest is only an effective instrument to encourage those who will pay their accounts.

Exclude non recoverable interest charged from revenue budget or make adequate provision for non-collectability.



IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (5/10)

INADEQUATE LIABILITY MANAGEMENT

Long-term liabilities are not paid on time.

Default on long-term borrowings indicates financial problems; and
Restriction of debt payments to disguise cash flow problems.

Prepare appropriate repayment plans which are acceptable to the lender.

Municipality, city or territory assets are refinanced through sale and leaseback agreements.

Can be an effective financing arrangement.
Could indicate that land and buildings (secure assets) have to be refinanced to increase access to cash.

Comply with conditions of agreements to safeguard the assets; and
Restructure agreements, if necessary.



IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (6/10)

POOR ACCOUNTING AND AUDITING

Backlog in the maintenance of accounting records and preparation of annual financial statements.

Inability to ascertain the extent of financial challenges or to demonstrate accountability over the funds received from consumers and Government.

Implement processes to update financial records and prepare annual financial statements; and
Produce accurate monthly financial statements.

Non-compliance with in-year reporting requirements.

Risk that financial challenges, amongst other problems, will go undetected.

Implement processes to prepare credible in-year reports; and
Review systems and processes.

Qualified audit reports are not addressed.

If not addressed, this could indicate a breakdown in controls and accountability and financial administration and governance processes.

Develop and implement audit action plans to address the underlying causes; and
Review and assess internal governance and compliance processes.

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (7/10)

INAPPROPRIATE ORGANISATIONAL STRUCTURES, ADMINISTRATIVE AND GOVERNANCE PROCESSES

Vacancies in key positions resulting in dysfunctional structures where there is no leadership.

Vacant key positions or high staff turnover results in key tasks not being carried out due to a lack of capacity or a lack of leadership;

Staff in acting positions may not take appropriate decisions; and

These may contribute to financial problems as key decisions that impact on finances are not being taken.

Develop and implement a realistic plan to fill key vacant posts;

Place short-term personnel, if necessary, to ensure continuity of operations; and

Assess the extent and nature of staff turnover and vacancies particularly in key management and service delivery positions.

Unaffordable or inappropriate organisational structures to size and/ or functions.

A restructuring exercise creates positions that are sometimes not affordable or which are not appropriate to ensure the functioning; and

Political changes without adjustments also results in bloated/ duplicated and costly structures.

Identify restructuring requirements to achieve an organisational structure which is affordable, sustainable and aligned to services and functions.

IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (8/10)

INAPPROPRIATE ORGANISATIONAL STRUCTURES, ADMINISTRATIVE AND GOVERNANCE PROCESSES

High turnover of staff in key positions.

Disruptive due to the loss of organisational/ institutional knowledge and the time lapses between the filling of posts; and
Critical tasks are not undertaken due to vacancies.

Identify reasons (e.g. due to leadership, Council interference or other factors); and
Respond accordingly.

Administrative and governance processes not in place.

Non existent or weak governance procedures leads to inadequate oversight over key financial, administrative and service delivery matters.

Develop recommendations and set targets to institute governance procedures and oversight; and
Implement separation between administrative and governance/ political oversight.



IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (9/10)

FAILING INFRASTRUCTURE AND LACK OF SERVICE DELIVERY

Inability to eliminate backlogs in infrastructure or service delivery or an inability to provide services on a reliable and sustainable basis.

Financial challenges due to inadequate revenue base; and

Resistance and protests from citizens to pay for inadequate or non-delivery of services.

Align the service delivery and budget implementation plan with the budget and performance management system; and

Assess nature and extent of backlogs and challenges and implement plans to address.

Capital programmes are inadequate.

Adverse impact on service delivery; and
Capital expenditure is fundamental to expanding and maintaining service delivery, revenue generation and economic growth.

Adjust budgets and reprioritise expenditure to address service delivery backlogs, revenue generation and economic growth.



IDENTIFYING FINANCIAL PROBLEMS AND POSSIBLE RESPONSES REQUIRED TO ADDRESS SUSTAINABILITY (10/10)

OTHER

Inability to respond to changing economic circumstances.

Sufficient emphasis must be given to the infrastructure and services that support economic growth, so as to retain or enhance economic development and job creation.

Focus on maximising and sustaining economic activities.

Not keeping up with trends and changes in technology i.e. Inadequate and/ or out of date financial and other systems.

Systems do not provide adequate data to ensure problems can be timeously identified, corrective action can be taken, and the necessary monitoring can be undertaken.

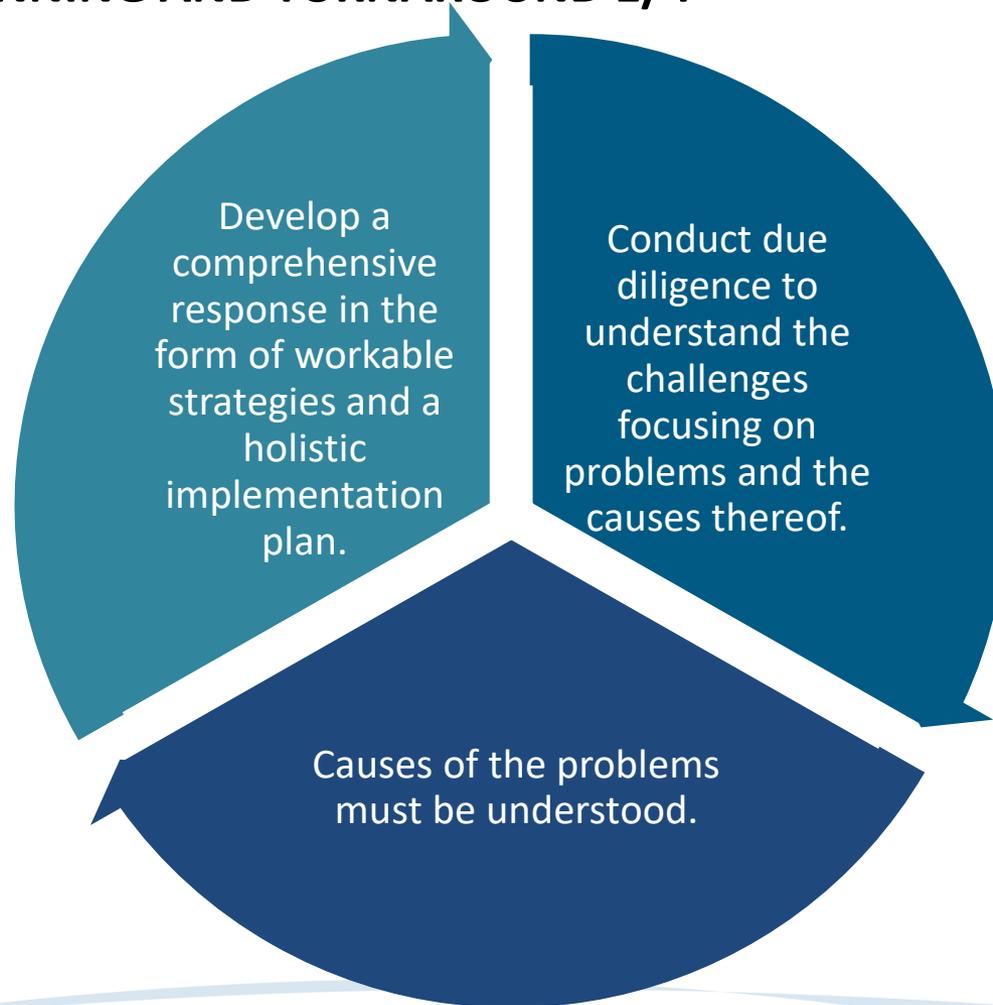
Identify and implement the necessary systems.

Country specific structures between national, provincial and local authorities - Powers and functions are not correctly legislated for, or not adhered to.

Duplication of functions and no clear indication of who is responsible for what?

Legislation, regulations, policies, delegation of powers must be properly amended or new is promulgated to ensure there are clear lines of authority.

FINANCIAL PLANNING AND TURNAROUND 1/4



Once the financial problems have been identified the planning and turnaround process must begin – need resilience ultimately

FINANCIAL PLANNING AND TURNAROUND CONTD. 2/4

The approach **must not undermine the governance** in place. There may be circumstances where **hard decisions have to be made** by the Key Stakeholders.

Need to **build capacity** at the local authority, city and territory level. This should be an **iterative and development process**.

Monitoring the work performed together with the outcomes of the holistic strategies and implementation plan.

Challenges and the proposed strategies to be workshopped with ALL stakeholders

FINANCIAL PLANNING AND TURNAROUND CONTD. 3/4

Strategies and implementation plan must **resolve the service delivery, financial and other problems.** The plan must be relevant, realistic and focused, achieve the required objectives and contain realistic accountabilities and timeframes.

Implementation will be successful if it achieves **compliance with mandated obligations, provision of basic services and/ or timely settlement of financial commitments.**

The strategies and implementation plan must contain **actions that are in terms of the relevant legislation and the regulations** and should not be able to be challenged when implemented.

Strategies must be compliant with legislation and be output orientated

FINANCIAL PLANNING AND TURNAROUND CONTD. 4/4

Example of the holistic and integrated plan. The plan will need to be monitored and implemented and when fully implemented will result in the local authority, city or territory becoming sustainable and viable to deliver efficient and effective services to the communities it serves – achieve intended outcomes.

Illustrative

Focus Area	Key Activities	Person Responsible (Title)	Timeline (√ - Tick)			Start Date	End Date	Measurable Outcome	Financial Implication		Support
			S	M	L				Revenue	Expenditure	

This may change based on specific circumstances and challenges

LONG-TERM FINANCIAL PLAN

The long-term financial plan showing the balance sheet and income and expenditure statement should include the additional expenditure and additional revenue of the identified strategies:

Example of the long-term financial plan

Illustrative

Description	AFS	AFS	AFS	AFS	AFS	Budget	Budget + 1	Budget + 2	Budget+ 3	Budget + 4	Budget + 5	Budget + 6	Budget + 7	Budget + 8	Budget + 9	Budget +10
Figures in Rand thousand	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000	R'000

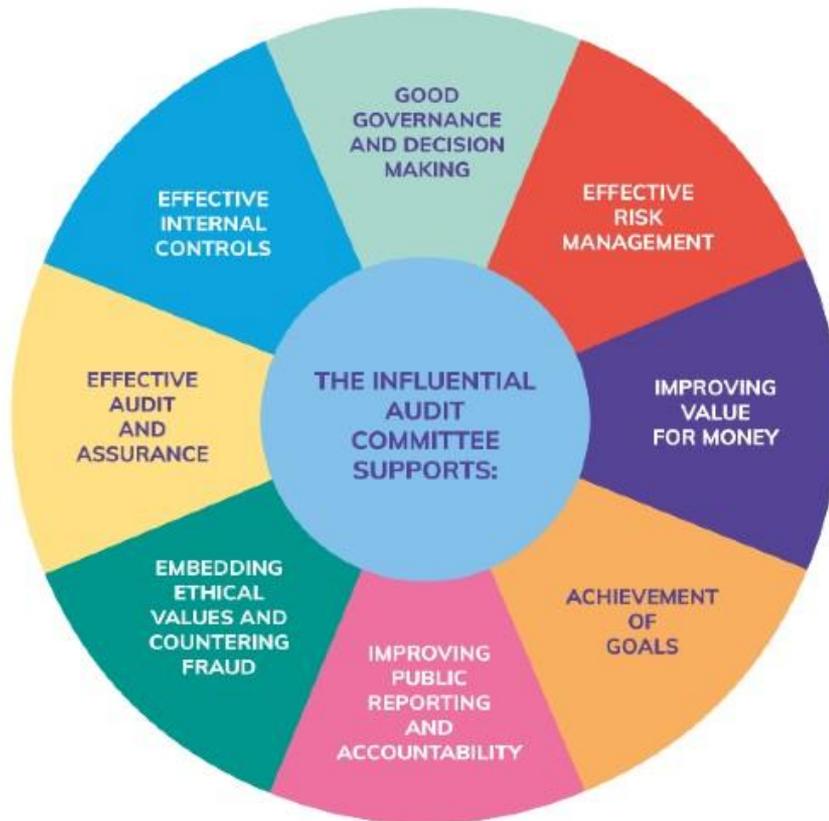
GENERIC KEY STRATEGIES - EXAMPLES

Illustrative



These are interrelated and not stand-alone – a multi-pronged approach is required

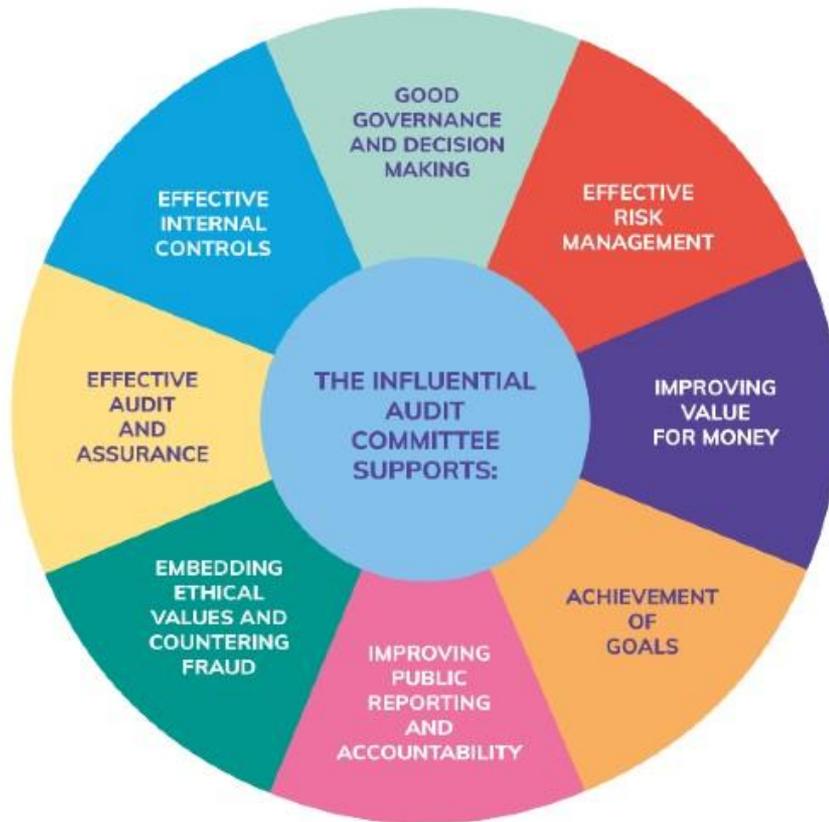
STRATEGY ONE: STRENGTHENING ADMINISTRATION, GOVERNANCE AND INTERNAL CONTROLS (1/2)



- ▲ Enhance operations through an appropriate comprehensive **system of delegations, improved governance and political oversight.**
- ▲ Comprehensive **plan to deal** with theft, fraud and corruption.
- ▲ Implement and enforce the **code of conduct for Councillors.**
- ▲ **Embed risk management** in the culture and internal control processes.

Address governance, political and institutional challenges hampering a financial turnaround of the city or territory

STRATEGY ONE: STRENGTHENING ADMINISTRATION, GOVERNANCE AND INTERNAL CONTROLS (2/2)



- ▲ **Internal Audit Unit** should be in place.
- ▲ **Internal controls** should be **assessed**.
- ▲ Introduce **adequate internal controls** and segregation of duties where necessary to combat fraud and corruption and irregular and fruitless and wasteful expenditure.
- ▲ Develop **an adequate audit action plan** to address persistent audit findings. A holistic approach should be followed in addressing the findings.

All activities to be implemented should form part of the performance agreement of relevant officials to ensure implementation

STRATEGY TWO: HUMAN RESOURCES MANAGEMENT AND ORGANISATIONAL RESTRUCTURING

- ▲ **Restructure** to ensure focus on service delivery and revenue generating functions.
- ▲ **Filling of critical posts**, if applicable, such as Heads of Departments that could stabilise the city or territory.
- ▲ **Identifying staff in excess of requirements** of the city or territory.
- ▲ **Reduce** administration and overhead costs.
- ▲ Review shared and corporate functions and ensure **no duplications** and value for money.
- ▲ Review all **high salary related costs** e.g. overtime by introducing shifts.
- ▲ **Reduce the number of cases** and related costs of litigation.



Understand causes and develop and implement corrective and preventative measures to address any recurring and costly labour related legal matters

STRATEGY THREE: ECONOMIC DEVELOPMENT



- ▲ Review **development application systems**, processes and timelines.
- ▲ Develop **investment attraction and retention policy**.
- ▲ Develop a **policy for development charges** towards capital expenditure.
- ▲ Formulate **informal trade policy**.
- ▲ **Revitalise** any previous economic functions that have deteriorated or ceased.

STRATEGY FOUR: REVENUE MANAGEMENT, PROTECTION AND ENHANCEMENT (1/3)



- ▲ **Installation of infrastructure** to enable accurate electricity and water meter readings and disconnection/ connection to separate and identifiable consumers.
- ▲ **Protection of meters** from vandalism and illegal connections.
- ▲ Implementation of **check meters**.
- ▲ A systematic data verifying process must be undertaken to **ensure correct details of account holders** or property owners.
- ▲ Consistent and regular **billing cycles and accurate and timely bills** must be assured.
- ▲ Efficient and effective **credit control management** policies and procedures applied with clear delegations of authority and monthly reporting on actions taken.

STRATEGY FOUR: REVENUE MANAGEMENT, PROTECTION AND ENHANCEMENT CONTD. (2/3)



- ▲ Development and implementation of a **Customer Care** Service Charter, Service Standards and Customer Care centre/s;
- ▲ Stricter **risk management and internal control processes** with emphasis on adequate supervision of daily cash receipting, banking processes and cash management reporting;
- ▲ Capacity of legal resources to support **debt collection** programs;
- ▲ Communication between departments to resolve customer queries timeously;
- ▲ **Cash flow targets** which form part of the performance measures of management; and
- ▲ **Review of all non-strategic assets** by means of an audit to optimise and/or sell.

STRATEGY FOUR: REVENUE MANAGEMENT, PROTECTION AND ENHANCEMENT CONTD. (3/3)

- ▲ The process should ensure that there is a **revenue enhancement strategy** to ensure that:
 - All residents are **paying what is due** for property rates and services;
 - All residents are being **charged the correct tariff** for their property rates and services; and
 - All residents or households receiving services from the municipality, city or territory are **included in the billing system**.



STRATEGY FIVE: IMPROVED FINANCIAL PLANNING/ BUDGETING AND MANAGEMENT (INCLUDING CASHFLOW MANAGEMENT) (1/4)



- ▲ An **own revenue review** must be undertaken to address the following if necessary:
 - Ensure that service charges/ tariffs are **cost reflective and sustainable**;
 - Address the **cost of free basic services** and allocation of services to indigents; and
 - A **multiple year tariff increase** approach should be adopted and communicated to all stakeholders.

STRATEGY FIVE: IMPROVED FINANCIAL PLANNING/ BUDGETING AND MANAGEMENT (INCLUDING CASHFLOW MANAGEMENT) CONTD. (2/4)

- An **expenditure review** must be undertaken to address the following:
 - The **cost of personnel** needs to only reflect “feet on the ground” and funded critical vacant positions taking the operating model and any necessary restructuring into consideration;
 - Review cost cutting/ austerity measures to **eliminate non-essentials**;
 - **Irregular, fruitless and wasteful and unauthorised expenditure** should be identified and eliminated;
 - Low levels of **repairs and maintenance** should be addressed to ensure effective operation of all assets and minimal service delivery interruptions;
- Set **spending limits** and **revenue targets**.
- Provide **budget parameters** which bind the municipality, city or territory for a specified period or until stated conditions have been met; and
- **Capital budget and expenditure should be reviewed** to ensure no loans or finance leases are raised unless the city or territory has the ability to repay and where possible identify capital projects that are revenue generating.



STRATEGY FIVE: IMPROVED FINANCIAL PLANNING/ BUDGETING AND MANAGEMENT (INCLUDING CASHFLOW MANAGEMENT) CONTD. (3/4)



- ▲ **Analyse all budget line items** which will assist in identifying possible expenditure excesses and identify credible revenue billing and collection so that the municipality, city or territory can set a realistic, credible and achievable budget.
- ▲ **Zero based budgeting** should be used where possible.
- ▲ **Take into account the non-payment of creditors** in the budget process and arrangements for the paying of the outstanding amounts needs to be agreed with the creditors in line with cash availability.

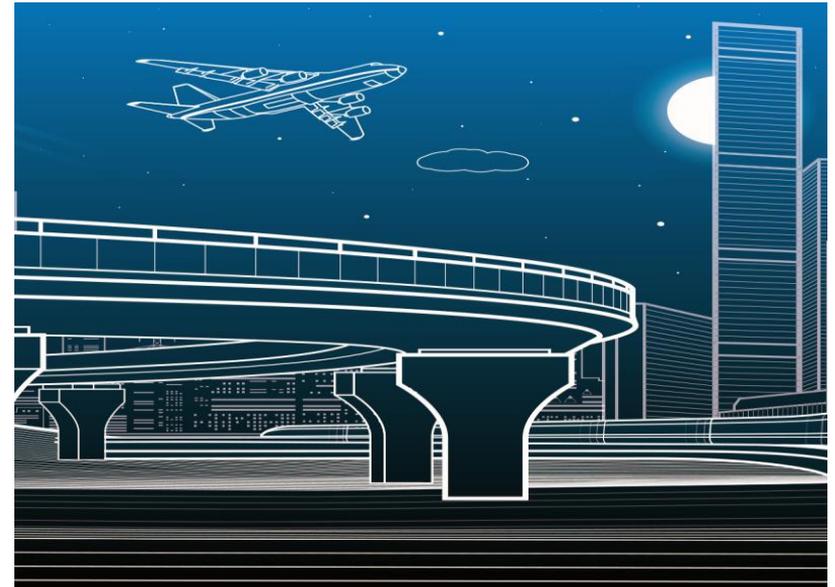
STRATEGY FIVE: IMPROVED FINANCIAL PLANNING/ BUDGETING AND MANAGEMENT (INCLUDING CASHFLOW MANAGEMENT) CONTD. (4/4)

- ▲ **Review all policies** relating to the budget annually and where necessary, update, approve and implement.
- ▲ **Align** revenue and expenditure budget as well as the cash flow budget **to ensure realistic anticipated cash flows**. To control the cash flows the following should be done:
 - Establish a centralised Cash flow Management Committee (approving orders before submitted to SCM for procurement); and
 - Updated cash flow statement and budget statement to be provided to Cash Flow Management Committee on a weekly basis.

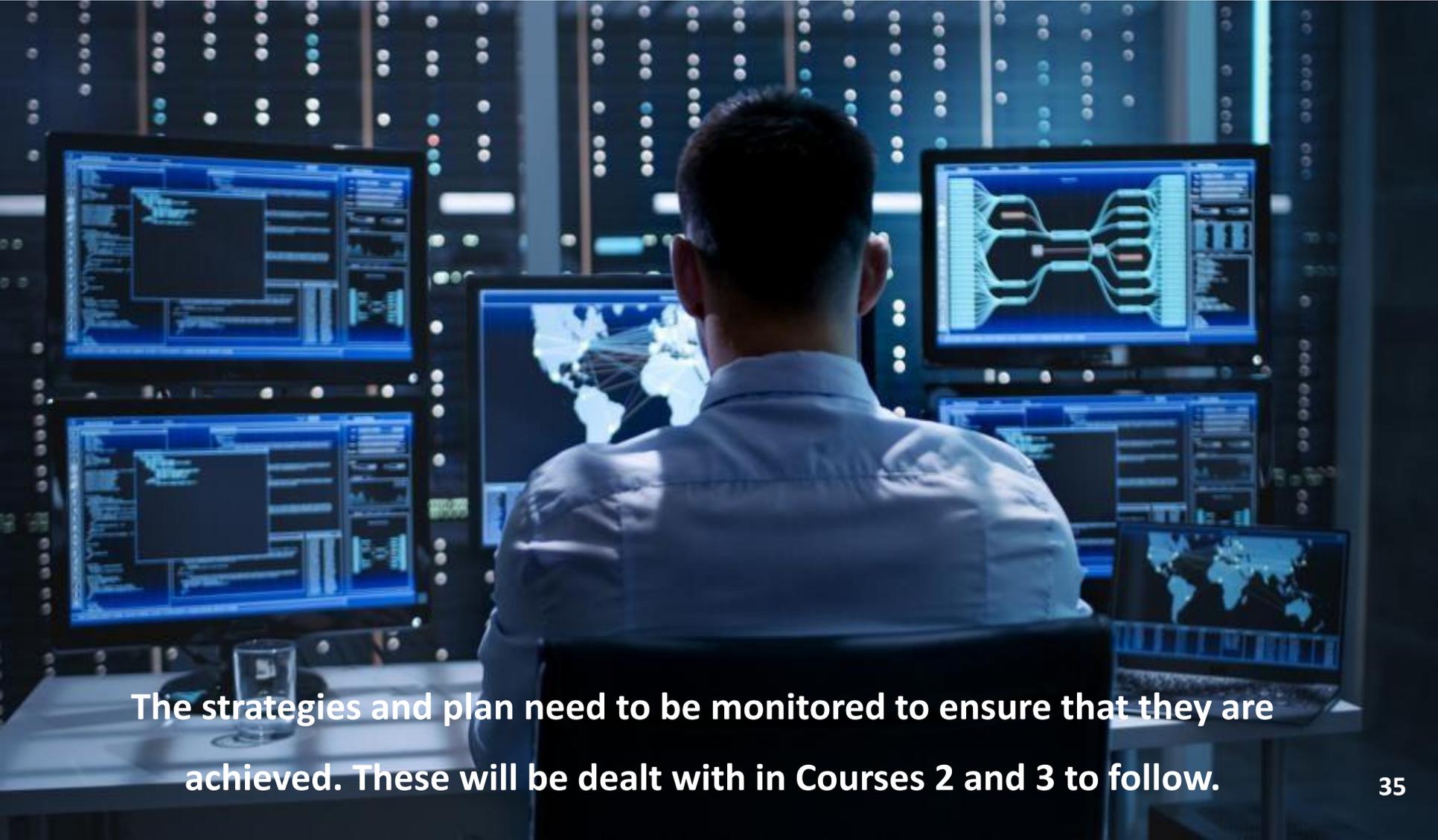


STRATEGY SIX: SERVICE DELIVERY AND INFRASTRUCTURE DEVELOPMENT AND MANAGEMENT

- ▲ **Establish whether there is a lack of asset management** of infrastructure and all other immovable and movable assets.
- ▲ The municipality, city or territory may need to **strengthen its internal technical skills** to effectively manage its assets and repairs and maintenance planning and management.
- ▲ **Management of water and electricity distribution losses**, lack of replacement and management plans, budget allocation for replacement, operation and maintenance is low.
- ▲ **Financial resources in the annual budget with a long-term planning horizon** to address service delivery backlogs, infrastructure and maintenance and upgrading issues. Address social versus revenue generating assets.



IMPLEMENTATION AND MONITORING THE STRATEGIES, FINANCIAL TURNAROUND PLAN AND KEY RATIOS



The strategies and plan need to be monitored to ensure that they are achieved. These will be dealt with in Courses 2 and 3 to follow.

COURSE 2

UNDERSTANDING AND MONITORING THE FINANCIAL PERFORMANCE OF LOCAL GOVERNMENTS: BALANCES AND FINANCIAL RATIOS TO WATCH



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A hand holding a pen pointing to a financial chart with candlesticks and a line graph. The chart shows a line graph with data points at 465, 571, and 490. The background is dark with a grid pattern.

STANDARD ACCOUNTING PRACTICES

An accounting standard is a set of **practices and policies used to systematise accounting functions across entities and over time.** Accounting standards apply to the full breadth of an entity's financial picture, including assets, liabilities, revenue, expenses, etc.

To be able to monitor and benchmark municipalities, cities and territories each country or all countries in Africa should have standard accounting practices/ standards.

STANDARD ACCOUNTING PRACTICES - INTERNATIONAL BEST PRACTICE (1/3)



International Financial Reporting Standards (IFRS) are a set of accounting standards that govern how particular types of transactions and events should be reported in financial statements. They were developed and are maintained by the International Accounting Standards Board (IASB).



United Kingdom - The code is prepared under IFRS, which have been adopted as the basis for public sector accounting in the UK. The Code specifies the principles and practices of accounting required to prepare financial statements. The Code applies to local government organisations across the UK including local authorities, police bodies, fire services and other local public service bodies.



Australia - The Office of Local Government (OLG) provides support and advice to councils through the Local Government Code of Accounting Practice and Financial Reporting (Code).

STANDARD ACCOUNTING PRACTICES - INTERNATIONAL BEST PRACTICE (2/3)



South Africa - Standards of **Generally Recognised Accounting Practice (GRAP)** are accounting standards issued by the Accounting Standards Board (ASB) in terms of section 89 of the Public Finance Management Act (PFMA).



Standards of GRAP set out the **recognition, measurement, presentation and disclosure requirements for financial reporting** in the public sector in South Africa.



The Standards of GRAP set out the **principles for the preparation of financial statements**. The Standards ensure that **relevant, credible and consistent information** is provided in the financial statements which enhances **accountability, comparability and informed decision-making**.

STANDARD ACCOUNTING PRACTICES - INTERNATIONAL BEST PRACTICE (3/3)

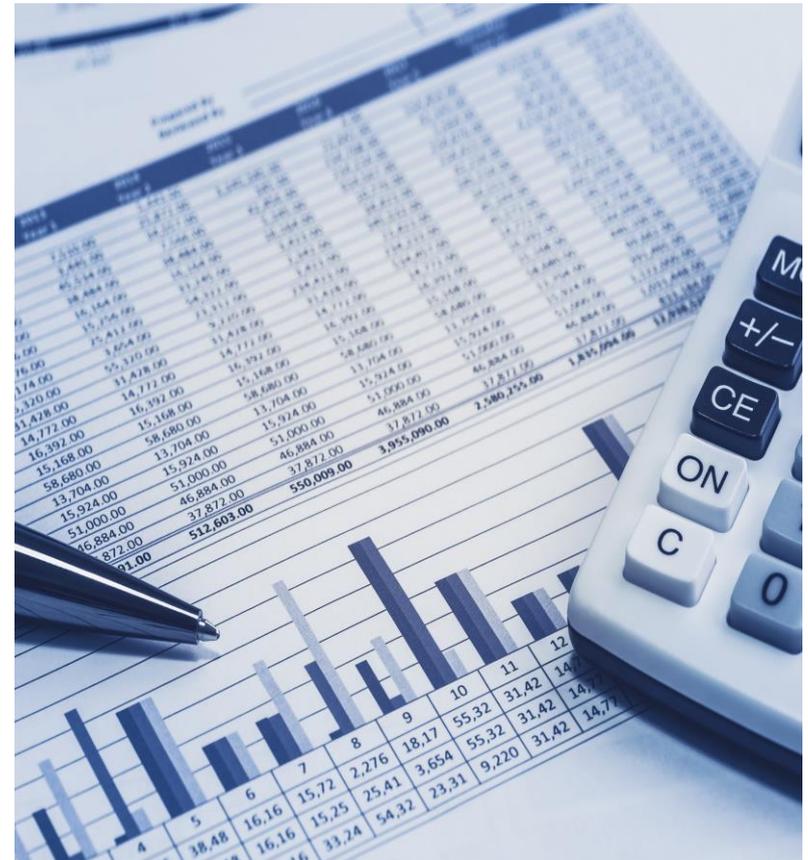


The ASB considers and makes use of pronouncements issued by the International Public Sector Accounting Standards Board (IPSASB), the International Accounting Standards Board (IASB) and other national and international accountancy organisations that develop financial reporting, accounting and auditing standards for the public sector.

Other African Countries:



From the research undertaken it appears that other African countries do not have accounting standards/practices, legislation, regulation and tools to be able to monitor and benchmark municipalities, cities and territories from a financial and service delivery perspective.



SOUTH AFRICA – STATUS OF FINANCIAL REPORTING AND MONITORING

- ▲ **Constitution:** A municipality has the right to govern, on its own initiative, the local government affairs of its community, subject to national and provincial legislation.
- ▲ **Municipal Systems Act:** Provides for legal matters pertaining to local government; and matters incidental thereto.
- ▲ **GRAP** accounting standards/ practices: Format of Financial Statements.
- ▲ **Municipal Finance Management Act.**
- ▲ **Municipal Standard Chart of Accounts (mSCOA).**
- ▲ **Uniform Financial Ratios and Norms.**
- ▲ **Integrated Development Plan (IDP).**
- ▲ **Budget Process.**
- ▲ **Service Delivery Budget Implementation Plan (SDBIP).**
- ▲ **Performance Management System.**



UNIFORM RATIOS AND NORMS TO BE MONITORED (1/14)

ASSET MANAGEMENT

Capital Expenditure to Total Expenditure

Formula:

$$\frac{\text{Total Capital Expenditure}}{\text{Total Expenditure (Total Operating expenditure + Capital expenditure)}} \times 100$$

Norm:

10% - 20%

Impairment of Property, Plant and Equipment (PPE), Investment Property and Intangible Assets (Carrying Value)

Formula:

$$\frac{\text{PPE Impairment} + \text{Investment Property Impairment} + \text{Intangible Assets Impairment}}{\text{Total PPE} + \text{Investment Property} + \text{Intangible Assets}} \times 100$$

Norm:

0%

Repairs and Maintenance as a % of PPE, Investment Property (Carrying Value)

Formula:

$$\frac{\text{Total Repairs and Maintenance Expenditure}}{\text{PPE and Investment Property (Carrying value)}} \times 100$$

Norm:

8%

UNIFORM RATIOS AND NORMS TO BE MONITORED (2/14)

DEBTOR MANAGEMENT

Collection Rate

Formula:

$$\frac{(\text{Gross Debtors Closing Balance} + \text{Billed Revenue} - \text{Gross Debtors Opening Balance} + \text{Bad Debts Written Off})}{\text{Billed Revenue}} \times 100$$

Norm:

95%

Bad Debts Written-off as % of Provision for Bad Debt

Formula:

$$\frac{\text{Bad Debts Written-off}}{\text{Provision for Bad Debt}} \times 100$$

Norm:

100%

Net Debtors Days

Formula:

$$\frac{((\text{Gross Debtors} - \text{Bad debt Provision}) / \text{Actual Billed Revenue}) \times 365}{}$$

Norm:

30 days

UNIFORM RATIOS AND NORMS TO BE MONITORED (3/14)

LIQUIDITY MANAGEMENT

Cash/Cost Coverage Ratio (Excluding Unspent Conditional Grants)

Formula:

$$\frac{((\text{Cash and Cash Equivalents} - \text{Unspent Conditional Grants} - \text{Overdraft}) + \text{Short Term Investment})}{\text{Monthly Fixed Operational Expenditure excluding (Depreciation, Amortisation, Provision for Bad Debts, Impairment and Loss on Disposal of Assets)}}$$

Norm:

1 - 3 Months

Current Ratio

Formula:

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Norm:

1.5 - 2:1

UNIFORM RATIOS AND NORMS TO BE MONITORED (4/14)

LIABILITY MANAGEMENT

Capital Cost (Interest Paid and Redemption)
as a % of Total Operating Expenditure

Formula:

$$\frac{\text{Capital Cost (Interest Paid and Redemption)}}{\text{Total Operating Expenditure}} \times 100$$

Norm:

6% - 8%

Debt (Total Borrowings)/ Revenue

Formula:

$$\frac{\text{(Overdraft + Current Finance Lease Obligation + Non-Finance Lease Obligation + Short Term Borrowings + Long Term Borrowings)}}{\text{Total Operating Revenue}}$$

Norm:

45%

UNIFORM RATIOS AND NORMS TO BE MONITORED (5/14)

Level of Cash Backed Reserves
(Net Assets - Accumulated
Surplus)

Formula:

$$\frac{\text{(Cash and Cash Equivalentts - Bank overdraft + Short Term Investment + Long Term Investment - Unspent grants)}}{\text{(Net Assets - Accumulated Surplus - Non-Controlling Interest - Share Premium - Share Capital - Fair Value Adjustment - Revaluation Reserve)}}$$

Norm:

100%

UNIFORM RATIOS AND NORMS TO BE MONITORED (6/14)

DISTRIBUTION LOSSES

Electricity Distribution Losses (Percentage)

Formula:

$$\frac{(\text{Number of Electricity Units Purchased and/or Generated} - \text{Number of Electricity Units Sold})}{\text{Number of Electricity Units Purchased and/or Generated}} \times 100$$

Norm:

7% - 10%

Water Distribution Losses (Percentage)

Formula:

$$\frac{(\text{Number of Kilolitres Water Purchased or Purified} - \text{Number of Kilolitres Water Sold})}{\text{Number of Kilolitres Water Purchased or Purified}} \times 100$$

Norm:

15% - 30%

UNIFORM RATIOS AND NORMS TO BE MONITORED (7/14)

REVENUE MANAGEMENT

Growth in Number of Active Consumer Accounts

Formula:

$$\frac{(\text{Period under review's number of Active Debtor Accounts} - \text{previous period number of Active Debtor Accounts})}{\text{previous period number of Active Debtor Accounts}} \times 100$$

Norm:

NONE

Revenue Growth (%)

Formula:

$$\frac{(\text{Period under review's Total Revenue} - \text{previous period's Total Revenue})}{\text{previous period's Total Revenue}} \times 100$$

Norm:

CPI

Revenue Growth (%) - Excluding capital grants)

Formula:

$$\frac{(\text{Period under review's Total Revenue Excluding capital grants} - \text{previous period's Total Revenue excluding capital grants})}{\text{previous period's Total Revenue excluding capital grants}} \times 100$$

Norm:

CPI

UNIFORM RATIOS AND NORMS TO BE MONITORED (8/14)

EXPENDITURE MANAGEMENT

Creditors Payment Period (Trade Creditors)

Formula:

$\text{Trade Creditors Outstanding} / \text{Credit Purchases (Operating and Capital)} \times 365$

Norm:

30 days

Irregular, Fruitless and Wasteful and Unauthorised Expenditure / Total Operating Expenditure

Formula:

$(\text{Irregular, Fruitless and Wasteful and Unauthorised Expenditure}) / \text{Total Operating Expenditure} \times 100$

Norm:

0%

UNIFORM RATIOS AND NORMS TO BE MONITORED (9/14)

EXPENDITURE MANAGEMENT

Remuneration as % of Total Operating Expenditure

Formula:

Remuneration (Employee Related Costs and Councillors' Remuneration) / Total Operating Expenditure x100

Norm:

25% - 40%

Contracted Services % of Total Operating Expenditure

Formula:

Contracted Services / Total Operating Expenditure x100

Norm:

2% - 5%

UNIFORM RATIOS AND NORMS TO BE MONITORED (10/14)

EFFICIENCY

Net Operating Surplus Margin

Formula:

$$\frac{(\text{Total Operating Revenue} - \text{Total Operating Expenditure})}{\text{Total Operating Revenue}}$$

Norm:

= or > 0%

Net Surplus /Deficit Electricity

Formula:

$$\frac{\text{Total Electricity Revenue less Total Electricity Expenditure}}{\text{Total Electricity Revenue}} \times 100$$

Norm:

0% - 15%

Net Surplus /Deficit Water

Formula:

$$\frac{\text{Total Water Revenue less Total Water Expenditure}}{\text{Total Water Revenue}} \times 100$$

Norm:

= or > 0%

UNIFORM RATIOS AND NORMS TO BE MONITORED (11/14)

EFFICIENCY

Net Surplus /Deficit Refuse

Formula:

Total Refuse Revenue less Total Refuse Expenditure/Total Refuse Revenue \times 100

Norm:

= or $>$ 0%

Net Surplus /Deficit Sanitation and Waste-Water

Formula:

Total Sanitation and Waste-Water Revenue less Total Sanitation and Waste-Water Expenditure/Total Sanitation and Waste-Water Revenue \times 100

Norm:

= or $>$ 0%

UNIFORM RATIOS AND NORMS TO BE MONITORED (12/14)

GRANT DEPENDENCY

Own funded Capital Expenditure (Internally generated funds + Borrowings) to Total Capital Expenditure

Formula:

Own funded Capital Expenditure (Internally generated funds + Borrowings) / Total Capital Expenditure x 100

Norm:

None

Own funded Capital Expenditure (Internally Generated Funds) to Total Capital Expenditure

Formula:

Own funded Capital Expenditure (Internally Generated Funds) / Total Capital Expenditure x 100

Norm:

None

Own Source Revenue to Total Operating Revenue (Including Agency Revenue)

Formula:

Own Source Revenue (Total revenue - Government grants and Subsidies - Public Contributions and Donations) / Total Operating Revenue (including agency services) x 100

Norm:

None

UNIFORM RATIOS AND NORMS TO BE MONITORED (13/14)

BUDGET IMPLEMENTATION

Capital Expenditure Budget Implementation Indicator

Formula:

Actual capital Expenditure / Budget Capital Expenditure x 100

Norm:

95% - 100%

Operating Expenditure Budget Implementation

Formula:

Actual Operating Expenditure / Budgeted Operating Expenditure x 100

Norm:

95% - 100%

UNIFORM RATIOS AND NORMS TO BE MONITORED (14/14)

BUDGET IMPLEMENTATION

Operating Revenue Budget Implementation Indicator

Formula:

$$\text{Actual Operating Revenue} / \text{Budget Operating Revenue} \times 100$$

Norm:

95% - 100%

Service Charges and Property Rates Revenue Budget Implementation Indicator

Formula:

$$\text{Actual Service Charges and Property Rates Revenue} / \text{Budget Service Charges and Property Rates Revenue} \times 100$$

Norm:

95% - 100%

KEY RATIO MONITORING USING THE INSTRUMENT/ TOOL

Implementation and monitoring of the strategies, turnaround plan and key ratios monitoring.

(This will be discussed in Course 3)

Illustrative

Ratio Analysis Report			Audited				Projected	
		Norm	2017	2018	2019	2020	2021	2022
FINANCIAL POSITION								
Asset Management/ Utilisation								
1	Capital Expenditure to Total Expenditure	10% - 20%	9,67%	7,42%	8,34%	11,59%	8,91%	8,36%
2	Impairment of Property. Plant and Equipment. Investment Property and Intangible assets (Carrying Value)	0%	0,02%	0,05%	0,08%	0,00%	0,00%	0,00%
3	Repairs and Maintenance as a % of Property. Plant and Equipment and Investment Property (Carrying Value)	8%	1,5%	2,1%	1,7%	1,3%	1,4%	1,4%
Debtors Management								
1	Collection Rate	95%	100,5%	52,0%	64,2%	95,0%	94,9%	94,9%
2	Bad Debts Written-off as % of Provision for Bad Debt	100%	3,8%	35,7%	21,4%	0,0%	0,0%	0,0%
3	Net Debtors Days	30 days	120,2	43,4	42,9	38,9	37,5	36,3

The National Treasury as an example uses this to benchmark budgets

DETAILED ANALYSIS REQUIRED

To add to the above **monitoring and analysis** the following analysis should also be done to identify any major variances:

- ▲ Statement of Financial Position (**Balance Sheet**);
- ▲ Statement of Financial Performance (**Income and Expenditure**);
- ▲ **Cash Flow** Statement; and
- ▲ **Notes** to the financial statements.



- ▲ The **Auditor-General Report (SA)** which is from the annual statutory audit of the annual financial statements and accounting records and includes:
 - Audit opinion;
 - Emphasis of matters;
 - Governance challenges;
 - Non-compliance;
 - Audit findings in the performance management system reports; and
 - Other matters.

PERFORMANCE MANAGEMENT SYSTEMS (PMS)

In addition to analysis and monitoring of the financial position and financial performance, you also **need to monitor the performance of the management and staff using PMS/ KPIs** which emanate from the following process:

- ▲ Approved budget;
- ▲ SDBIP compiled using approved budget;
- ▲ Strategies in the holistic financial plan to be included; and
- ▲ PMS to have KPIs to monitor SDBIP and strategies to ensure the performance of the management and staff.



COURSE 3

BUILDING A FINANCIAL FORECAST FOR LOCAL GOVERNMENTS



UCLG AFRICA
United Cities and Local Governments of Africa
Cités et Gouvernements Locaux Unis d'Afrique
CGLU AFRIQUE

AKHILE

MST™

PEOPLE. PASSION. SUSTAINABILITY.



UCLG AFRICA
United Cities and Local Governments of Africa
Cités et Gouvernements Locaux Unis d'Afrique
CGLU AFRIQUE

A K H I L E

ABOUT MST™ (1/3)



- ▲ Technology driven solutions is a key contributor to business enhancement and development.
- ▲ It is critical to invest into the integration of technology solutions into business processes to **enable data driven and informed decision making;**
- ▲ Our internally developed and **innovative platform (MST™)** enables data driven and empowered decision making by Municipalities and key stakeholders;

01. Experienced Specialists

Our Team and strategic partners are experts in their field of specialisation.

02. Sustainable Practical Solutions to the Public Sector

We integrate the right partners and technologies.

03. Exceptional Client Service

We distinguish ourselves by adding lasting value to our clients and quality delivery of assignments.

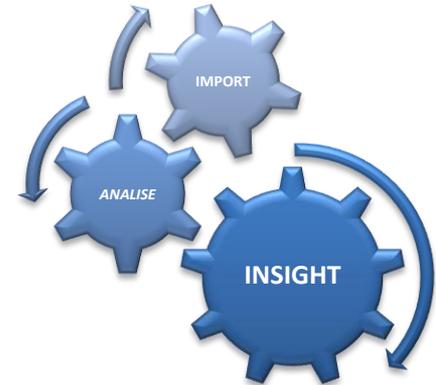
04. 15+ Years in the Consulting Business

We have successfully executed projects across municipalities.

ABOUT MST™ (2/3)

- ▲ The MST™ platform solution incorporates **detailed reporting** and will enable us to deliver on your requirements in a **fast and cost-effective** manner;
- ▲ Aggregate, validate and manage data from internal and external sources on a single platform (work **seamless** with client existing systems);
- ▲ **Predictive models** built in (AI and Machine Learning);
- ▲ Data is **spatial**, enhanced and depicted with filters built in to **zoom to insights**; and
- ▲ Data sources can also be made **available via API** for the benefit of other internal applications.

MST™



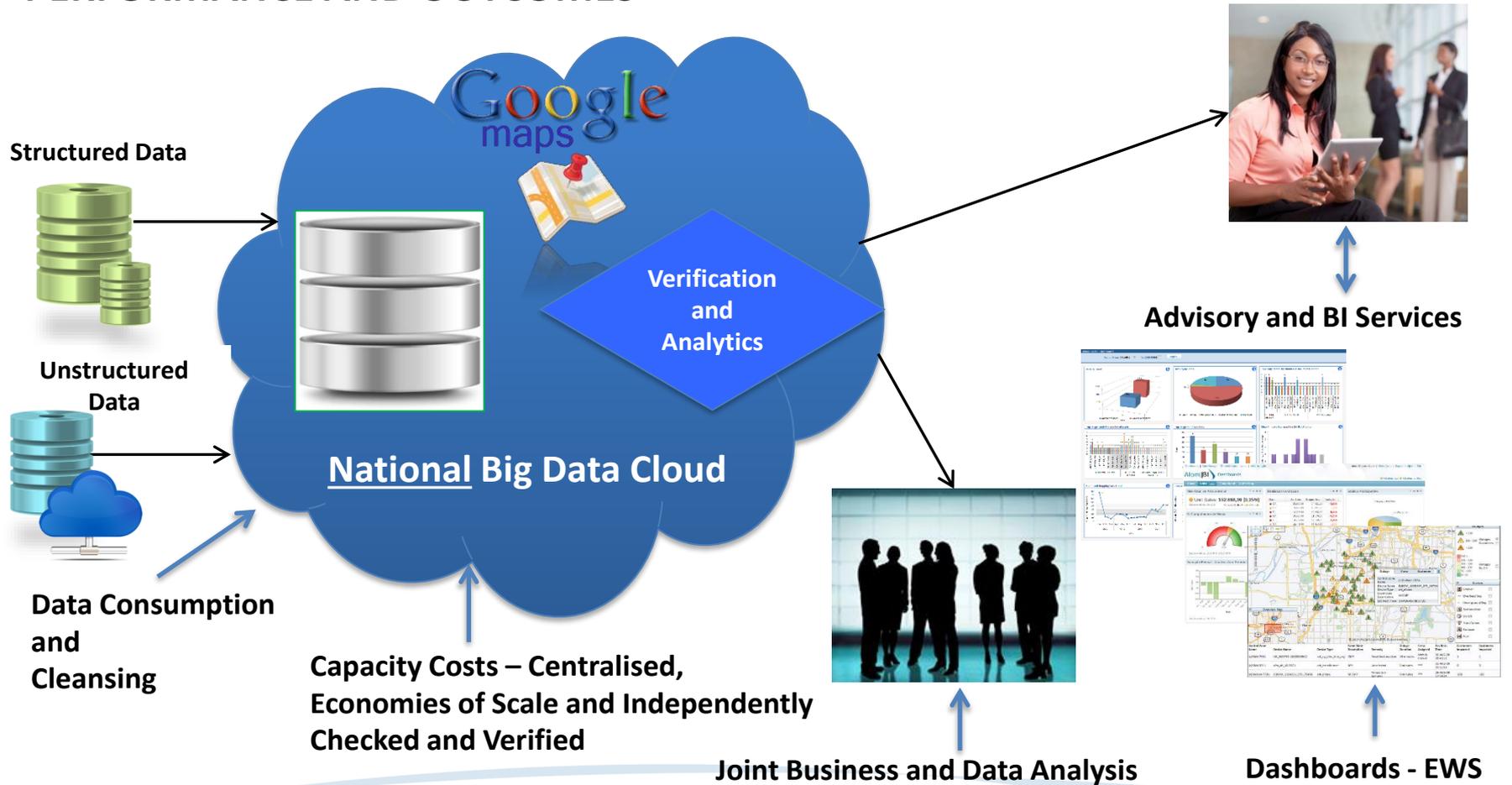
ABOUT MST™ (3/3)

The logo for MST™, featuring the letters 'MST' in a bold, blue, sans-serif font with a trademark symbol (™) to the upper right.

Modules includes but
not limited to:

- ▲ **Single View** of Customer with Profiling – Private and Public;
- ▲ **Revenue** Management, Enhancement and Protection (including Data Remediation, Cleansing and Enrichment);
- ▲ **Socio Economic** and Economic Analysis;
- ▲ **Human Resource** Management;
- ▲ **Asset/ Infrastructure** Management;
- ▲ **Tariff / Price Modelling**;
- ▲ **Automated Financial Modelling**; and
- ▲ **Customised dashboards** for monitoring and evaluation.

MST™ HAS THE ABILITY TO MANAGE BIG DATA; FINANCE, SPATIAL, GIS, ECONOMICS, HR, *ETC.* ALL OF WHICH AFFECT LOCAL AUTHORITIES PERFORMANCE AND OUTCOMES



National government cannot be expected to assist municipalities indefinitely and new/ innovative solutions are required – how will we meet our mandate otherwise

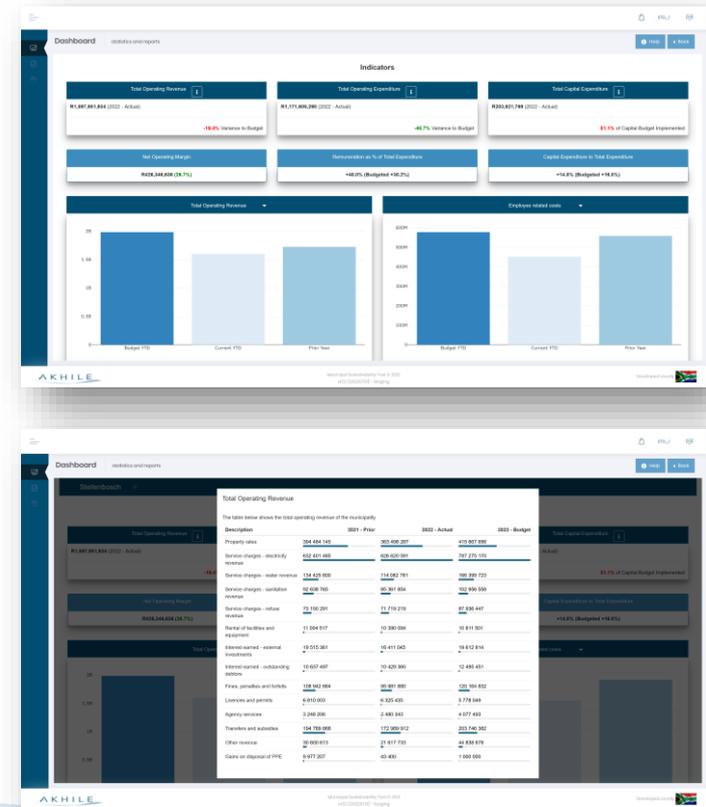
LONG-TERM FINANCIAL PLANNING – ONE OF MANY MODULES

Illustrative

MST™ includes a long-term financial planning module that enables local authorities and other entities to **create long-term financial plans of up to 10 years.**

Benefits for municipalities include:

- Quick and easy setup
- Parameter tuning
- Enables scenario planning
- Subsequent monitoring and evaluation
- Dashboard to measure progress



LOG IN



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.....

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Log in



NAVIGATE TO THE FINANCIAL MODEL

The screenshot displays the MST™ interface for the LTFP - Financial Model. The left sidebar contains a navigation menu with the following items: Dashboard, Infrastructure, Human Resources, Sustainability Models, LTFP Tool, Economic Model, Revenue Forecast, Financial Model (highlighted with a red arrow and a red callout box stating "Select the Financial Model on the menu"), and Tools and APIs. The main content area is titled "LTFP - Financial Model" and includes a "Help" button and a "Back" button. Below the title bar, there is an "Actions" section with a download icon, a "% Adjust Forecast" button, and an "Analyse" button. The "Import" tab is active, showing a dropdown menu for "City of Johannesburg" (circled in red), an "Import mSCOA Strings" section with a "Browse..." button and "No file selected" text, a "Year Selected" dropdown menu with "Please select the Year" text, an "Amount Type Selected" dropdown menu with "Please select the Type" text, and a "Save Import" button. The footer of the page includes the AKHILE logo, the text "Municipal Sustainability Tool © 2021 v1121 [20220721] - Staging", and "Developed Locally" with a South African flag icon.

SETUP: SELECT THE HISTORICAL DATA

The screenshot displays the MST™ interface for the 'LTFP - Financial Model'. The left sidebar contains navigation options: Dashboard, Infrastructure, Human Resources, Sustainability Models, LTFP Tool (expanded), Economic Model, Revenue Forecast, Financial Model (selected), and Tools and APIs. The top right shows user information 'COGTA_INTERNAL_TEST' and a help icon. The main content area is titled 'LTFP - Financial Model' and includes a 'Help' button and a 'Back' button. Below this is an 'Actions' bar with a download icon, '% Adjust Forecast', and 'Analyse' buttons. A tabbed interface shows 'Setup' as the active tab, with other tabs for 'Import', 'Financial Performance', 'Financial Position', 'Cash Flow', 'Capital', and 'Ratios'. The 'Setup' tab is divided into 'Setup Financial Planning Scenario' and 'Setup planning assumptions'. Under 'Setup Financial Planning Scenario', there is a dropdown menu showing 'JHB_2019_RAUD, JHB_2020_F', 'Load Data', and 'Save for Revenue Forecast' buttons. A 'Data to include:' dialog box is open, listing the following items with checkboxes: JHB_2019_RAUD (checked), JHB_2020_RAUD (checked), JHB_2021_ADJB, JHB_2021_AUDA (checked), JHB_2021_PAUD, JHB_2022_ORGB, JHB_2023_IBY1, and JHB_2024_IBY2. A slider control is visible next to the list, currently set to 10. The footer contains the AKHILE logo, 'Municipal Sustainability Tool © 2021 v1.121 [20220721] - Staging', 'Developed Locally', and the South African flag.

SETUP: SELECT THE FORECAST PERIOD

The screenshot displays the 'LTFP - Financial Model' interface. At the top right, there are navigation buttons for 'Help' and 'Back'. The main content area is divided into several sections:

- Actions:** Contains buttons for '% Adjust Forecast' and 'Analyse'.
- Import Setup:** Includes tabs for 'Financial Performance', 'Financial Position', 'Cash Flow', 'Capital', and 'Ratios'. The 'Setup' tab is active.
- Setup Financial Planning Scenario:** Features a dropdown menu showing 'JHB_2020_AUDA, JHB_2021_F' and buttons for 'Load Data' and 'Save for Revenue Forecast'.
- Setup planning assumptions:** Contains an 'Assumptions' section with a slider for 'Number of Years to Forecast'. The slider is set to 5 and is circled in red. Below the slider is a 'Base Forecast' button.

SETUP: SELECT THE ASSUMPTIONS

LTFP – Financial Model Help Back

Setup planning assumptions

Assumptions

Number of Years to Forecast

0 5 10

Base Forecast

Set the planning assumptions

Search:

name	2022	2023	2024	2025	2026
1 CPIX	4.5	4.5	4.5	4.5	4.5
2 Interest Rate	4.5	4.5	4.5	4.5	4.5
3 Employee Cost Escalation	4.5	4.5	4.5	4.5	4.5
4 Bulk Water Purchase Cost Escalation	4.5	4.5	4.5	4.5	4.5
-	--	--	--	--	--

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SETUP: CREATE BASE FORECAST

FINANCIAL PERFORMANCE

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LTFP - Financial Model

Actions: Adjust Forecast, Analyse

Import Setup Financial Performance Financial Position Cash Flow Capital Ratios

Search:

Item code	Item label	2020	2021	2022	2023	2024	2025	2026
0100	OPERATING REVENUE			0	0	0	0	0
0300	Property rates	12,552,806,225	13,005,302,380	13,621,890,787	14,254,876,082	14,875,445,505	15,544,640,553	16,244,308,379
0300	Service charges - electricity revenue	16,031,682,360	16,745,237,674	17,498,752,469	18,286,196,330	19,109,875,165	19,968,983,548	20,867,587,807
0400	Service charges - water revenue	7,894,876,989	8,028,064,974	8,396,442,898	8,774,491,828	9,169,343,961	9,581,964,439	10,013,152,838
0500	Service charges - sanitation revenue	5,015,470,936	5,145,162,237	5,376,494,538	5,618,646,792	5,871,484,852	6,135,701,675	6,411,808,246
0600	Service charges - refuse revenue	2,006,410,202	2,200,276,621	2,299,289,049	2,402,737,077	2,510,881,146	2,623,870,797	2,741,944,983
0800	Rental of facilities and equipment	361,300,959	374,107,025	393,941,831	408,334,213	426,938,253	446,129,574	466,205,405
0900	Interest earned - external investments	363,361,503	382,486,644	395,198,355	308,482,281	322,363,983	336,870,363	352,029,529
1000	Interest earned - outstanding debtors	1,576,102,936	1,375,992,380	1,437,912,246	1,502,618,297	1,570,236,121	1,640,896,746	1,714,737,100

Developed locally

FINANCIAL POSITION

AKHILE Municipal Sustainability Tool © 2020 v101 [002070] - Singing

LTFP - Financial Model

Actions: Adjust Forecast, Analyse

Import Setup Financial Performance Financial Position Cash Flow Capital Ratios

Search:

Item code	Item label	2020	2021	2022	2023	2024	2025	2026
0100	ASSETS							
0110	Current assets							
0120	Cash	6,667,214,315	7,215,185,321	7,539,868,660	7,879,162,750	8,233,725,074	8,604,242,702	8,991,433,624
0130	Call deposits and investments	12,808,592	1,375,050	1,436,927	1,501,589	1,569,160	1,639,773	1,713,562
0140	Consumer debtors	14,598,142,383	15,729,808,665	17,427,944,705	22,392,202,217	23,999,851,317	24,452,844,626	25,532,222,634
0150	Other debtors	3,124,777,841	1,76,389,904	184,222,950	192,512,982	201,178,067	210,228,990	219,689,294
0160	Current portion of long term receivables	1,392,567,022	994,636,840	1,039,386,408	1,085,947,706	1,134,815,253	1,189,882,044	1,239,264,736
0170	Inventory	298,136,033	365,624,389	382,027,487	399,270,973	417,238,167	436,013,885	455,634,510
0180	Total current assets	26,091,646,186	28,482,738,169	29,764,461,287	31,103,862,149	32,503,525,946	33,966,195,063	35,494,673,841

Developed locally

CASH FLOW

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LTFP - Financial Model

Actions: Adjust Forecast, Analyse

Import Setup Financial Performance Financial Position Cash Flow Capital Ratios

Search:

Item code	Item label	2020	2021	2022	2023	2024	2025	2026
0100	Cash Receipts By Source							
0110	Property rates	10,818,341,358	11,699,162,323	12,940,796,438	13,523,132,277	14,131,673,230	14,767,598,525	15,432,140,407
0120	Service charges - electricity revenue	17,803,883,807	17,651,767,090	16,623,851,646	17,371,886,554	18,153,621,487	18,970,554,370	19,824,208,404
0130	Service charges - water revenue	10,809,957,834	10,808,650,686	7,976,810,753	8,335,767,237	8,710,874,742	9,100,866,217	9,512,495,111
0140	Service charges - sanitation revenue	0	0	0	0	0	0	0
0150	Service charges - refuse revenue	1,765,340,191	1,956,423,031	2,184,324,615	2,282,619,223	2,385,337,088	2,492,677,257	2,604,847,707
0160	Service charges - other	0	0	0	0	0	0	0
0170	Rental of facilities and equipment	537,247,468	373,390,913	390,193,504	407,752,212	426,101,841	445,275,609	465,313,000
0180	Interest earned - external investments	0	0	0	0	0	0	0

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KEY RATIOS

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LTFP - Financial Model

Actions: Adjust Forecast, Analyse

Import Setup Financial Performance Financial Position Cash Flow Capital Ratios

Table Chart

Compare Ratios

Item Label	norm	2020	2021	2022	2023	2024	2025	2026
Asset Management/Utilisation								
Capital Expenditure to Total Expenditure	10-20%	80	80	80	80	80	80	80
Impairment of Property, Plant and Equipment, Investment Property and Intangible assets (Carrying Value)	<= 0%	0	0	0	0	0	0	0
Repairs and Maintenance as a % of Property, Plant and Equipment and Investment Property (Carrying Value)	<= 8%	20	20	20	20	20	20	20
Debtors Management								
Collector Rate	>= 95%	100	100	100	100	100	100	100
Net Debtors Days	<= 30 days	115	114	114	114	114	114	114
Liquidity Management								
Cash / Cost Coverage Ratio(Excl. Unspent Conditional Grants)	1-3 months	17	17	17	17	17	17	17
Current Ratio	1.5-2:1	22	11	11	11	11	11	11

Developed locally

ANALYSE AND ADJUST FORECAST

LTFP - Financial Model

Help Back

Actions

% Adjust Forecast

Import Setup **Financial Performance** Financial Position

Search:

item.code	item.label
0100	OPERATING REVENUE
0200	Property rates
0300	Service charges - electricity revenue
0400	Service charges - water revenue
0500	Service charges - sanitation revenue
0600	Service charges - refuse revenue
0800	Rental of facilities and equipment
0900	Interest earned - external investments
1000	Interest earned - outstanding debtors
1100	Dividends received
1200	Fines, penalties and forfeits
1300	Licences and permits
1400	Agency services
1500	Transfers and subsidies
1600	Other revenue

Financial Performance: Adjustments to the forecast

Legend: Forecast (Green), History (Blue)

Apply Consumer Price Index (CPI)

Apply Compound Annual Growth Rate (CAGR)

Apply Auto Machine Learning Algorithm

Custom Percentage Growth

%

Apply Custom Percentage Growth

	2024	2025	2026
	0	0	0
	-14,875,445,505	-15,544,840,553	-16,244,358,378
	-19,109,075,165	-19,968,983,548	-20,867,587,807
	-9,169,343,961	-9,581,964,439	-10,013,152,838
	-5,871,484,852	-6,135,701,671	-6,411,808,246
	-2,510,881,146	-2,623,870,797	-2,741,944,983
	-426,918,253	-446,129,574	-466,205,405
	-322,363,983	-336,870,363	-352,029,529
	-1,570,236,121	-1,640,896,746	-1,714,737,100
	0	0	0
	-1,772,577,284	-1,852,343,261	-1,935,698,708
	-18,457,544	-19,288,133	-20,156,099
	-390,021,724	-407,572,701	-425,913,473
	-17,089,007,486	-17,858,012,823	-18,661,623,400
	-2,882,929,953	-3,934,573,361	-4,111,629,162
	-4,296,652,475	-4,490,001,836	-4,692,051,919
	-4,903,194,255		

DOWNLOAD YOUR FINANCIAL PLAN

The screenshot displays the 'LTFP - Financial Model' application interface. A 'Download' menu is open, showing options: Download, Explore, Save Data, and Restore Data. A file save dialog box is overlaid on the application, titled 'Enter name of file to save to...'. The dialog shows the 'Downloads' folder with a list of files and folders. The file 'lftp_download.xlsx' is selected. The 'File name' field contains 'lftp_download.xlsx' and the 'Save as type' is 'Microsoft Excel Worksheet (*.xlsx)'. The background application shows a table with columns for years 2025 and 2026, and rows for various revenue categories.

	2025	2026
0100	0	0
0200	5,544,840,553	-16,244,358,378
0300	7,968,983,548	-20,867,587,807
0400	7,581,964,439	-10,013,152,838
0500	5,135,701,671	-6,411,808,246
0600	2,623,870,797	-2,741,944,983
0800	-446,129,574	-466,205,405
0900	-336,870,363	-352,029,529
1000	1,640,896,746	-1,714,737,100
1100	0	0
1200	1,852,343,261	-1,935,698,708
1300	-19,288,133	-20,156,099
1400	-407,572,701	-425,913,473
1500	7,858,012,823	-18,661,623,400
1600	1,692,051,919	-4,903,194,255

OTHER MODULES



REVENUE FORECASTING

MST™ provides tools to **forecast revenue** using an integrated **tariff modelling** tool that is easily customisable by service and tariff.

Features include:

- Multiple scenarios;
- Select all or individual services;
- Calculate the affordability of tariffs; and
- Compare forecasted revenue to required revenue (budget).

The screenshot displays the MST Revenue Forecasting software interface, which is divided into several sections:

- Scenario Setup:** This section allows users to define a scenario. It includes fields for "Scenario Name" (set to "Water"), "Base Year" (2021), and "Forecast Year" (2023). A "Services" dropdown is set to "Electricity, Water, Sewerage". A "Get Financial Data" button is visible.
- Selected Scenarios:** This section shows a list of scenarios. The selected scenario is "Small Household (Indigent)". Below this, there are dropdown menus for "Linked Rates Tariff", "Linked Electricity Tariff", "Linked Water Tariff", and "Linked Sewerage Tariff".
- Summary Table:** A table summarizing the financial data for the selected scenario. The table has columns for "Monthly Account", "Base Year", "Forecast year", "% Growth", "Service Input", "Linked Tariff", and "Value".
- Detail Consumption & Customer Count:** A detailed table showing consumption and customer counts for various tariff categories. The table has columns for "Tariff Code", "Category", "Tariff Rate", "Step", "Demand", "Lower", "Upper", "Max Increase", "Step Code", "Tariff Add", "Forecast Tariff", "Customer Count", and "Cover All".

Monthly Account	Base Year	Forecast year	% Growth	Service Input	Linked Tariff	Value
Property Rates	100	100		Small Household (Indigent)		4000000
Electricity - Other	210.24	246.76	17.37%	Small - other		456
Electricity - Basic	183.77	212.87	15.29%	Building - other		57
Water	184.44	194.52	5.45%	Elec - Non-pipe (DomD)		237
Water - Basic	69.84	75.09	7.52%	Electricity - Basic	Dom-4*Credit meter	
Average	100.00	100.00	0.00%	Water - Other - 100.00		58

Tariff Code	Category	Tariff Rate	Step	Demand	Lower	Upper	Max Increase	Step Code	Tariff Add	Forecast Tariff	Customer Count	Cover All
1	DOM - RESIDENTIAL	1	Step 1 Domestic 0-6	0	6	0	DOM-1	6.00000	1	6.00000	207,647	
2	DOM - RESIDENTIAL	1	Step 2 Domestic 6-12	6	12	0	DOM-2	9.17000	1	9.17000	166,807	
3	DOM - RESIDENTIAL	1	Step 3 Domestic 12-25	12	25	0	DOM-3	15.51000	1	15.51000	203,289	
4	DOM - RESIDENTIAL	1	Step 4 Domestic 25-40	25	40	0	DOM-4	30.33000	1	30.33000	16,410	
5	DOM - RESIDENTIAL	1	Step 5 Domestic 40-70	40	70	0	DOM-5	61.24000	1	61.24000	30,872	
6	DOM - RESIDENTIAL	1	Step 6 Domestic 70-99999	70	99999	0	DOM-6	95.83000	1	95.83000	10,241	

REVENUE MANAGEMENT (2/4)

Analysis of billing and the identification of delinquent customers billed for services that they can't afford.

Using filters for LSM & Credit Score.

The screenshot displays a dashboard interface for revenue management. At the top, there is a 'Filters' section with several dropdown menus: 'Select Municipality:' (Demo), 'Select Customer Type:' (Businesses, Employees, Government, Inc), 'Select Service:' (Electricity, Industrial Effluent, Prepaid Elec), 'Select LSM:' (1-3), and 'Select Credit Status:' (Debt Review, High risk, Very high risk). Below the filters, a summary bar shows 'Revenue Billed' with 'Current Month' at R22.6M, 'Previous Month' at R21.6M, and 'Previous Year' at R18.9M. A red box highlights this summary bar with the text 'Dynamic update of numbers with filter selection'. Below the summary bar, there are tabs for 'Analytics', 'Table', and 'Spatial'. A search bar is present, followed by a 'Show 10 entries' dropdown. The main part of the dashboard is a data table with columns: ContractNum, CustType, LSMGroup, CreditScore, CreditStatus, Electricity, Prepaid Electricity, Property Rates, Sanitation, Waste Management, and Water. The table contains 10 rows of data. At the bottom, there is a pagination bar showing 'Showing 1 to 10 of 449 entries' and a 'Previous' button followed by page numbers 1, 2, 3, 4, 5, ..., 45, and a 'Next' button.

ContractNum	CustType	LSMGroup	CreditScore	CreditStatus	Electricity	Prepaid Electricity	Property Rates	Sanitation	Waste Management	Water
1000144349	Residential	1-3	-2	Debt Review	R0.00	R1,214.53	R1,540.95	R580.51	R79.01	R746.36
1000144935	Residential	1-3	0	Very high risk	R2,197.53	R0.00	R1,548.97	R583.53	R79.42	R750.25
1000145698	Residential	1-3	0	Very high risk	R0.00	R1,231.18	R1,562.06	R588.46	R80.09	R756.59
1000145728	Residential	1-3	0	Very high risk	R0.00	R1,231.69	R1,562.72	R588.71	R80.12	R756.91
1000145787	Residential	1-3	0	Very high risk	R0.00	R1,232.41	R1,563.64	R589.05	R80.17	R757.35
1000146203	Residential	1-3	0	Very high risk	R0.00	R1,238.14	R1,570.91	R591.79	R80.54	R760.88
1000146270	Residential	1-3	0	Very high risk	R0.00	R0.00	R1,572.22	R0.00	R80.61	R0.00
1000146288	Residential	1-3	0	Very high risk	R0.00	R0.00	R1,572.41	R0.00	R80.62	R0.00
1000146318	Residential	1-3	0	Very high risk	R0.00	R1,239.72	R1,572.90	R592.54	R80.65	R761.84
1000146513	Residential	1-3	0	Very high risk	R0.00	R1,242.32	R1,576.21	R593.79	R0.00	R763.44

REVENUE MANAGEMENT (3/4)

Analysis of customer debt and easily identify the customers that can afford to pay but arrears.

Connect to digital collection platform for effective and affordable collection.

Filters

Select Municipality:

Polokwane

Select Arrears Status:

Current, Arrears

Select Credit Status:

Good, Excellent

Select Customer LSM:

8-10

Customer Balances

Current Month: R2,991.0M Previous Month: R3,013.6M Previous Year: R0

Analytics Table Spatial

Show: 10 entries

Search: residential

ContractNum	CustType	LSMGroup	Private Risk Status	Public Risk Status	Combined Risk Status	Current	Arrears	Total	Deposit	Additional Deposit Required
000000140	Residential	8-10	Excellent	High Risk	Unknown	R462.14	R15,605.34	R16,067.48	R0.00	R500.00
000001645	Residential	8-10	Excellent	High Risk	Unknown	R167.07	R1,877.65	R2,044.72	R0.00	R200.00
000002144	Residential	8-10	Excellent	High Risk	Unknown	R597.19	R5,246.48	R5,843.67	R0.00	R600.00
000002155	Residential	8-10	Excellent	High Risk	Unknown	R684.52	R6,101.34	R6,785.86	R0.00	R700.00
000002249	Residential	8-10	Excellent	High Risk	Unknown	R688.31	R2,256.11	R2,944.42	R0.00	R700.00
000002255	Residential	8-10	Good	Unknown	Unknown	R657.41	R544.07	R1,201.48	R0.00	R700.00
000002329	Residential	8-10	Excellent	Unknown	Unknown	R325.66	R120.68	R446.34	R0.00	R400.00
000002536	Residential	8-10	Good	Low Risk	Unknown	R0.00	-R12,077.20	-R12,077.20	R8,324.00	R0.00
000005049	Residential	8-10	Excellent	Moderate Risk	Unknown	R501.67	R1,306.47	R1,808.14	R0.00	R500.00

Select customers in the table to the left to refer for debt collection:

ContractNum	Total
0010460802	R38,297.75

You selected 1 customers for referral to debt collectors. Click the button below to confirm the selection for referral.

Customer profiling using private and government data

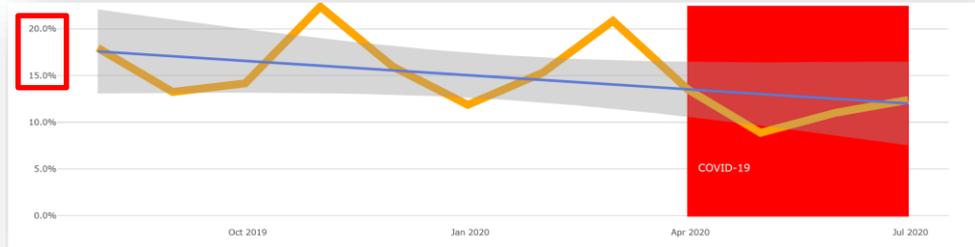
Automatic calculation of additional deposit required

Send to digital sheriff for collection

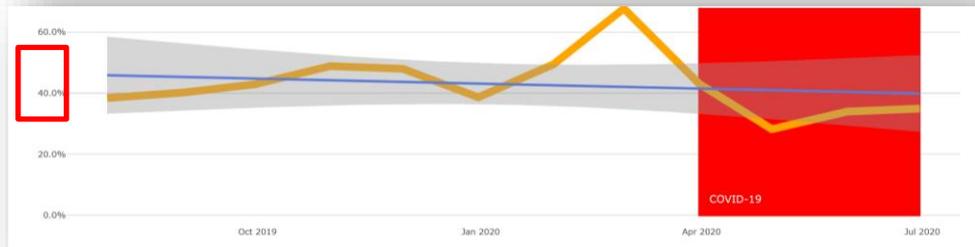
REVENUE MANAGEMENT (4/4)

- Analysis of customer collection ratios with filters to isolate certain customer types and profiles.
- Profiling clearly indicates the ability of customers to pay for services and impact of a disaster like Covid-19.

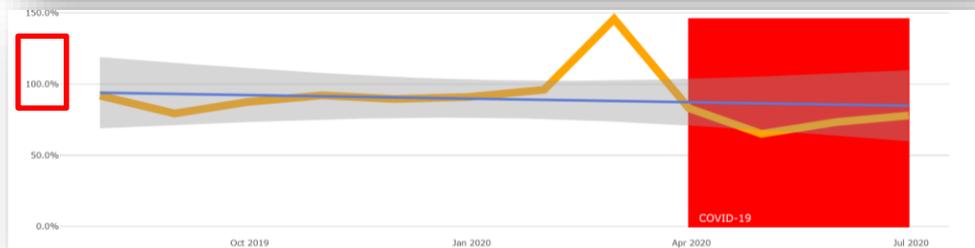
LSM 1-3



LSM 4-7



LSM 8-10



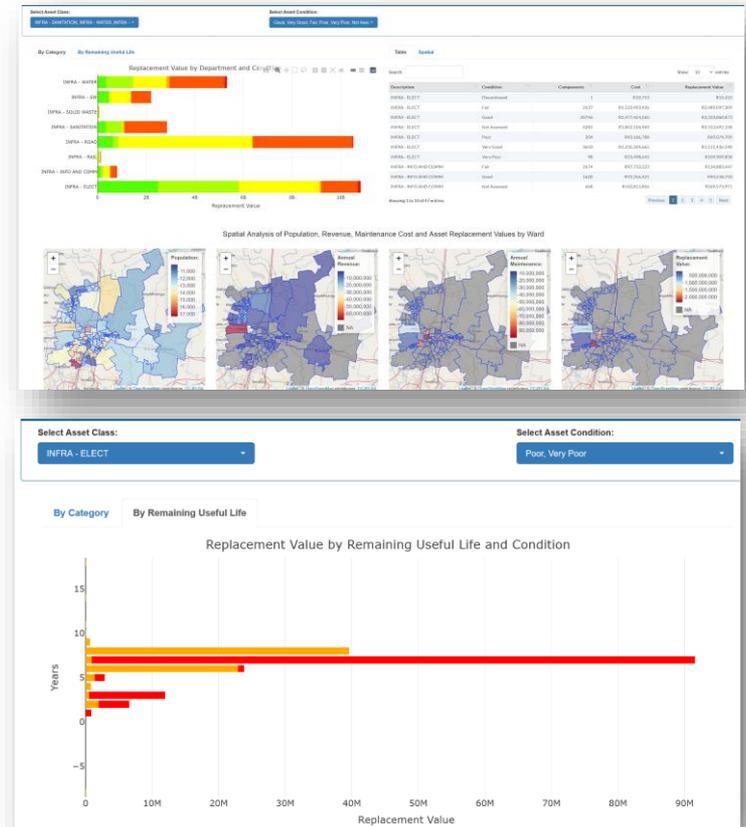
ASSET MANAGEMENT (1/2)

MST™ provides municipalities with **asset management business intelligence** to make strategic decisions.

Progressive thinking and **planning enable sustainable service delivery in the long term.**

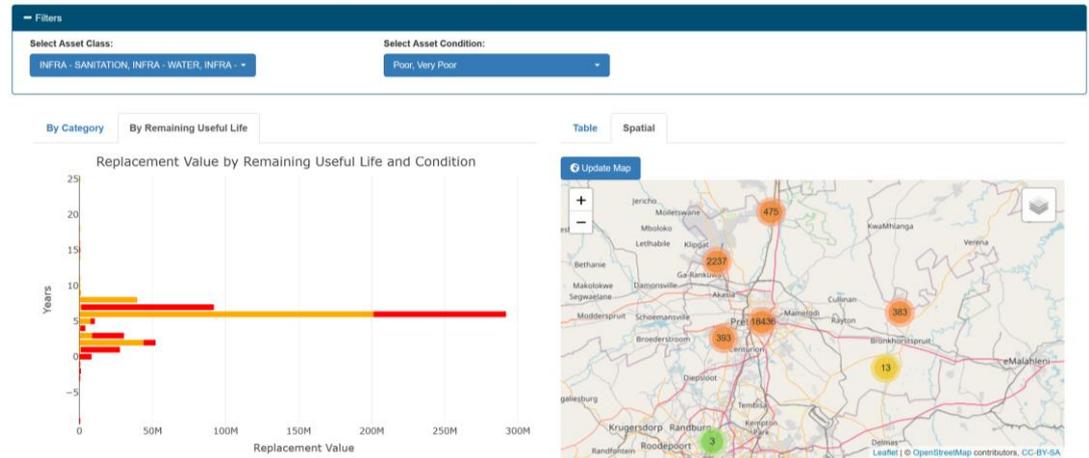
Features include:

- ▲ Single view of entire asset base;
- ▲ Asset condition linked to replacement;
- ▲ Spatial views linked to revenue and maintenance costs;
- ▲ On demand analytics using filters, charts, maps and tables; and
- ▲ Individual assets visible on a map colored by condition.



ASSET MANAGEMENT (2/2)

Isolate assets in a poor condition and have instant insight of the locations as well as the timing and extent of replacement costs is a key input to long-term financial planning.



Values automatically update with selections.

Maps zoom to individual asset level and toggle to satellite view.

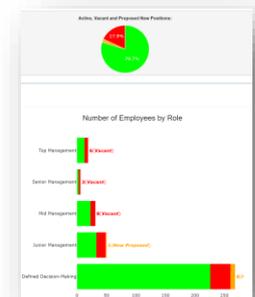
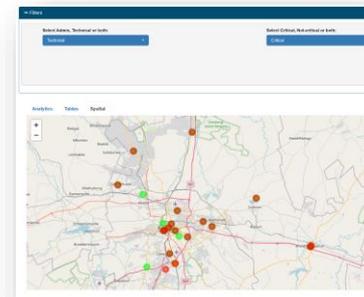


HUMAN RESOURCE MANAGEMENT

MST™ includes **business intelligence tools** designed to make **human resource specific strategic decisions**.

Features include:

- Single view of human resource data;
- Relate service delivery issues to staff vacancies;
- Identify critical vacant positions that affect service delivery;
- Identify non-critical administrative positions to cut costs and freeze vacant positions; and
- All data spatially depicted.

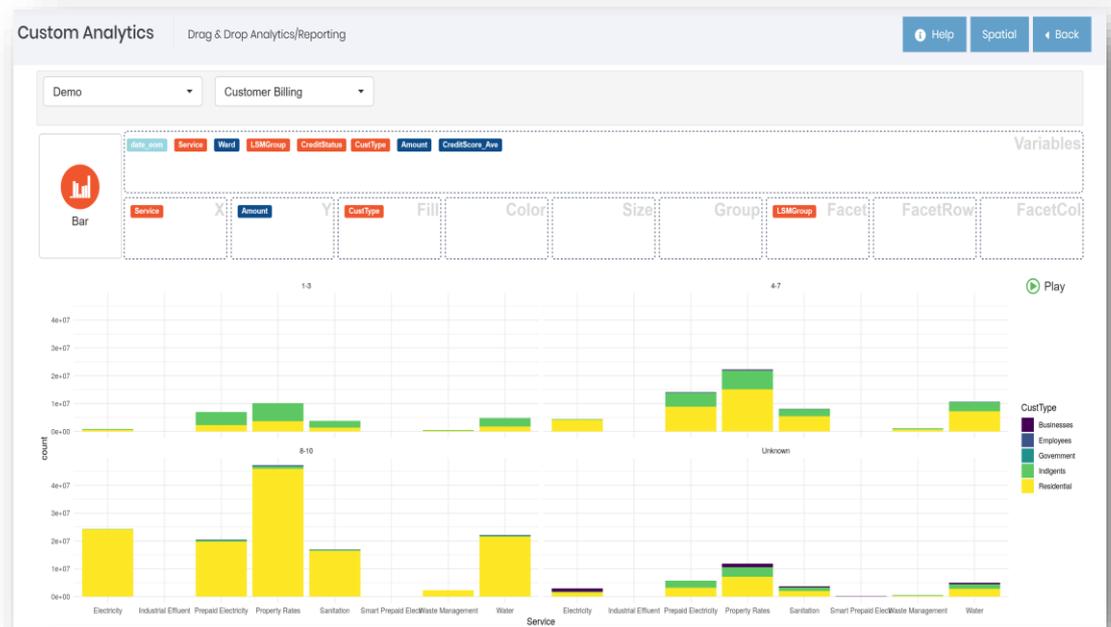


CUSTOM ANALYTICS

MST™ includes a custom analytics module that enables municipalities to **analyse data and create custom visualisations.**

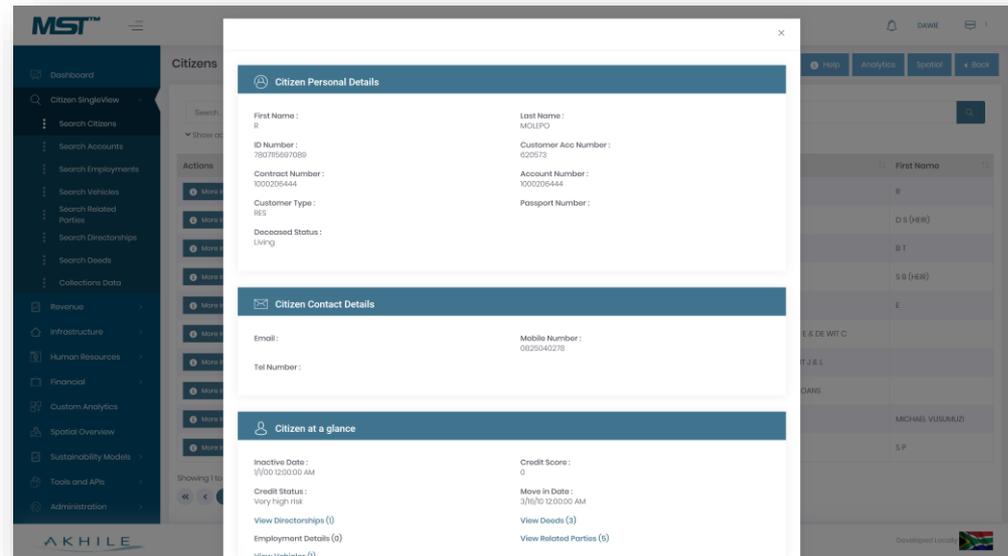
Features include:

- Custom charts;
- Change colors;
- Filter data; and
- Export results to use in presentations and emails.

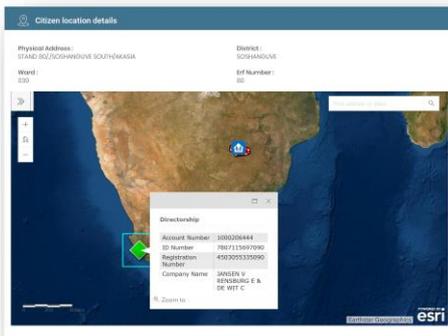


CITIZEN SINGLE VIEW

MST™ provides municipalities with a **powerful single view of customers** through direct integration to data sources like credit bureau, tracing agents and government departments.

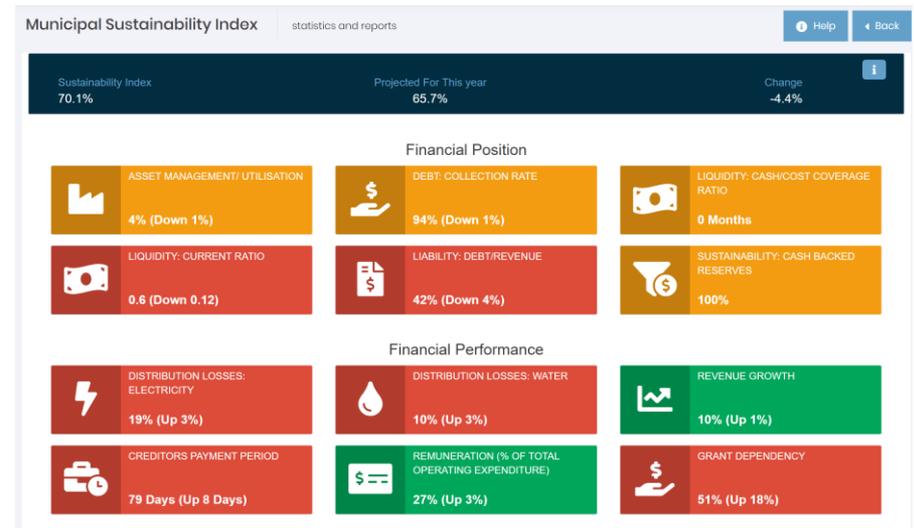


Providing the user with Citizen Location Details.



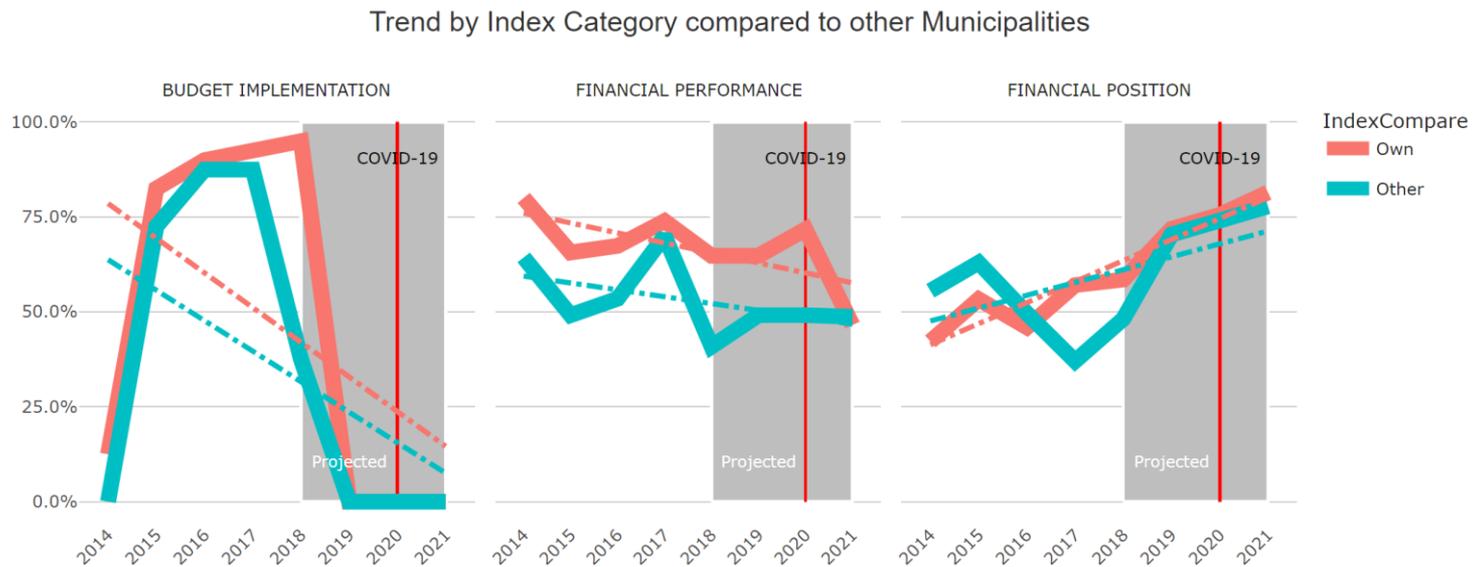
MSI™ (Municipal Sustainability Index™) (1/2)

- MSI™ was developed by Akhile to provide insight into the sustainability of municipalities;
- Highlights areas of improvement; and
- Taking all financial ratios into account.



MSI™ (Municipal Sustainability Index™) (2/2)

- MSI™ provides time series and trend analysis and comparison capabilities to understand what needs attention and where should focus be directed to address sustainability issues.



The MSI™ can be used for benchmarking based on local circumstances

OUR STRATEGIC PARTNERS



We can leverage these partners and additional resources, as and when required



We have access to additional resources, as and when required

NEWSPAPER HEADLINES YOU DON'T WANT TO SEE (1/3)

Municipalities, Cities and Territories on the brink of collapse: Report



NEWSPAPER HEADLINES YOU DON'T WANT TO SEE (2/3)



**Municipal, City and Territory sectors
about to collapse – Ratings Afrika**

NEWSPAPER HEADLINES YOU DON'T WANT TO SEE (3/3)

- ▲ The good, the bad and the shocking: A visual gauge of the financial state of Municipalities, Cities and Territories



QUESTIONS

THANK YOU!



UCLG AFRICA
United Cities and Local Governments of Africa
Cités et Gouvernements Locaux Unis d'Afrique
CGLU AFRIQUE

AKHILE