

“Manage your utilities smarter”

SMART UTILITIES Revenue Recovery Solutions

Smart Metering / Pre-Paid Vending / Utility Accounting / Engineering

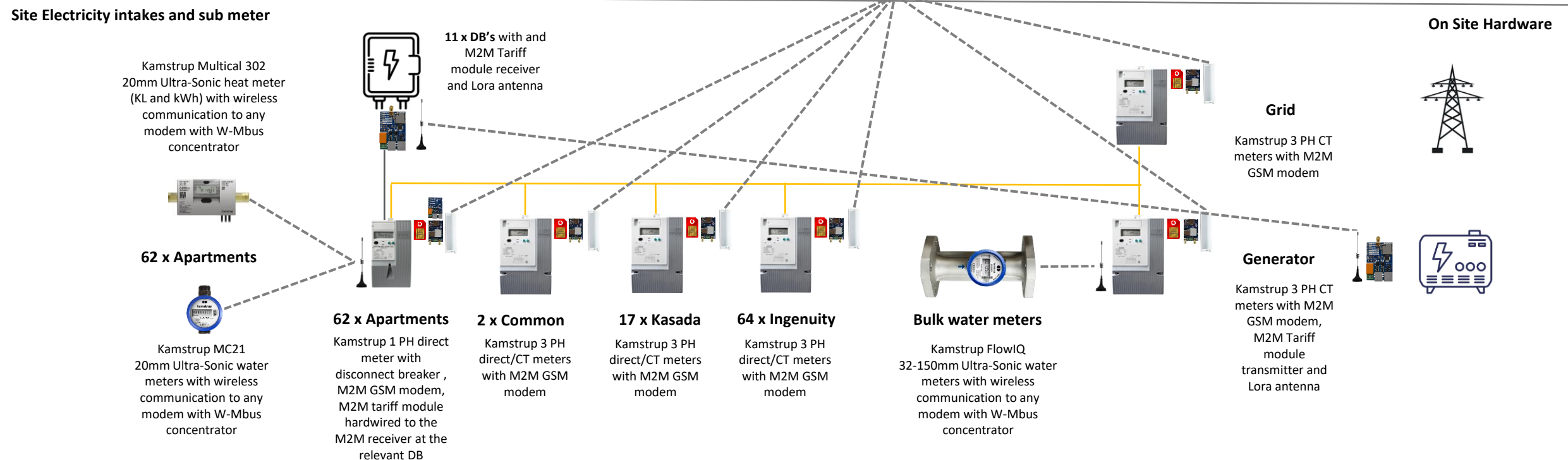
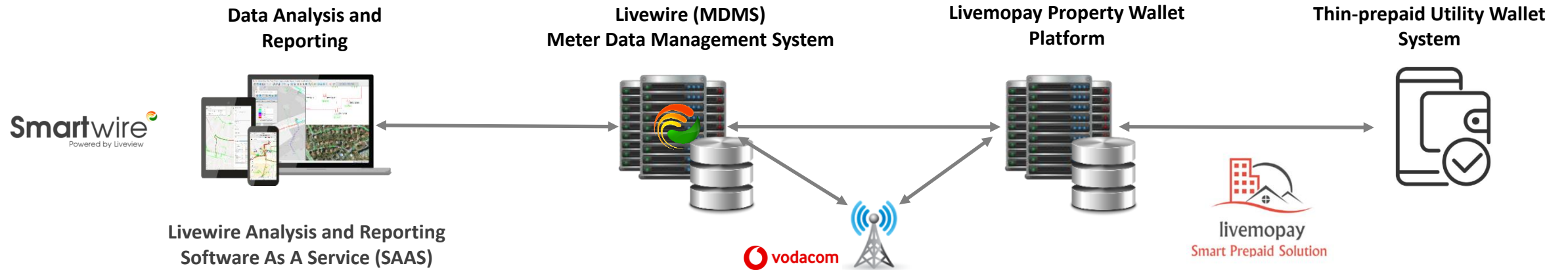
livewire

ENGINEERING AND CONSULTING (PTY) LTD

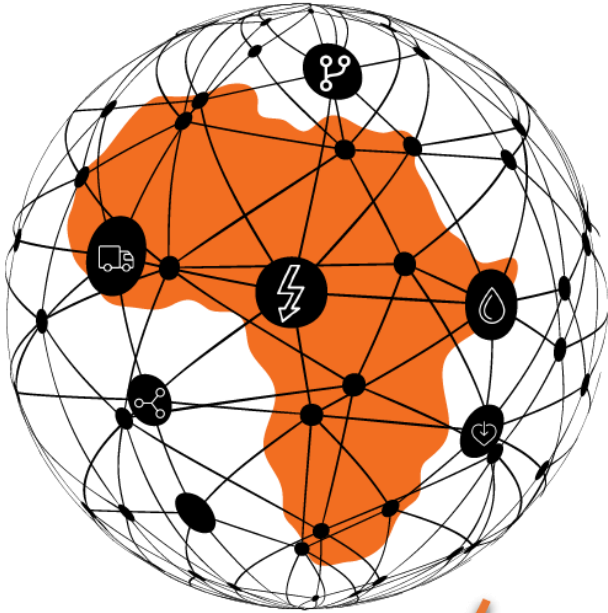
a **macrocomm** group company



EXAMPLE SYSTEM DESIGN



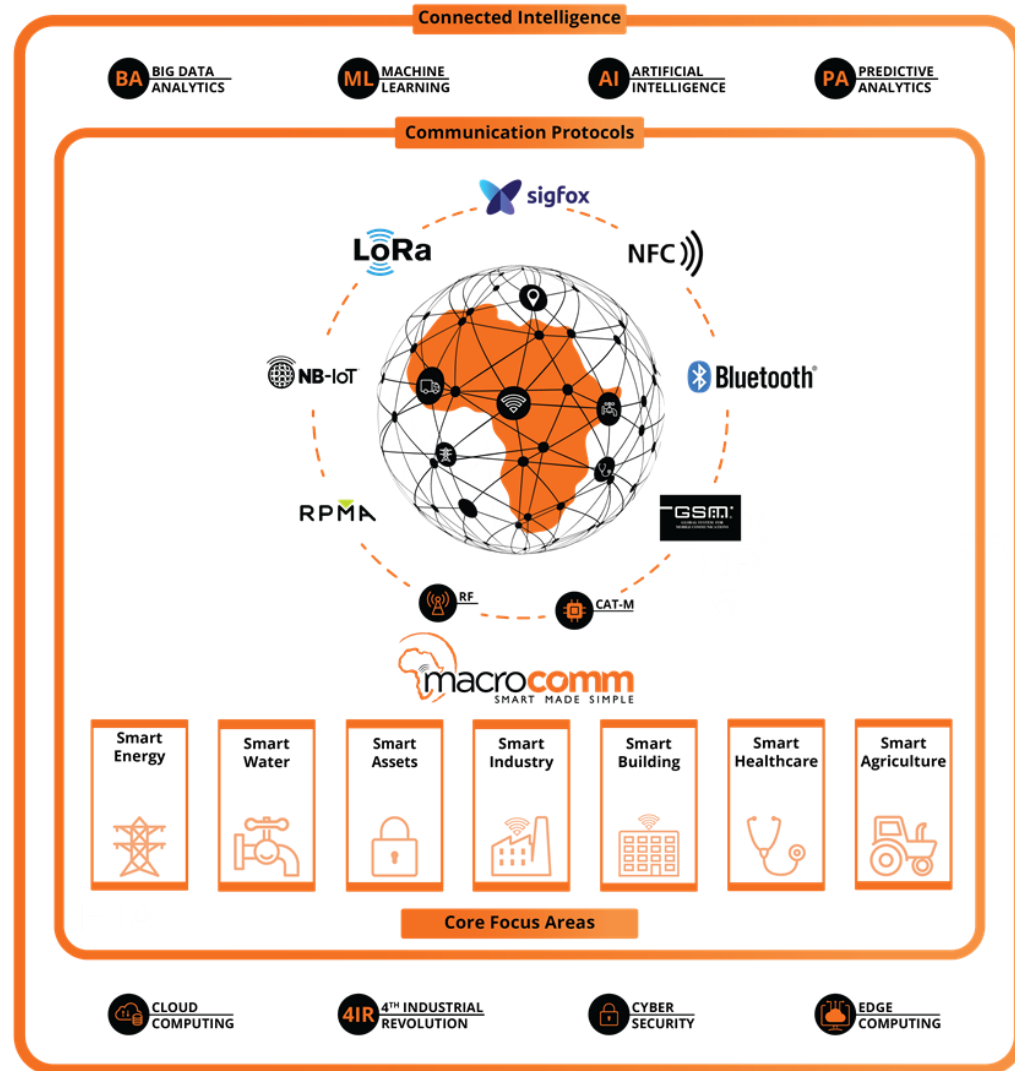
BUSINESS INTRODUCTION



- **MACROCOMM IS A LEVEL 1 BBBEE** 100% black woman-owned organisation
- Livewire is 65.4% owned by Macrocomm Group with 40+ staff full-time in **LIVEWIRE IS ALSO A LEVEL 1 BBBEE** company
- Macrocomm was **ESTABLISHED** in 2005 and Livewire in 2006
- Founded on the values of **INTEGRITY AND PROFESSIONALISM**.
- The company has a strong focus on understanding its customer needs and designing and building **BESPOKE SOLUTION** to address the key challenges facing our customers.
- We are able to offer turnkey solutions deployed by our team of **EXPERTS ACROSS SOUTH AFRICA AND AFRICA**
- Through our partner ecosystem, we build solutions to create a unique offering in Smart City Management, Energy Management, Smart Industry Management, Utility Management and **RENEWUE RECOVERY SOLUTIONS** (with in-house developed Unified Meter Data Management Platform).
- Macrocomm prioritises job creation through meaningful **ECONOMIC TRANSFORMATION AND INCLUSIVE GROWTH**
- We have created a number of NQF level 4 jobs and have upskilled a number of government employees through our **TRAINING AND SKILLS TRANSFER PROGRAMS**



BUSINESS ECOSYSTEM



USE CASES

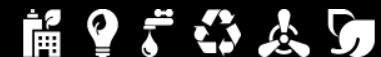
MacrocommSmart Water and Electricity Monitor

MacrocommSmart Logistics and Fleet Analytics

MacrocommSmart Asset Management

MacrocommSmart Infrastructure

MacrocommSmart **Revenue & Enhancement**





ABOUT LIVEWIRE

Livewire is a utility management company that harness smart technologies and knowledge to deliver solutions to our clients that maximize and sustain utility recoveries, savings and efficiency across all types of utilities

Smart Metering / Pre-paid Vending / Utility Accounting / Engineering



PROGRAM GOALS

“How can we help you manage your utilities smarter?”

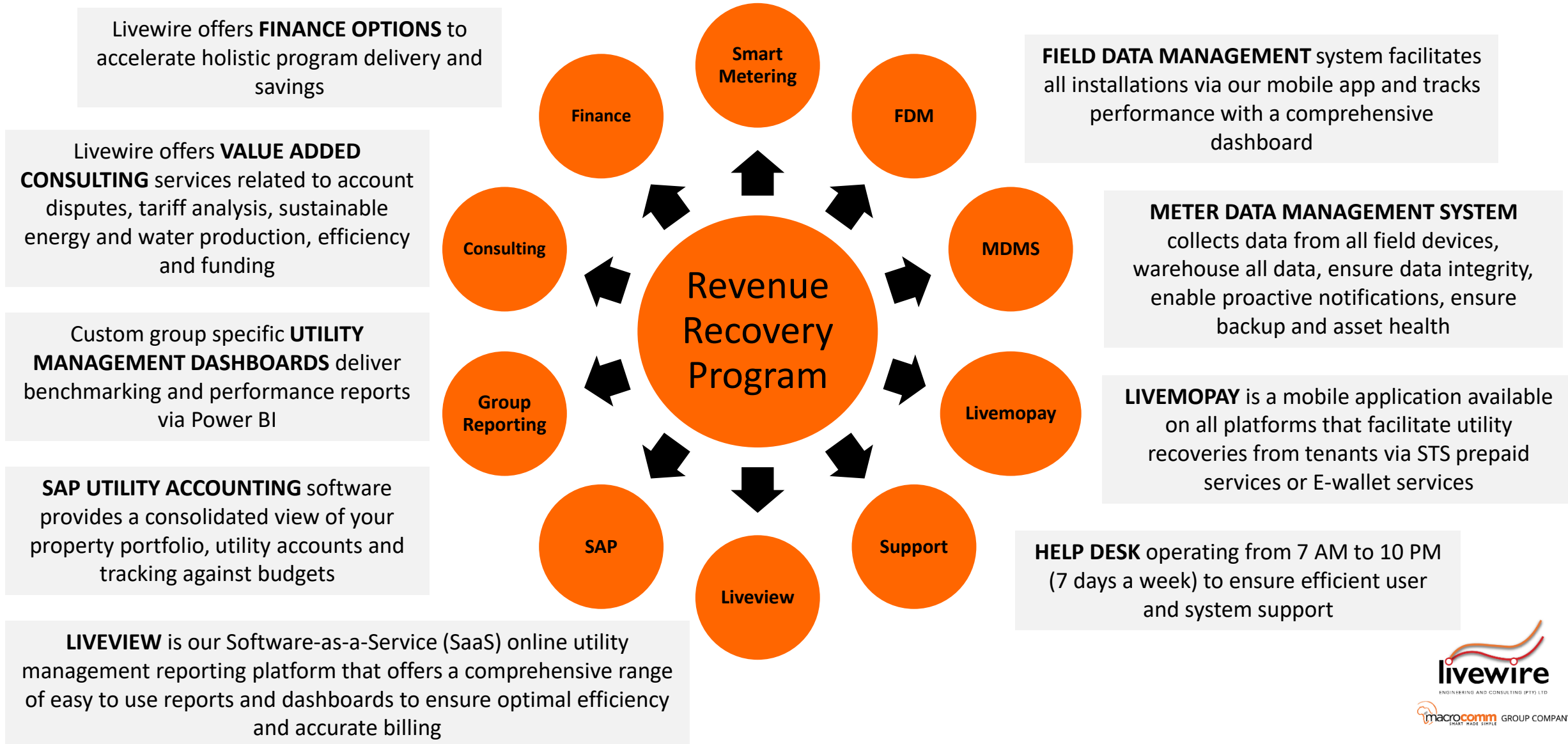


- Verify utility **ACCOUNT ACCURACY** and secure any over billing refunds
- Ensure that all utilities are always on the most **COST EFFECTIVE TARIFFS** available
- Establish and track against a proper **UTILITY BUDGET**
- Identify, measure and understand all high **UTILITY COST CONTRIBUTION AREAS**
- Implement **EFFICIENCY SOLUTIONS** to reduce and control utility costs
- Implement **SUSTAINABLE ENERGY AND WATER SOURCES** to reduce cost and secure supply
- Optimise and ensure accurate **TENANT RECOVERIES** with best in class metering solutions
- Accelerate the holistic program delivery with **FINANCE, FUNDING AND AVAILABLE TAX INCENTIVES** to realise and sustain maximum savings

VALUE PROPOSITION



SMART METERING INFRASTRUCTURE (Electricity, Water, Gas and Environmental)



SYSTEM ARCHITECTURE OVERVIEW

LIVEWIRE Meter Data Management (MDM) Platform linked to IoT Hub for Energy Data Analytics, Accounting and Reporting



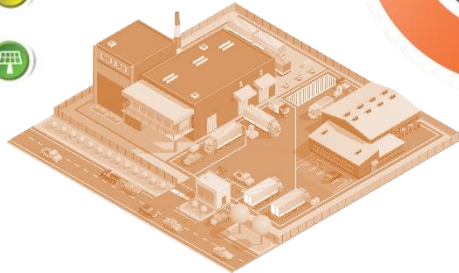
Tier 2 – Connectivity and MQTT

Tier 4 – Data Analytics and Reporting

Integrated Utility Reporting and Dashboard Display

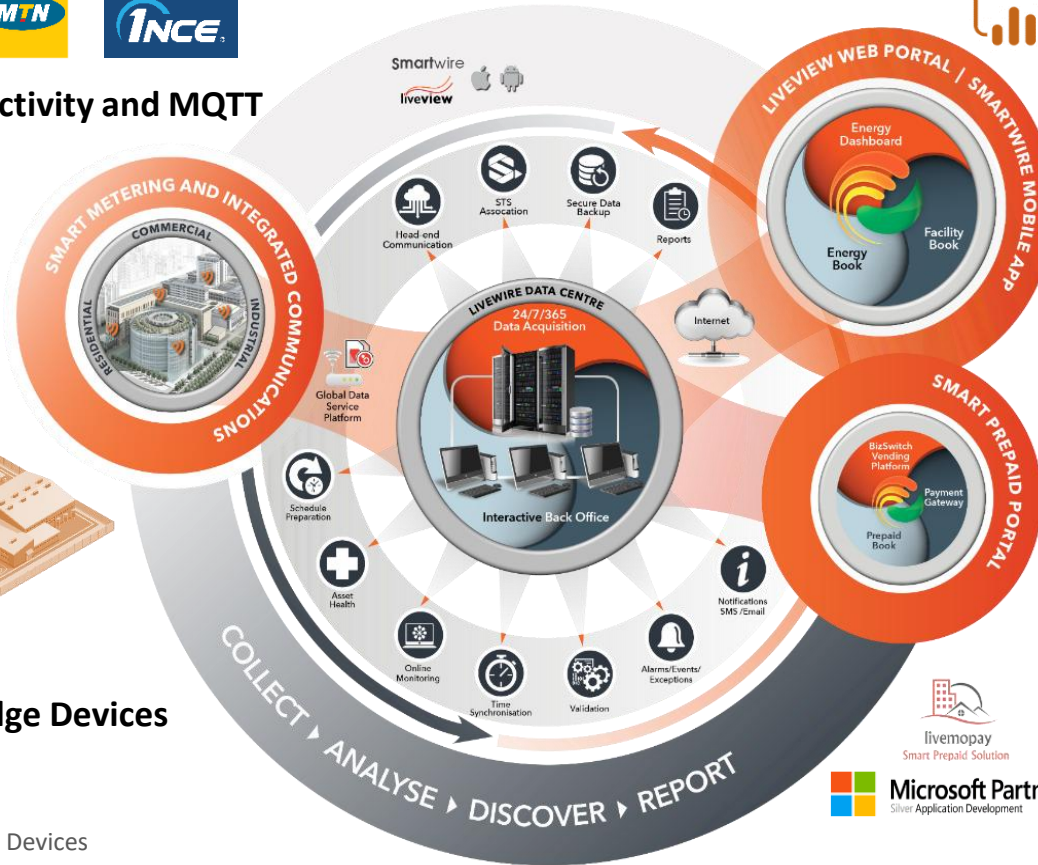


Kamstrup | Elster | Honeywell | Hexing | Enermax | EDM
Landis+Gyr | Itron | Energy Intellect | Schneider Electric
Echelon | Sensus | Inventia | Holosys



Tier 1 – Metering and Edge Devices

Power Meter Devices
Water Meter Devices
Cooling / Heating Meter Devices
IoT Controller Devices



Tier 3 – Meter Data Management and Visualization Console



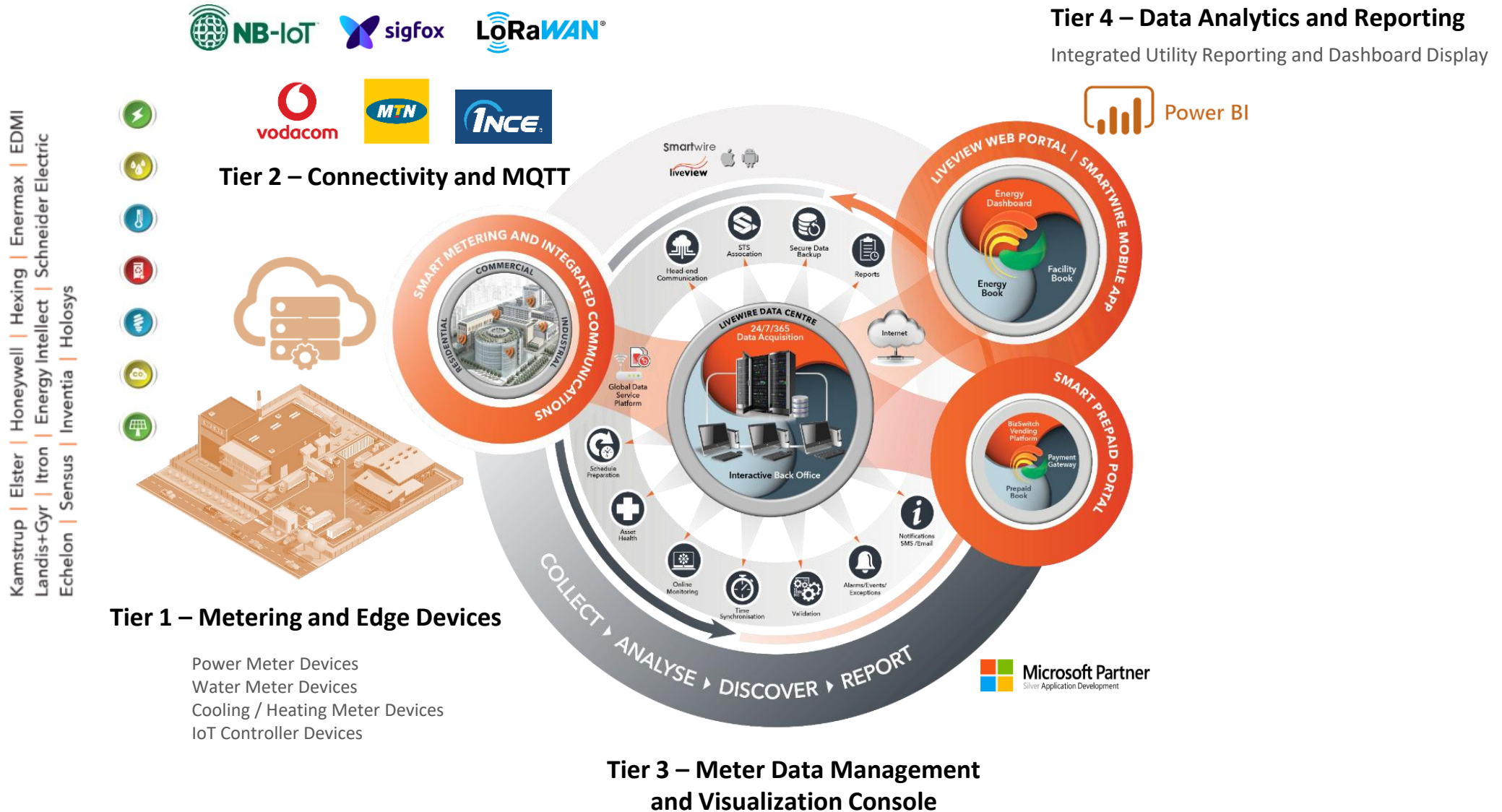
Tier 5 – Utility Accounting and Tariff Optimization

Integrated Property / Financial Accounting



MDMS AND UTILITY MANAGEMENT TOOLS - OVERVIEW

LIVEWIRE Meter Data Management (MDM) Platform linked to IoT Hub for Energy Data Analytics, Accounting and Reporting



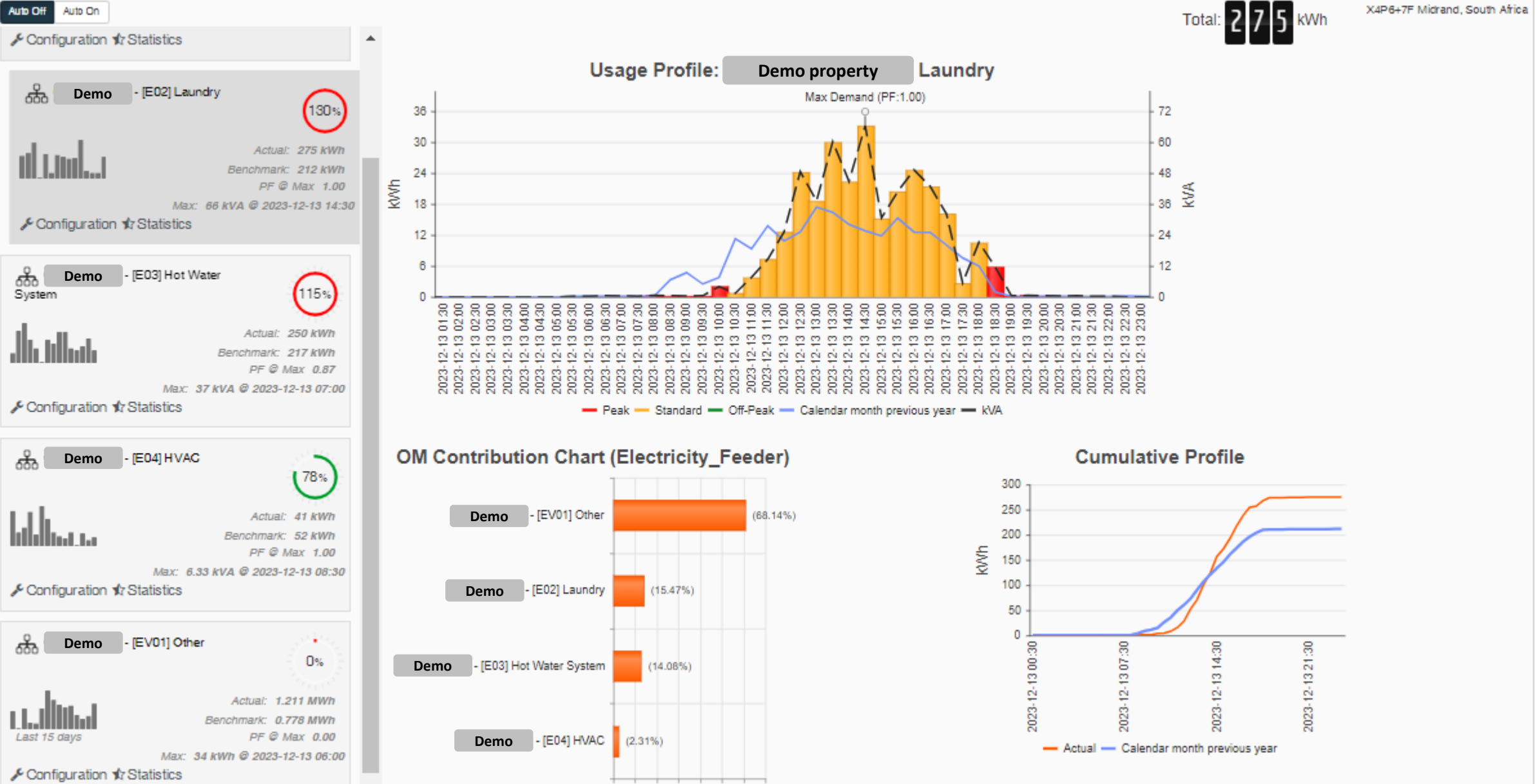
LIVEVIEW ONLINE UTILITY MANAGEMENT SOFTWARE – OPTIONAL

SOLUTION	FUNCTIONALITY
Utility Bill Comparison & Tariff Analysis	<ul style="list-style-type: none"> Identify over and under billing Ensure that you are on the most cost effective tariff available to you
Cost allocation Summary & Cost allocation slips	<ul style="list-style-type: none"> Accurate cost allocation to all tenants and sub meters
Dashboard displays	<ul style="list-style-type: none"> TV displays Group and Management views We cater for all your needs
Group Summary and Benchmark Reporting	<ul style="list-style-type: none"> We can compare different sites with multiple tariffs costing & usage Detailed report on energy or water performance to monitor current data and historical data
SANS 204 1 2008 Energy Efficiency in Buildings	<ul style="list-style-type: none"> Group and facility performance compared to SANS standard to identify inefficiency building management
DATA import / Exports	<ul style="list-style-type: none"> We can export any format and layout for your importing needs to your financial system Flat files "CSV" SOAP Interface for easy data exports
Custom BI Dashboard	<ul style="list-style-type: none"> Our team can design and develop custom industry / company specific dashboards that integrate data from multiple sources
Photovoltaic Solar Reporting	<ul style="list-style-type: none"> Solar billing reports with Grid demand saving calculations
Custom Report Development	<ul style="list-style-type: none"> Lets take care of your existing report and make life easy



<https://youtu.be/UVhXiiPY8Dc>

LIVEVIEW DASHBOARD – CONSUMPTION POINTS EXAMPLE



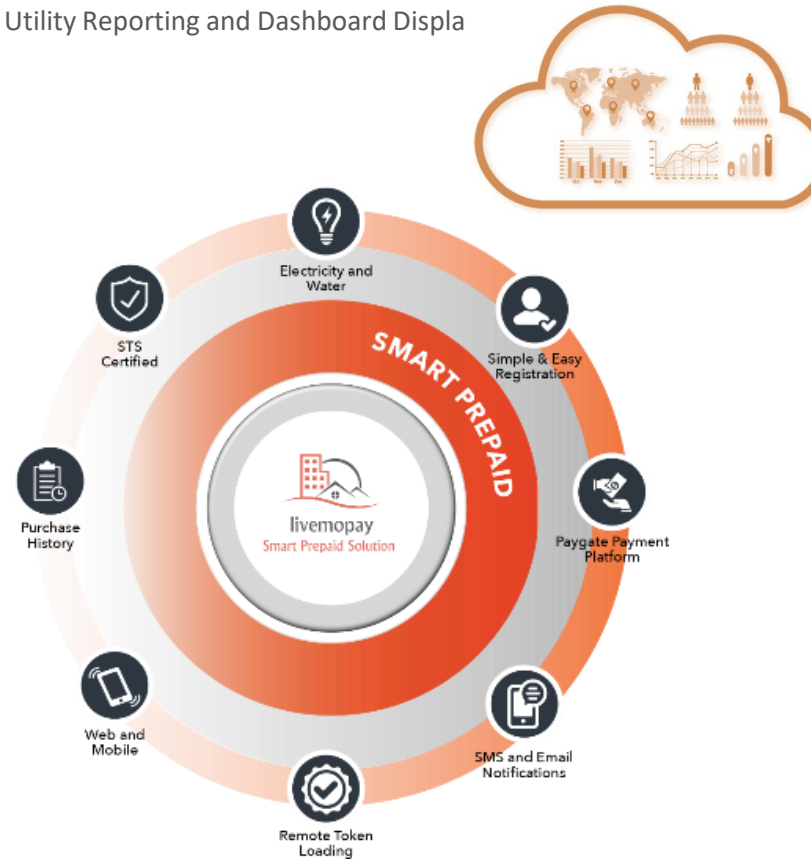
SMARTWIRE UTILITY MANAGEMENT APPLICATION

Tools	Functionality
Utility Book	<ul style="list-style-type: none">• Smart meter load profiles• Smart prepaid load profiles and purchases• Prepaid purchases and usage• Conventional meter readings and usage statistics
Competition Book	<ul style="list-style-type: none">• Leaderboard scoring per defined category e.g. Consumption per Occupancy• Total Cost per Occupancy• Time-of-Use Cost per Occupancy
General	<ul style="list-style-type: none">• Messages – Push notifications• User Profile



THIN-PREPAID / LIVEMOPAY UTILITY WALLET - OVERVIEW

Integrated Utility Reporting and Dashboard Displa



Tier 5 – Utility Accounting and Tariff Optimization

Integrated Property / Financial Accounting

LIVEMOPAY MOBILE APPLICATION (UTILITY WALLET)

The problem

Challenge

Inaccurate billing, data errors, ease of use


Negatives

Low customer satisfaction due to no transparency



The solution

One unified platform that takes data from all sources of revenue combined with GIS data to be able to accurately determine revenue and to enhance revenue collection.



livemopay
Smart Prepaid Solution

Sign in

Email address

Email address is required

Password

Forgot password?

Sign in

v20231023.0.3.0

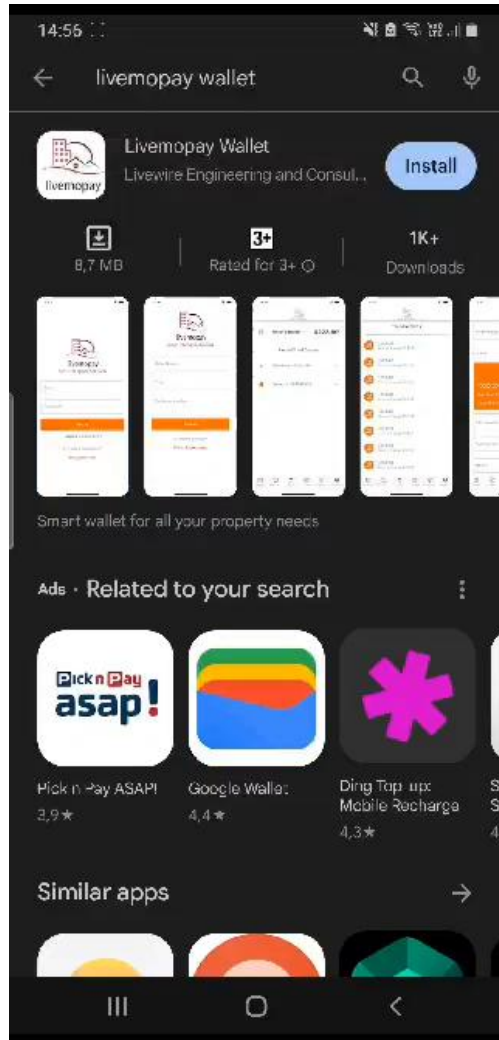
A banner for Livewire - Macrocomm Group Company. It has a dark brown background with abstract, curved shapes in lighter shades of brown. The text "Livewire - Macrocomm Group Company" is written in a bold, white, sans-serif font. Below it, in a smaller white font, is the text "PROVEN ENERGY MANAGEMENT SOLUTIONS We aim to connect the world's meters and sensors to the web to provide our customers with quasi real-time information to manage their energy resources (electricity, water, gas, etc.). Livewire provides utility meter monitoring and data management hardware and services. We give our customers convenient, online access to detailed energy consumption data. Livewire's services range from the supply of individual monitoring components to complete turn-key system design and implementation." There is a small grid of dots in the top right corner.

Livewire - Macrocomm Group Company

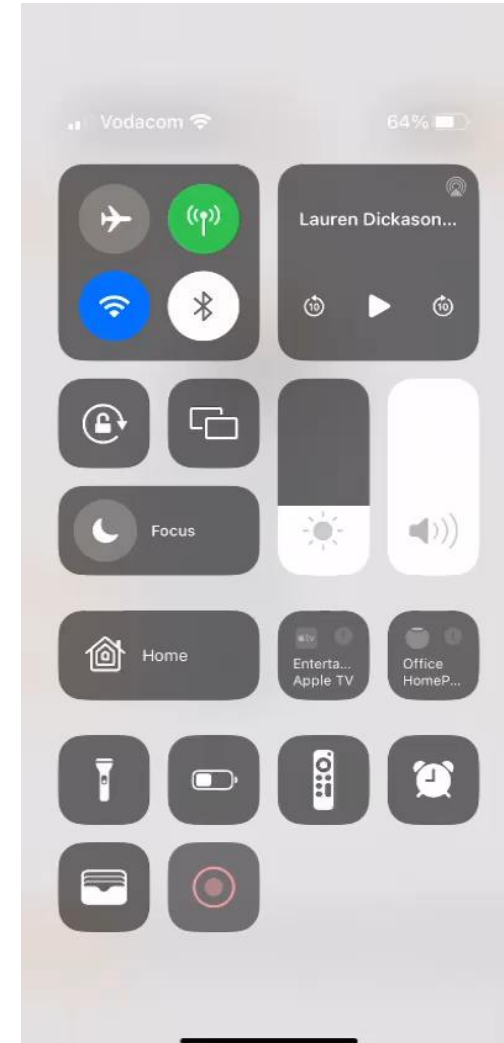
PROVEN ENERGY MANAGEMENT SOLUTIONS We aim to connect the world's meters and sensors to the web to provide our customers with quasi real-time information to manage their energy resources (electricity, water, gas, etc.). Livewire provides utility meter monitoring and data management hardware and services. We give our customers convenient, online access to detailed energy consumption data. Livewire's services range from the supply of individual monitoring components to complete turn-key system design and implementation.

LIVEMOPAY MOBILE APPLICATION (CLIPS)

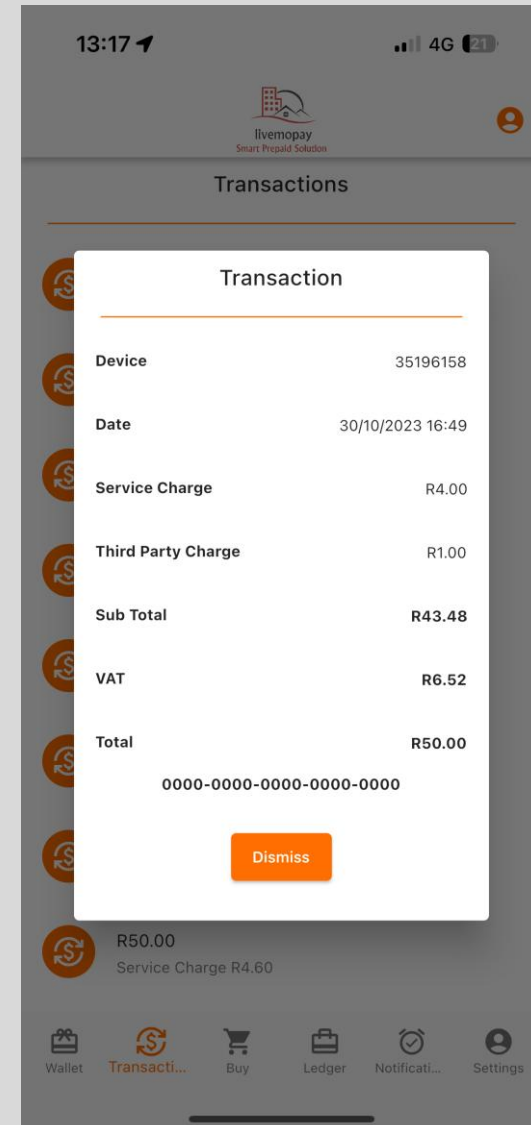
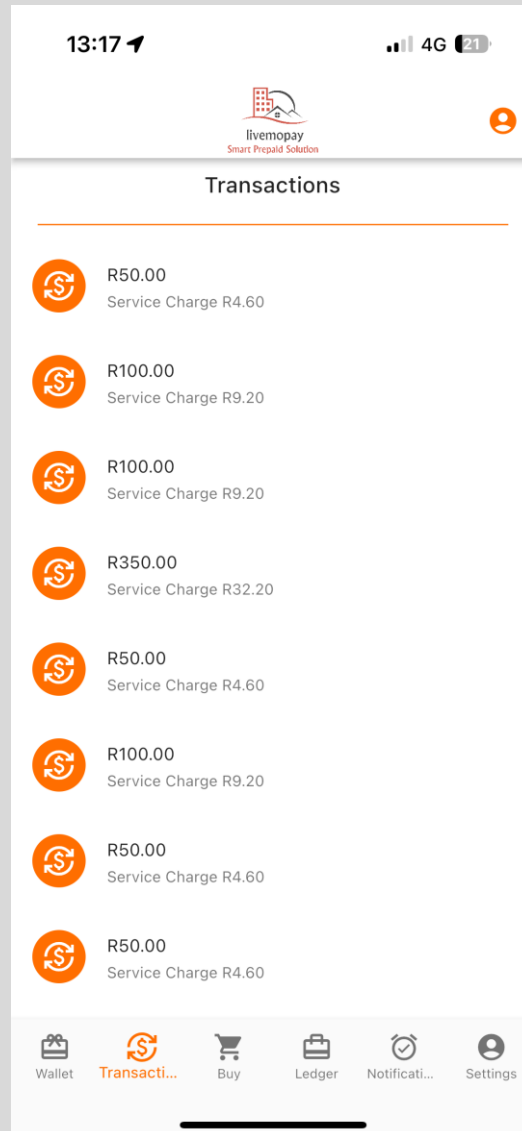
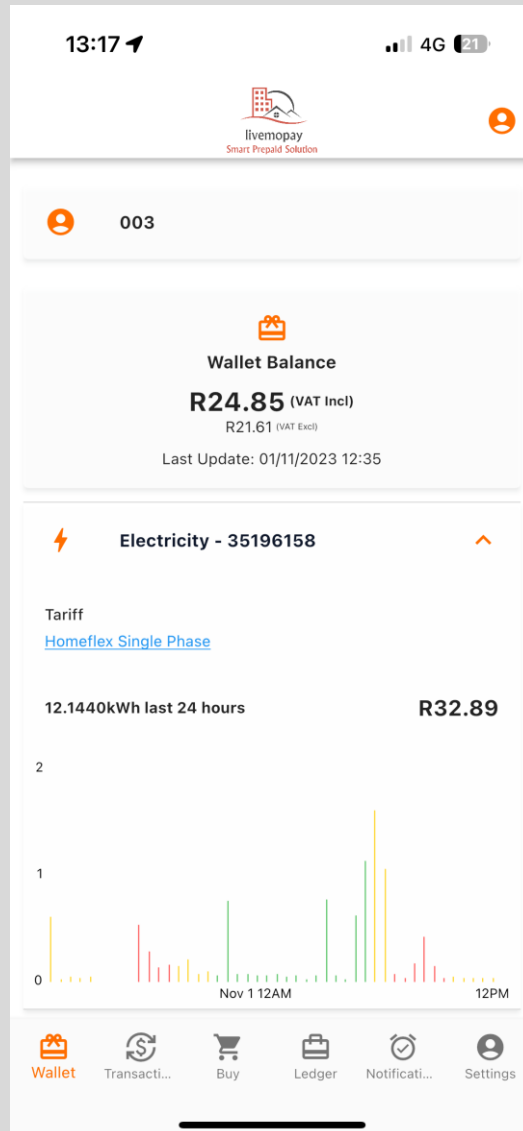
Registration



Wallet top-up





MOBILE APPLICATION (SCREENSHOTS)



MOBILE APPLICATION (SCREENSHOTS)

13:17

4G 21



Smart Wallet - 35196158

Amount

XXXX XXXXXX XXXXX

Exp. Date MM/YY


Card Holder


Card number


Name on card


MM/YY


CVV


 Wallet

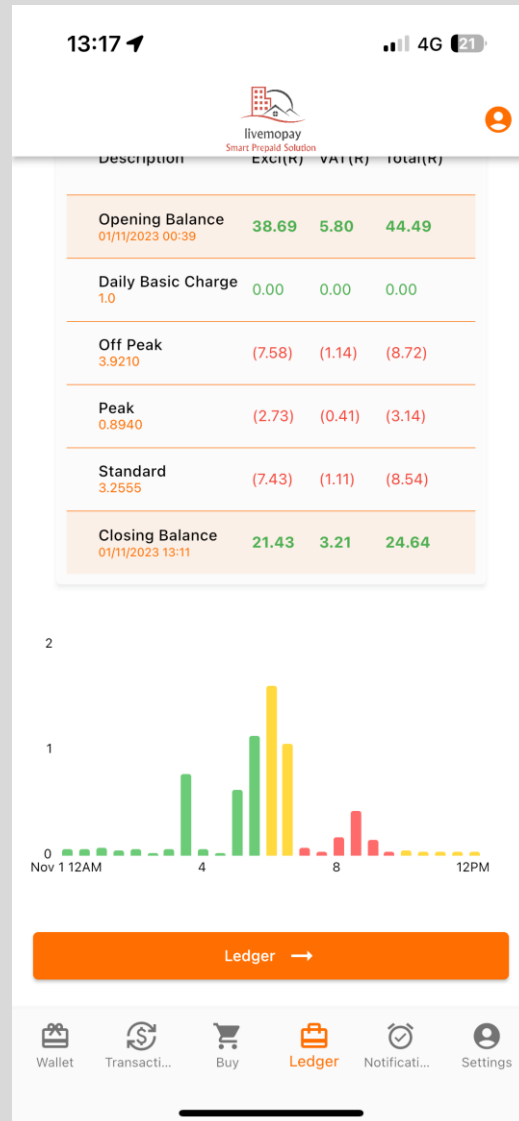
 Transacti...

 Buy

 Ledger



 Notificati...

 Settings





13:17


4G 21





35196158 -2023-11-01 12:00:00 - 2023-11-01 12:30:00 - Standard	R0.10	R24.64
0.0395 kWh @ R2.6309 (VAT Incl)		
35196158 -2023-11-01 11:30:00 - 2023-11-01 12:00:00 - Standard	R0.10	R24.75
0.040 kWh @ R2.6309 (VAT Incl)		
35196158 -2023-11-01 11:00:00 - 2023-11-01 11:30:00 - Standard	R0.10	R24.85
0.0415 kWh @ R2.6309 (VAT Incl)		
35196158 -2023-11-01 10:30:00 - 2023-11-01 11:00:00 - Standard	R0.09	R24.95
0.036 kWh @ R2.6309 (VAT Incl)		
35196158 -2023-11-01 10:00:00 - 2023-11-01 10:30:00 - Standard	R0.12	R25.04
0.044 kWh @ R2.6309 (VAT Incl)		
35196158 -2023-11-01 09:30:00 - 2023-11-01 10:00:00 - Peak	R0.13	R25.16
0.035 kWh @ R3.5077 (VAT Incl)		
35196158 -2023-11-01 09:00:00 - 2023-11-01 09:30:00 - Peak	R0.54	R25.29
0.154 kWh @ R3.5077 (VAT Incl)		
35196158 -2023-11-01 08:30:00 - 2023-11-01 09:00:00 - Peak	R1.51	R25.83
0.429 kWh @ R3.5077 (VAT Incl)		
35196158 -2023-11-01 08:00:00 - 2023-11-01 08:30:00 - Peak	R0.60	R27.33
0.1715 kWh @ R3.5077 (VAT Incl)		


 Wallet

 Transacti...

 Buy

 Ledger

 Notificati...

 Settings

PAYMENT OPTIONS

- **EFT TRANSFERS:**

- Payments reflect instantly on receipt of the automated proof of payment (as setup when creating a new beneficiary)
- No card fees transaction fees or third-party vending fees relevant to the user

- **CARD PURCHASES:**

- Debit Card/Credit card purchases on the Livemopay application
- Card transaction fees will be deducted from the user on purchase

- **THIRD PARTY VENDORS:**

- Available at ATM's, Online banking channels, Garages and stores
- Third party vending fees will be deducted from the User on purchase

Automated EFT Solution

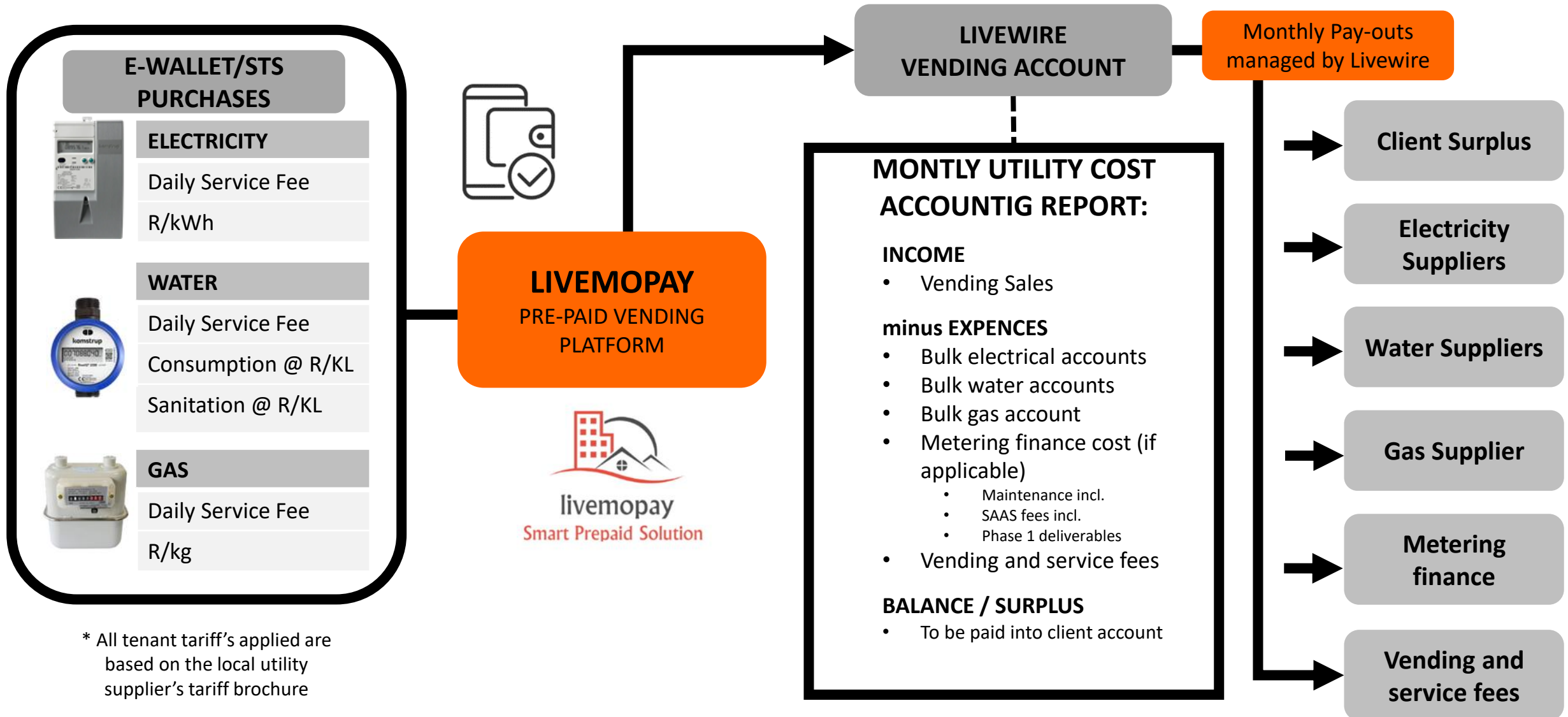
An automated EFT solution is available 24/7 and there is no third party charge applicable at all. This functionality is available 24/7 and has advanced automated reconciliation and verification methods in place to ensure no duplicate vends occur. All major banks are supported. STS Tokens are delivered to the customer via the following channels

- SMS
- E-Mail
- Push notification on mobile application

This channel is unmanned and automated and is available 24/7



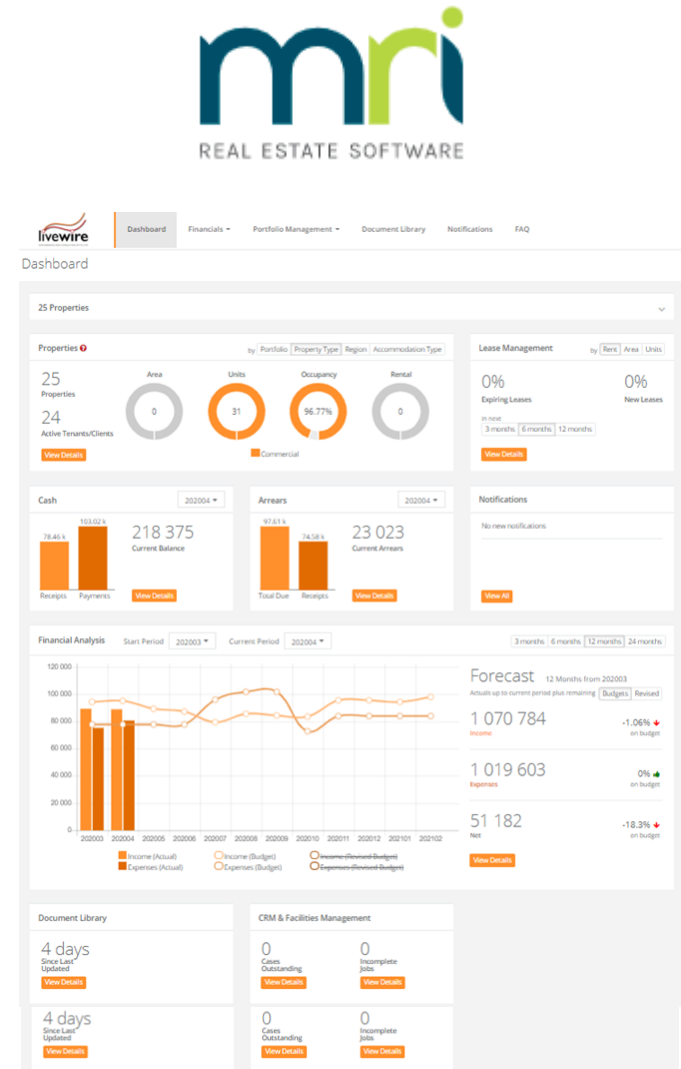
TYPICAL RECOVERY MODEL – THIN PRE-PAID SOLUTION



LIVEWIRE UTILITY ACCOUNTING SERVICES - OPTIONAL

FUNCTIONALITY

- Manage utilities account more on behalf of the client
- Ensure that each property and tenant is on the most cost effective tariff
- Linking all municipal bills and utility supplier to a property and billable area
- Full reporting on different levels for each parties' requirements
- Quick and easy access to data per billing period/month for all utilities
- Asset management per meter with location setup in MRI / MDA
- Full mapping of all buildings and billable areas
- Deliver a monthly cost allocation report, statement and pay any surplus into the clients account



CONTACT US



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066 240 9757



www.livewire.co.za



**Tygerberg House, 2nd Floor, Tygerberg
Office Park, 163 Uys Krige Drive,
Platteklouf 1, 7500, Cape Town**

A graphic consisting of two white, curved lines that sweep upwards and to the right, ending in small circles.

livewire

ENGINEERING AND CONSULTING (PTY) LTD

a  **macrocomm** group company

