

Project Title	PULSECheck
Institution/Department	South African Local Government Association (SALGA)
Innovation	<p>The platform was developed and designed to conduct verifications and create live linkages in real time. Automated reports are generated for every verification across a range of data points linking companies, individuals, bank accounts, addresses and proximities, shared directorships, or marital status indicators amongst others. Its approach combines advanced data science techniques, robust data integration, and machine learning models to address the challenges associated with data inaccuracy, misrepresentation, fraud, and identity theft.</p> <p>PULSECheck! Explained:</p> <ul style="list-style-type: none"> • Comprehensive data integration: The solution integrates data from multiple sources, including home affairs, credit bureaus, deeds, and municipal records, providing a more holistic view of indigent profiles. • Advanced analytics: PULSECheck! utilises machine learning algorithms to identify patterns of fraud and anomalies in indigent data, enabling proactive detection and prevention. • Real-time verification: The solution offers near real-time verification capabilities, allowing municipalities to make timely decisions and prevent fraud cases.
Impact	<p>The PULSECheck! solution has demonstrated a significant impact across multiple municipalities in the Western Cape, Mpumalanga, Eastern Cape, KwaZulu-Natal, and Free State provinces. These municipalities previously managed their indigent registers in various formats, often manually, leading to inconsistent and unreliable data.</p> <p>PULSECheck! has transformed this process by not only verifying and validating indigent data against hundreds of data points but also cleaning, harmonising, and standardising the data for subsequent analysis and planning. Through automated scripting, the solution delivers near real-time verification results, a substantial improvement over traditional manual methods that could take months to complete. This efficiency has eliminated the risk of ghost beneficiaries and double-dipping, preventing significant financial losses for municipalities. By providing accurate, clean, and accessible indigent data, PULSECheck! empowers municipalities to make informed decisions, optimise resource allocation, and enhance service delivery to deserving beneficiaries.</p> <p>This has also led to a new service for municipalities where SALGA has built in a feature – in the solution – to conduct automated data cleansing and quality checks for all indigent registers. To this end, the first platform towards a national indigent register has been achieved.</p> <p>Benefits are in addressing non-revenue losses (by removing potential ratepayers from indigent lists), providing data integrity to indigent lists (which will ensure audit compliance), and ensuring accurate funding allocation is provided to municipalities for free basic service provision. Deserving citizens will receive free basic services and those non-deserving will pay.</p>