



Title: Data Integrity in Asset Management: Leveraging Integrated Systems, GIS and Automation

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Heading

Data integrity is the assurance that information is accurate, consistent, and reliable throughout its entire lifecycle.

What “Data Integrity” means for municipalities

Financial Accountability

Ensures financial reporting aligns with National Treasury norms, such as **mSCOA** (Municipal Standard Chart of Accounts) and the **MFMA** (Municipal Finance Management Act)

Evidence-Based Planning

Provides municipal managers with accurate data to allocate budgets, identify infrastructure backlogs, and plan for future community growth

Service Delivery and Public Trust



Where data integrity breaks in Asset Management



Transfers:

Disposals:

Write-offs:

Council approved R2m write-off, but register still shows R2m. No journal = overstatement.

ProjectLongDesc	ProjectShortDesc	Function	Item	Funding	Region	Costing
2018 Capital/Non-Infrastructure/New Computer Equipment Provision of Laptops, PCs and Peripheral Devices	Computer Equipment Provision of Laptops, PCs and Peripheral Devices	Information Technology Information Services	Assets:Non-current Assets:Property, Plant and Equipment:Cost Model:Computer Equipment:In-use:Cost:Acquisitions	Fund:Capital:Transfers and Subsidies:Monetary Allocations:National Government:Infrastructure Skills Development Grant	Regional:Regional Identifier:Local Government by Province:Limpopo:District Municipalities:DC35 Capricorn:Municipalities:LIM354 Polokwane:Whole of the Municipality	Costing:Default

Where data integrity breaks in Asset Management

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Leveraging integrated systems

This approach bridges data silos to eliminate manual data entry, reduce errors, and deliver actionable insights for enhanced productivity and smarter decision-making.

Data silos in asset management occur when information is trapped in isolated databases, spreadsheets, or software platforms that do not communicate

Integration = capture once, use everywhere. MFMA s63 + GRAP 17 both require complete + accurate records. You can't do that with capturing data by different official for same asset on different spreadsheets.

Asset management require information from SCM, Property management and planning department and others department to avoid recapturing of this data.

Integrated systems don't just save time. They remove the 3 places where data dies: re-capturing, spreadsheets, and email approvals.

Control still required by Asset Management

Segregation of duties

SCM can't approve depreciation changes. Finance can't create POs.

Reconciliation

Month-end FA register depreciation must = GL. If integrated, this should be 0 variance.

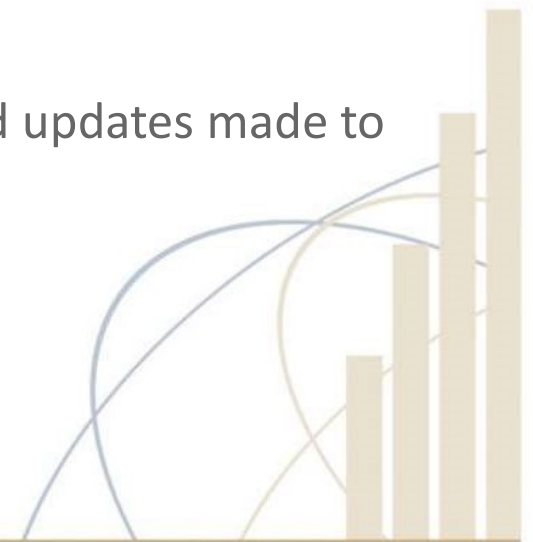
Data integrity GIS-based asset management

A **Geographic Information System (GIS)** is a computer framework used to gather, manage, analyze, and visualize spatial and geographic data.

GIS breaks the real world down into thematic map layers. These layers—such as roads, elevation, property boundaries, and vegetation—are stacked on top of one another using geographic coordinates (latitude and longitude) to help users

GIS (Geographic Information System) in asset management is used to link physical infrastructure with real-time spatial and condition data

easily locate assets: you can immediately make all changes and updates made to each digital model available on the GIS;



The main benefit in asset management

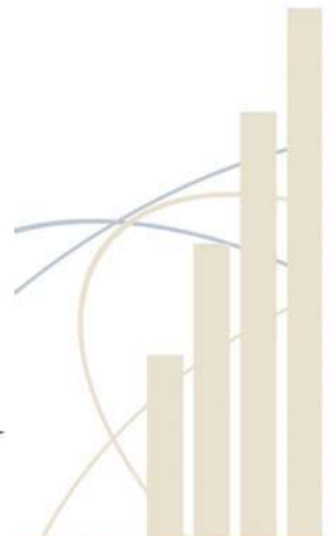
- **Spatial Accuracy:** The exact geographic location of an asset relative to reality.
- **Completeness:** Assurance that all existing asset classes and their corresponding records are fully accounted for without gaps.



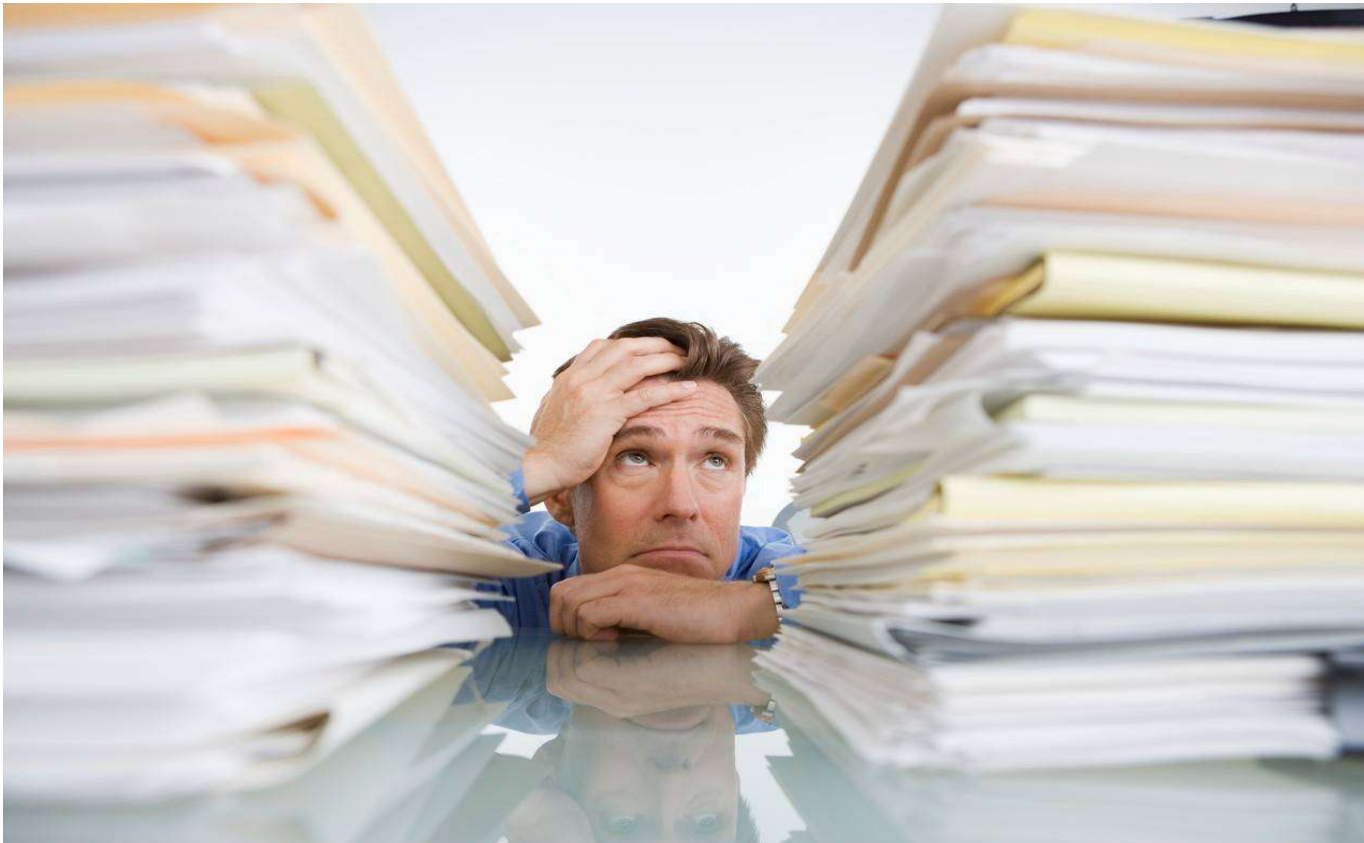
Automation

is the use of technology to execute tasks and workflows with minimal human intervention. By replacing manual, repetitive processes with predefined decision criteria and software, it accelerates operations, reduces human error, and frees up employees to focus on higher-level, creative work.

Automation is required to eliminate redundant workflows, reduce manual errors, and maximize efficiency. By shifting repetitive tasks to machines and software



Heading



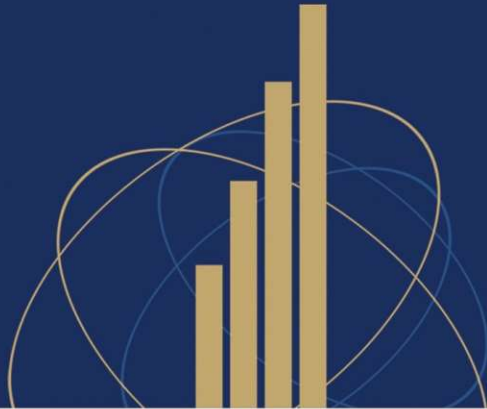
Error Reduction: Manual processes (such as data entry) are prone to human error. Automated systems operate with high precision, consistency, and compliance.

Heading

‘Integrated systems give you data. GIS gives it location. Automation keeps it clean’.



Q & A



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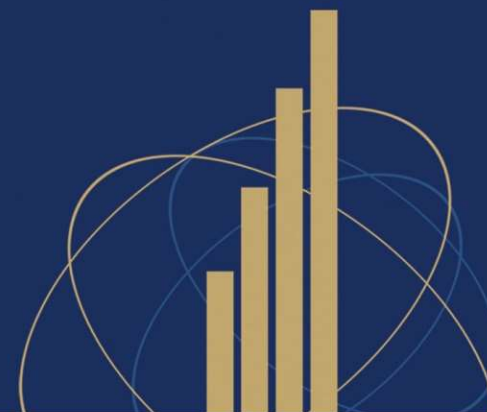
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Thank You!



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