The Open Group

"Managing, Enabling and Operating the city, 1 process at a time."

By: Vuyani Zwane

Applications Manager: Projects and Solution Delivery



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EKURHULENI METROPOLITAN MUNICIPALITY

Total Population = 3 200 000

Residential Customers = 583 000

Indigent = 211 420

Total Households = 900 000

Business = 21 000

Industrial/Commercial = 13 000

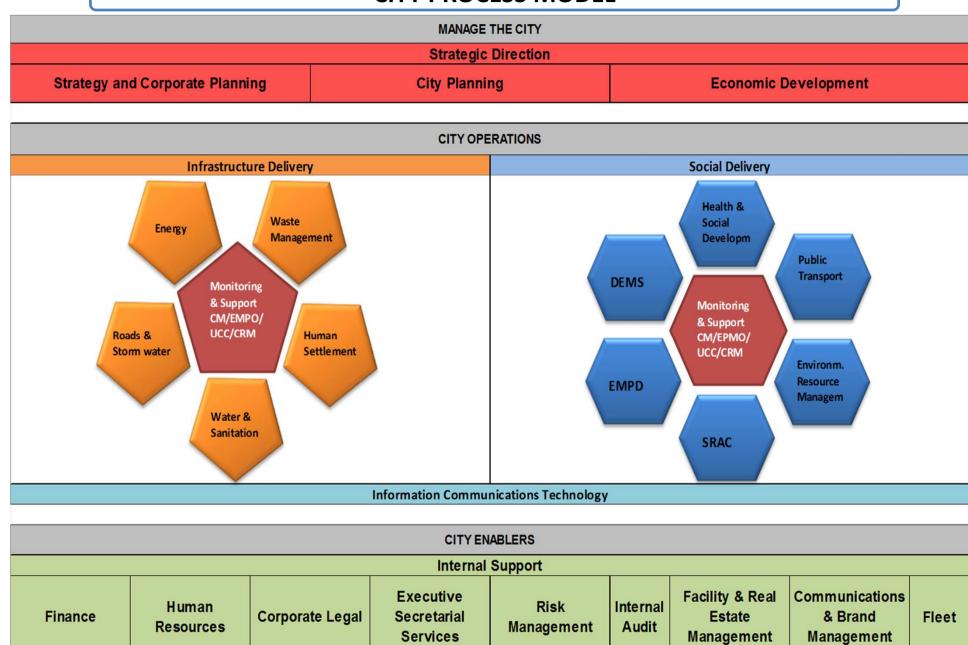
Institutional = 44 000

Other 4 200





CITY PROCESS MODEL



MANAGE THE CITY

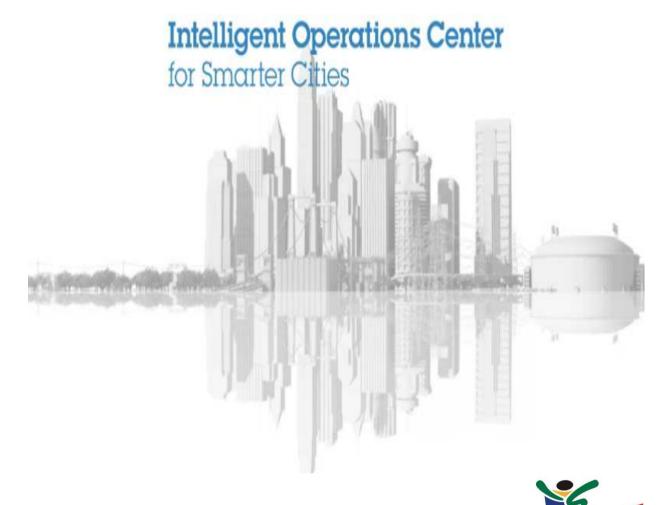


CITY OPERATIONS

Processes modelled = 14 Main Processes

83 Sub-processes

- Unified Command Centre
- Health and Social Development (Indigent)
- CRM (Workforce Management)
- Energy (Operational Maintenance)



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CITY ENABLERS

Processes modelled = 10 Main Processes

60 Sub-processes

- Supply Chain Management
- Asset Management (fleet)
- H.R. Management
- Real Estate Management

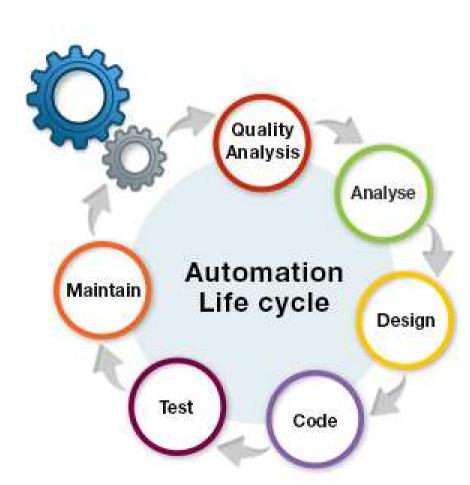




AUTOMATION

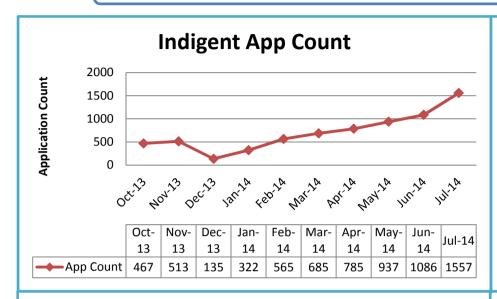
Processes Automated and/or Enhanced = 10

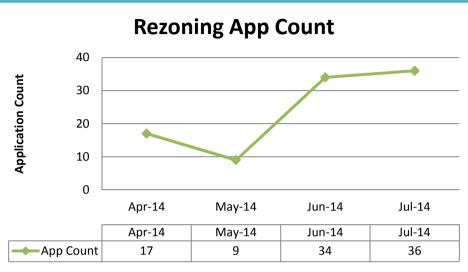
- Indigent Management (Registration / Deregistration
- Application for Rezoning
- Application for Building Plan
- Application Round Collection (Waste Management)

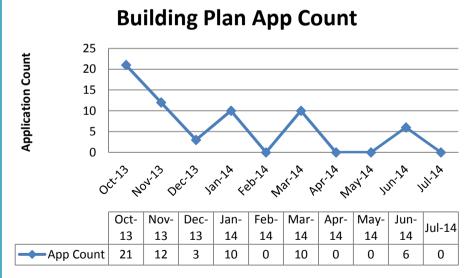




AUTOMATION









EMM Enterprise Architecture Principles

Enterprise Architecture Principles

Global Architecture Principles

Business Architecture Principles

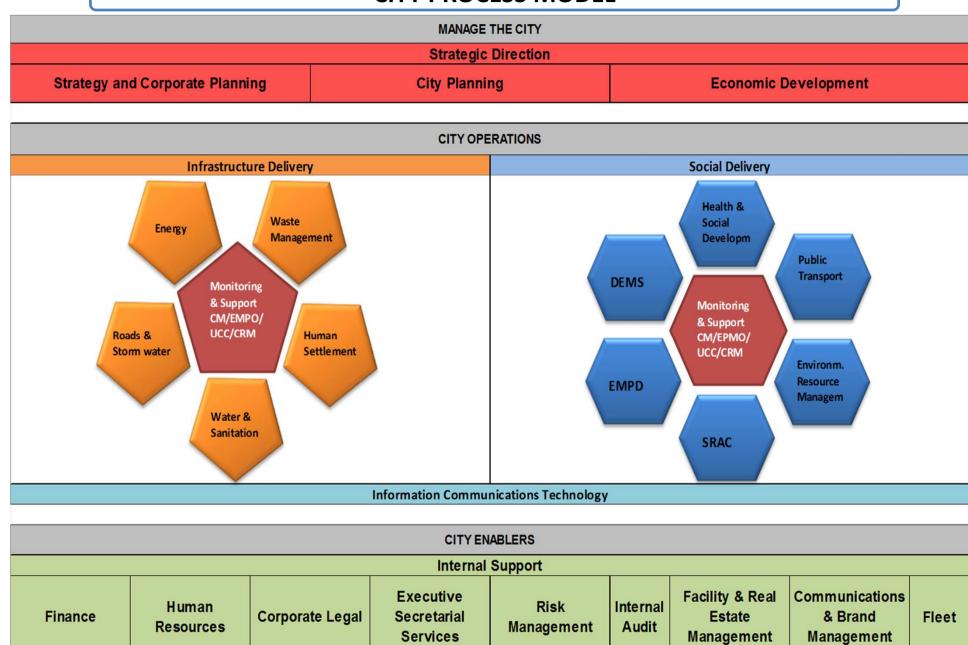
Information/Data Architecture Principles

Information Systems/Applications Architecture Principles

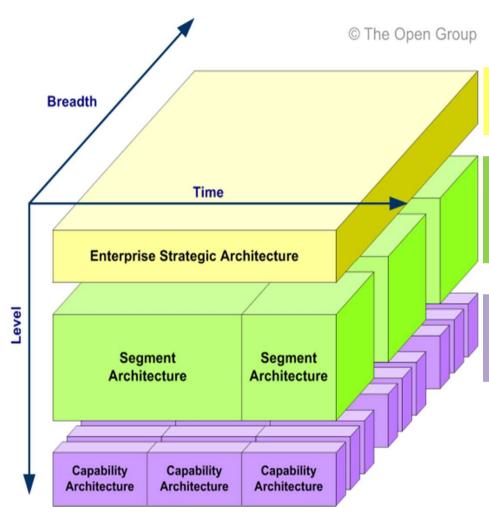
Technology Architecture Principles

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CITY PROCESS MODEL



EMM Levels of Enterprise Architecture



Strategic Architecture provides an organizing framework for direction setting at an executive level. (EMM Enterprise Strategic Architecture)

Segment Architecture provides an organizing framework for operation and development of architecture roadmaps at Cluster level. (e.g. Corporate Cluster, Social Cluster, Infrastructure Cluster) Growth and Development Segment Architecture)

Capability Architecture provides an organizing framework for change activity and the development of architecture roadmaps at a capability or project level. (UCC Architecture, Digital City, ERP etc.)



Foundation Architecture

ystem Security Infrastructure

ntity & Authentication, Authorisation & Access Contro

onfidentiality / Cryptography, Safeguarding/Integrity,

& Security Audit technology

Application Delivery Infrastructure

Web Server, Portal, Application Server, & User Interface Technology

Middleware Infrastructure

Enterprise Service Bus, Message Brokering & Queuing, Business Logic, Directory & Naming, Time Service Technology

Database Management Infrastructure

Transactional DBMS, Data Warehouse , Master Data Management , & Metadata Management technology

Computing Platforms, Peripheral & Sensors

Operating Systems, Servers/Hosts, Storage, End-User Computing, Peripherals, & Data Sensing Technology

Communication Infrastructure

Transmission / Carrier (WAN, LAN), Data Switching , Internet, Intranet, Extranet, Virtual Private Network, Voice & Video Conferencing Technology

System Engineering Infrastructure

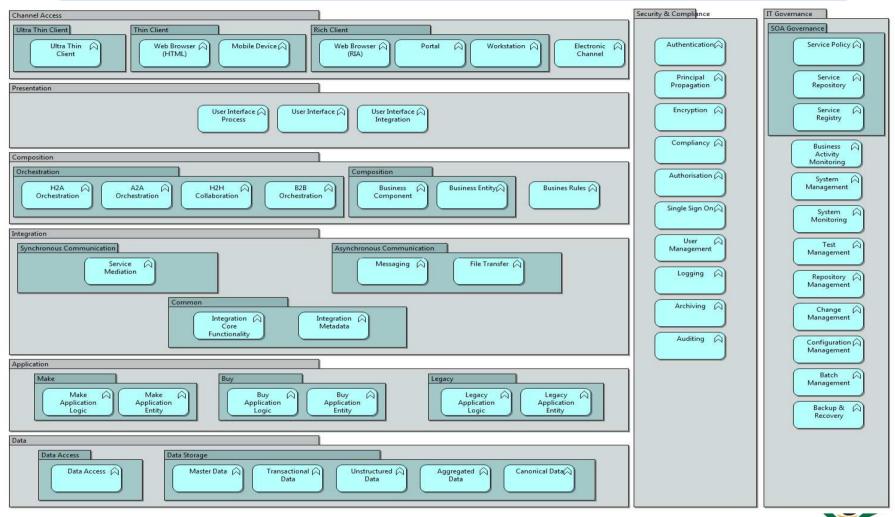
System Design/Modelling, Software development, & Software configuration technology

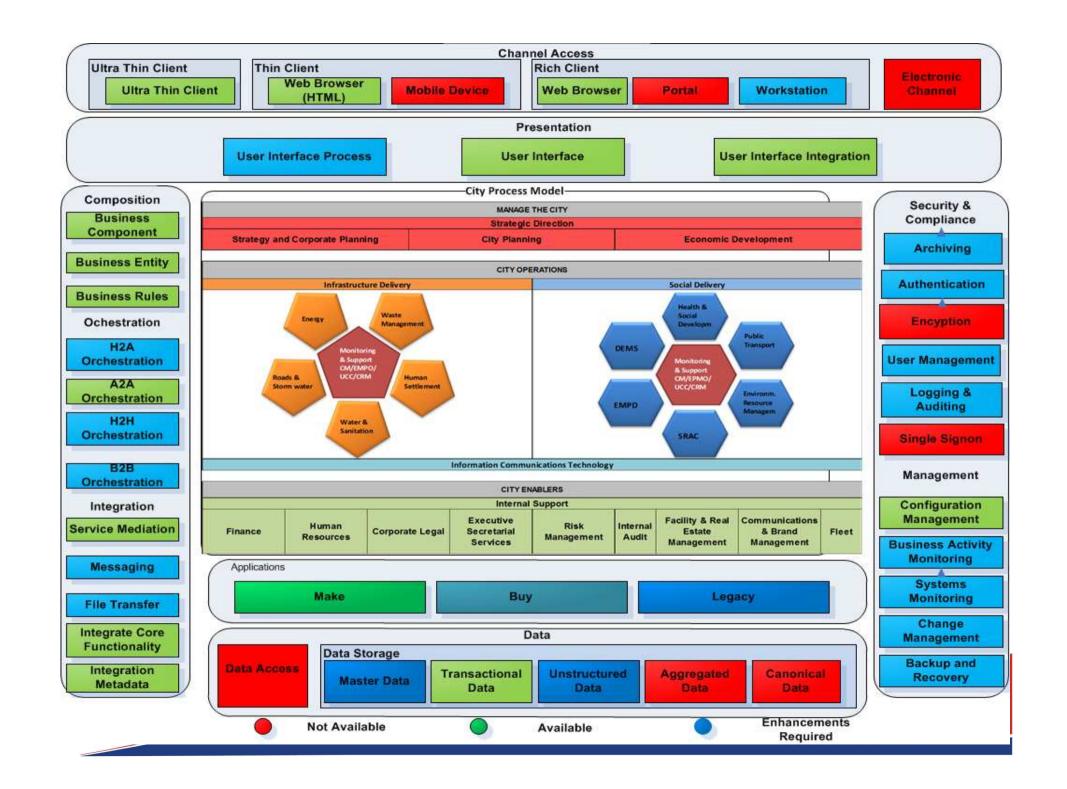
System Management Infrastructure

Network & Security, Capacity/Performance, Infrastructure configuration, Software License & Incident/Fault Management Technology

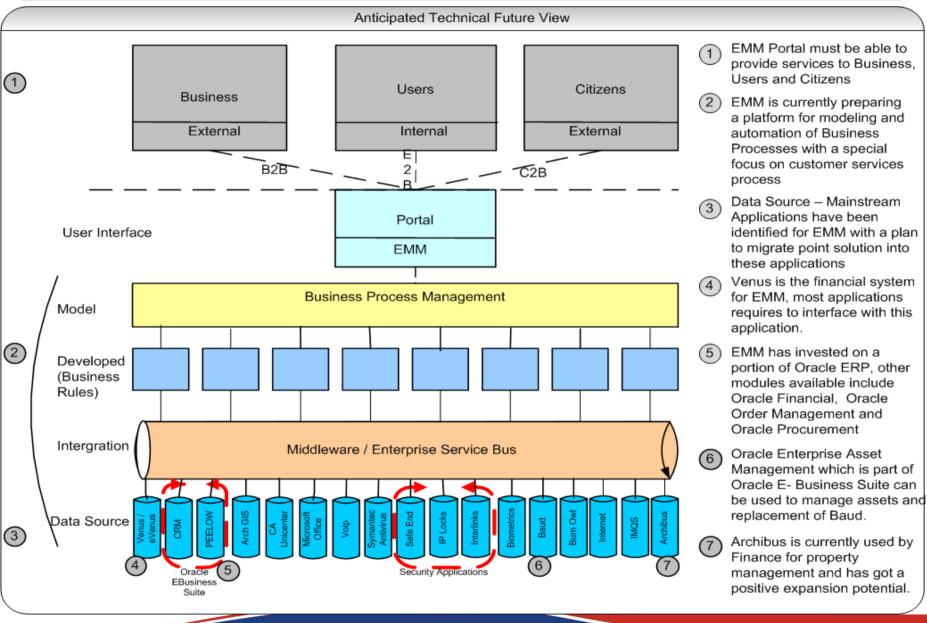
Ekurhuleni METROPOLITAN MANGGRALITI

Common Reference Architecture (CORA)





ANTICIPATED TECHNICAL FUTURE VIEW



ANTICIPATED TECHNICAL FUTURE VIEW

Lessons Learnt

Set an architecture vision.

Stick to it.

An architecture board is not a policing function (**NO BEAUROCRACY**).

Maintain a(SOA) services catalogue.

THE TOOL IS NOT ARCHITECTURE.

Customer engagement is key (BPM Forum).

Architecture on Demand.

Develop principles with supportive standards.

Stick to them.

Architecture validation is good but hard to institutionalise (Legacy applications, supply chain, etc.).

Speak the same language.



FUTURE

INDUSTRIAL HUB

Online Services

Real Time Dashboards / Reports

Application Portfolio Dashboard



Mobile Applications





12%. I Setrect of data

System Integration



Achieving a plug and play IT application landscape



ACKNOWLEDGEMENTS

- 1. EMM ICT-CIO: KIRUBEN PILLAY
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- 4. EMM ICT DEPARTMENT

