EThekwini Municipality: A City in Transition

Lunga Madlala

Chief Digital Officer

The emerging agenda for the city is about

- ⱱ Being data-driven
- ⱱ Citizen engagement
- ⱱ Social and economic development needs of the city
- ⱱ Creating a globally competitive and smart city
- ⱱ Good governance and good government
- ⱱ Forming Partnerships
- ⱱ Completely rethinking and reengineering the enterprise

Improved Quality of Life

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BUT…… What is a Smart City?

- High speed interconnectivity - people, systems and objects can communicate and interact with one another in entirely new ways.

- Instrumented - we can measure, sense and see the condition of practically everything

- Intelligent - we can analyse and derive insight from large and diverse sources of information to predict and respond better to change

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Core Characteristics of a Smart City

- ❯ Central role of technology as a means for accumulating, organizing and making vast amounts of information accessible to an increasing number of people

- ❯ The advancement of human and social capital through knowledge creation and dissemination, advanced participation and digital inclusion, and the establishment of new forms of innovation (open, social)

- ❯ Networking within and among cities and regions, for purposes of good practice dissemination, production base diversification and the establishment of economies of scale.

- ❯ Advancement of the business sector, to be realized through a high record of entrepreneurial agility, investment attraction and new business creation.

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Then…. What does digital mean?

⊽ Optimization: The process of using digital data (and technology) to improve existing business models, operating processes, services or outcomes. It should focus on value and outcome and not what you do today

⊽ Transformation: The process of exploiting digital data (and technology) to reinvent or create new business models, operating processes, services or outcomes.

⊽ Mind-set change - completely rethinking and reengineering the enterprise

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Biggest Barriers to Digital Transformation

- Culture (47%)
- Resources (27%)
- Talent (10%)
- Other (16%)

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And we have other headaches…

- Data
- Integration
- Application proliferation

Fragmented implementation of applications and systems to serve narrow, project-level goals, resulting in lack of data sharing, integration, compatibility and interoperability, and economies of scale not being realized

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Municipality at a glance

ERP
- FPlite
- Proc of equipment
- RMS
- JDE
- Elipse
- Value Assist
- RRS
- Asset Management
- Elec overtime system
- Performance man sys
- DRL
- Time and Attendance
- HR Suite
- Leave API
- Skills development
- Talent management
- e-Careers
- Property Man System
- Quote management
- COINS

Delivery Management
- Capital monitoring app
- Road maint/reporting
- Meter management
- Operational indicators
- eWorks
- Enterprise project man

- Event management
- CMS landfill
- Service provider perform
- Budgeting
- Disaster man sys
- IDP application
- Plan tracker
- PRC booking
- Queue man system
- e-Ticketing
- GIS/CAD
- Trade Licences

e-Government
- Way-leaves
- Grant-in-aid
- Hsing ledgers/rentals
- Insurance / Pensions
- Rank Man system
- Fault management
- Metro pol sched. sys
- Police fines
- PME Portal
- Libraries
- Museum image storage artefacts catalogue
- Cemeteries application
- Boardroom booking sys
- Hazardous vehicle cert
- City awards
- Identity management
- Contact centre
- SOPs
- Electronic agendas
- C-track/fleet man
- Deadline monitoring sys
- DMS
- RTF workflow
- Contract sec man sys
- e-learning
- Bulk markets
- CURA

e-GovIT
- Active Directory
- Management Console for EMPL750
- Novell File and Print, vibe
- SharePoint
- Tibco
- Data warehouse
- Desktop man
- SQL reporting
- IT change request
- Call logging system
- IT asset life cycle management app

Information
- Public Trans MIS
- PME survey
- Crystal reporting
- Geo-database
- City stats
- Questionnaire & surveys
- RMS database
- Effluent MIS
- Laboratory Info Sys

e-Governance
| G2C | G2G | G2B |
- DMS website
- Ward profiles
- eThekwini website
- Mile
- Imagine eThekwini
- Sustainable living
- eThekwini green map
- Remote library web services
- eThekwini beachfront website
- GIS website
- Surveyor general
- Online payment

Employee self service
- Gift register
- DOI
- Employee self service

Communication
- eMail Services
- SMS
- Instant messenger
- Video conferencing
- EMTV

Gartner Digital Maturity Model

	E-Gov.	Open	Data-Centric	Fully Digital	Smart
Maturity Level	1 Initial	2 Developing	3 Defined	4 Managed	5 Optimizing
Value Focus	Compliance, efficiency	Transparency and openness	Constituent value	Transformation	Sustainability
Channel Strategy	Portal	Government as a platform	Nongovernment channels	Truly multichannel	Automation replaces portals
Leadership	CIO/CTO	CDO	Departments	CIO and departments	(New) CIO
Technology Focus	SOA	Open data, open service	Open any data	Things as data	Smart machines
Sourcing Strategy	Mixed	Re-insourced, cloud first	Multisourced	Partner-sourced	Outsourced
Key Metrics	% services on line	% open data	Number of data-driven services	% data from things	% decrease of services

Source: Gartner September 2015

Should we be worried?

Almost 70% of government organizations report they are pursuing digital transformation, but only 5% are achieving it

So what is our game plan?

- ❧ SMART CITY AND DIGITAL TRANSFORMATION STRATEGY
    – Which path have we chosen to realize our vision?
- ❧ STRATEGIC PLAN
    – In line with IDP
- ❧ OPERATIONAL PLANS
    – Annual

Key Issues to Tackle Moving Forward

- Break down silos
  - From ICT Governance to Digital Governance
- Culture
  - Culture hacks (hackathons), AI, digital twins, build trust
- Data
  - Data architecture, policy, strategy, principles
- Integration
  - Integration architecture, policy, strategy, principles
- Digital technology platform
  - IT Systems, Citizen Experience, IoT, Data and Analytics, Ecosystems

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Our Approach

- Collaboration and Partnerships
- Measurable outcomes (stakeholder benefits with focus on communities)
- The journey to s Smart City is not a technology initiative, but it is a transformation initiative. A city isn't smart because it uses technology. A city is smart because it uses technology to make its citizens' lives better
- Extracting the full value of data is critical,
- Bring communities along - design with the people, not for them.
- Alignment with other local initiatives
- Early wins to create momentum (low-hanging fruit)
- Include KPIs – how are you gonna know when you are there? Establish a baseline from which to measure progress using the metrics relevant to the strategy.
- Long lasting Smart City culture
- Leadership - A smart city needs leaders who can think beyond the boundaries of their own specialisation or sector and bring people together.

Thank You For Listening

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