

XaaS – Anything as a Service in the Municipal Environment



Willy Govender

CEO : Evaluations

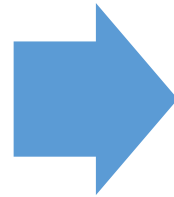
30 November 2018



Change – we have to Embrace it

Status Quo

- Buy Licenses
- Purchase Hardware
- Capitalize and Depreciate
- Buy more than required
- AMC costs around 20% of original spend



Crossing over

- Internet now more than mature
- Broadband – high speed and more reliable
- Computing power – more and more required

Xaas Explained

Outsource non-core components to vendor to manage

Pay as you go, depending on use

Typically delivered over the internet to onsite at client

SaaS

- software applications, such as Google Apps, Microsoft Office 365 and Salesforce, to users.

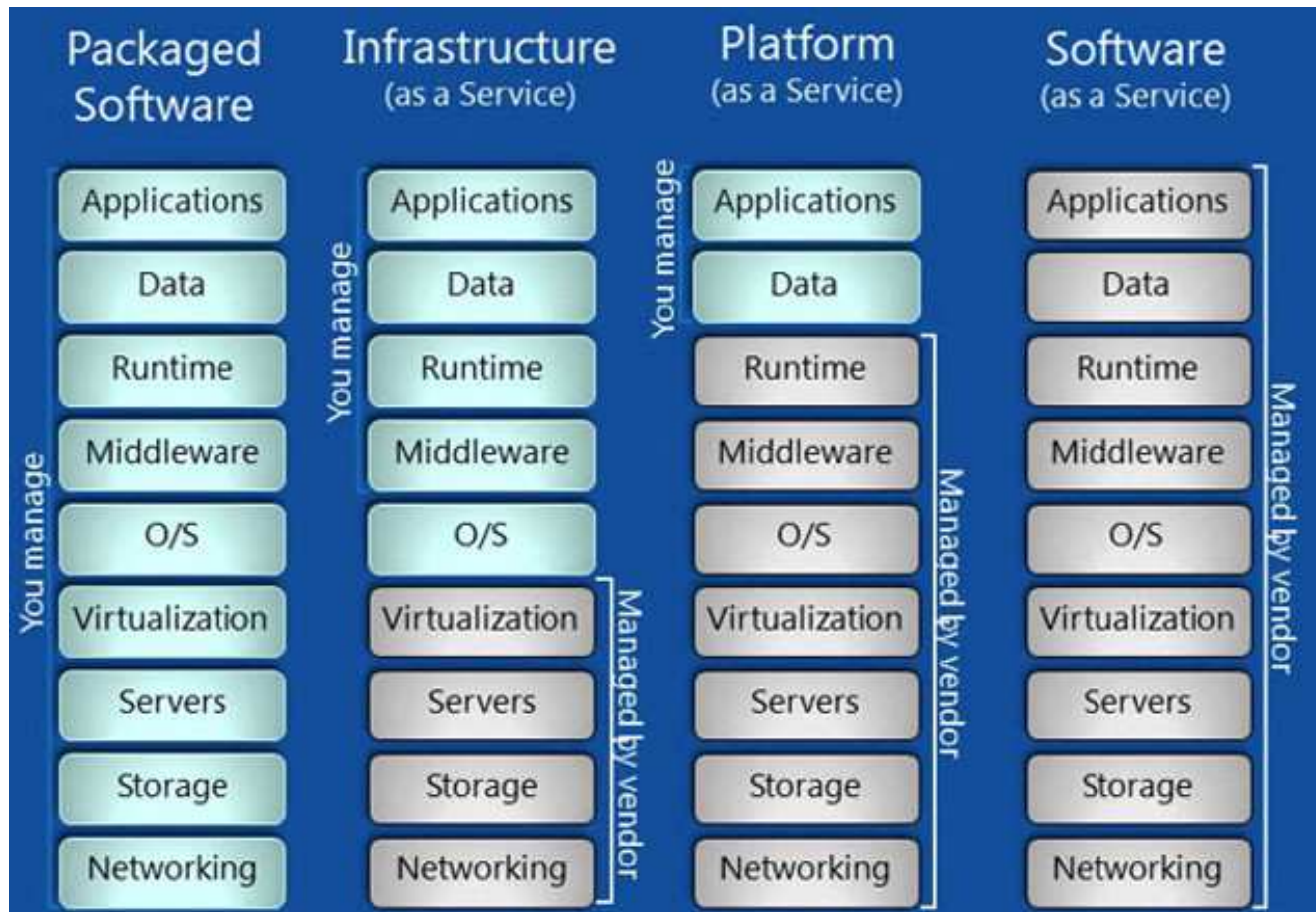
PaaS

- preconfigured virtual machines (VMs) and other resources for application development and testing. offerings, such as Amazon Web Services (AWS) Google App Engine, SAP HANA

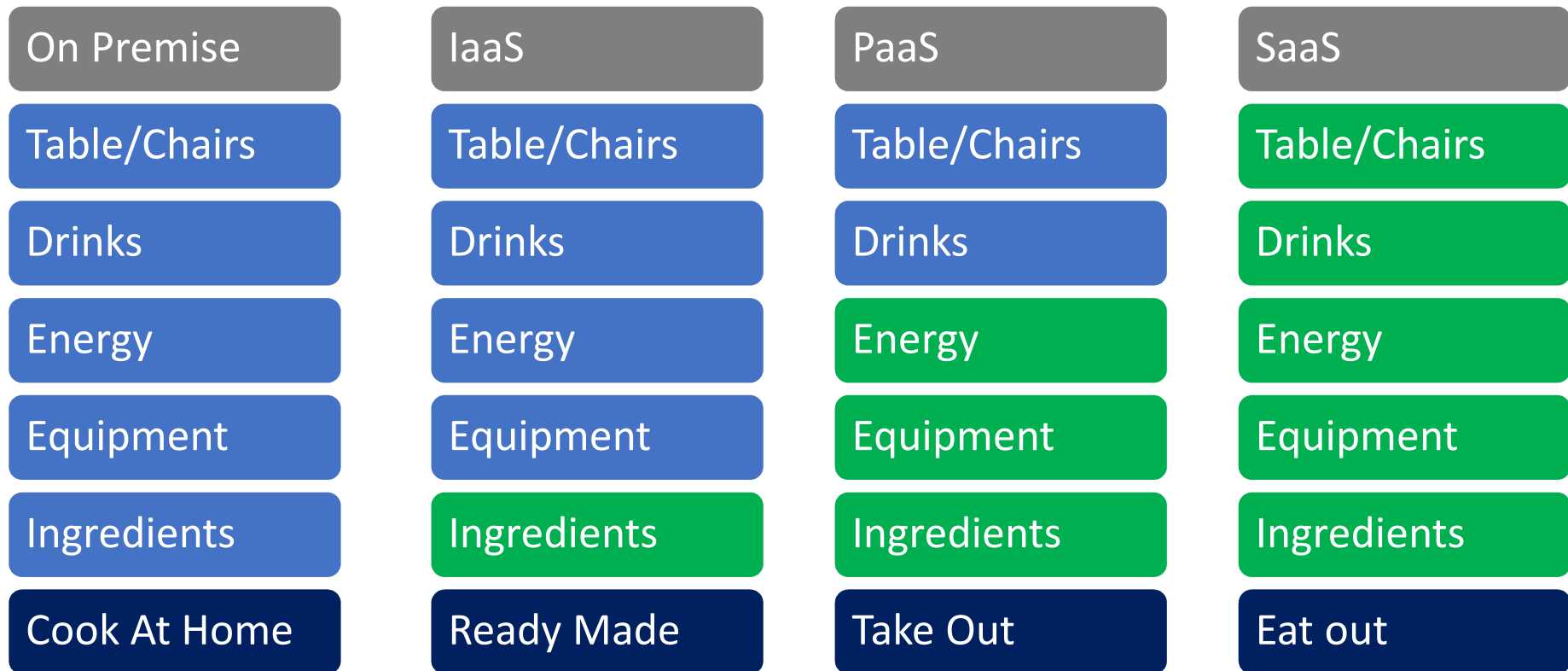
IaaS

- deploy and configure virtual machines hosted in a data center and manage those VMs remotely such as Microsoft Azure, Amazon Cloud

Technology based Service offerings



Example – Meal as a Service



move from traditional onsite to subscription based

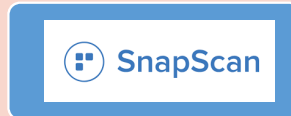
Transportation
as a Service



Accommodation
as a Service



Payment as a
Service



Malware as a
Service



Entertainment
as a Service



Benefits



Lower cost

- No outright purchase or upfront costs
- Cost is divided over contract term
- Capex to Opex



Scalability/Flexibility

- Upgrade or downgrade depending on user requirements and demand
- New versions and updates at no additional cost
- Respond faster to business changes, improvements and innovations



Maintenance

- Vendor does all maintenance at no additional cost to customer
- Backups



Simplicity

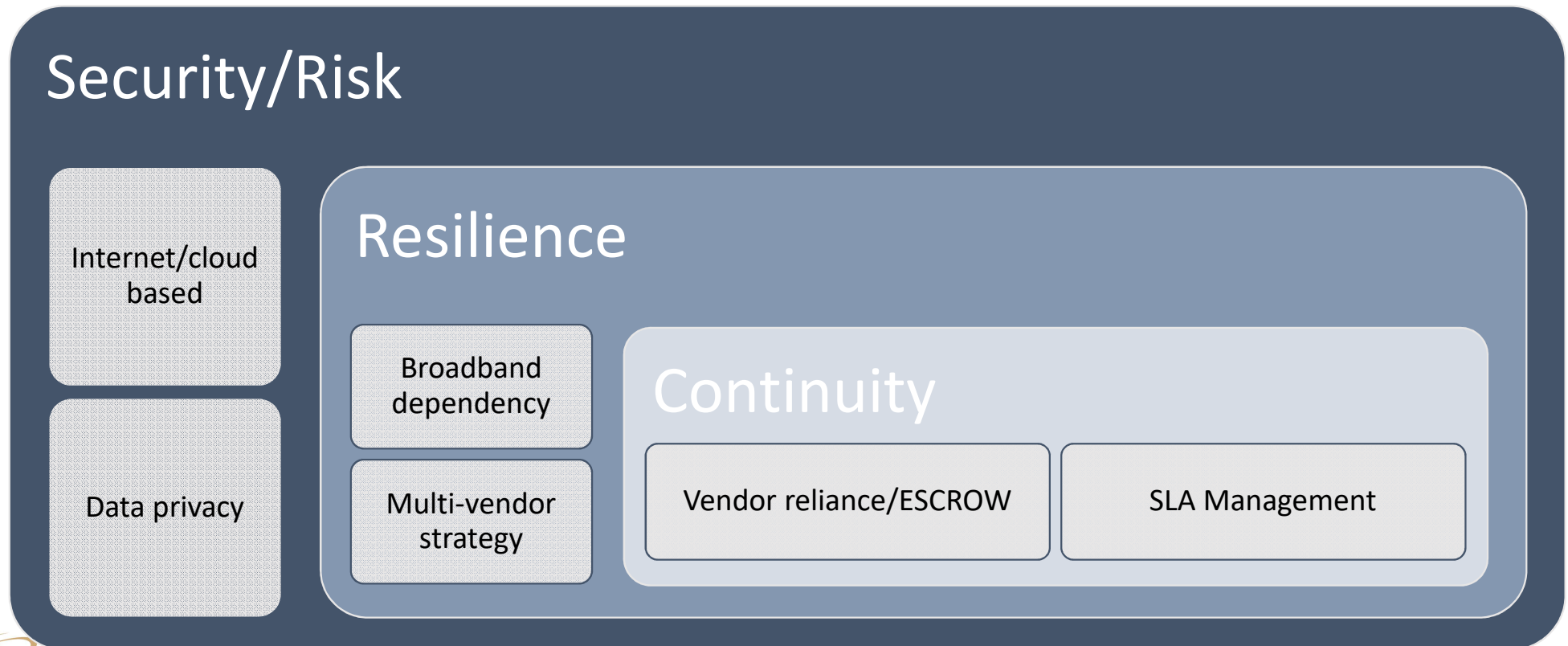
- IT services, infrastructure, skills reduced
- No real estate overhead costs, reduced energy costs etc



Independence

- Device – use multiple modes to access
- Location – access from anywhere

Be aware of



The business of Municipalities

Management

Finance

Human Capital

Planning

Governance & Accountability

Community Services

Maintenance

Information Technology

Supply Chain

Functions

Planning and Building Regulations

Utilities (Water, Electricity, Cleansing, Street Lighting)

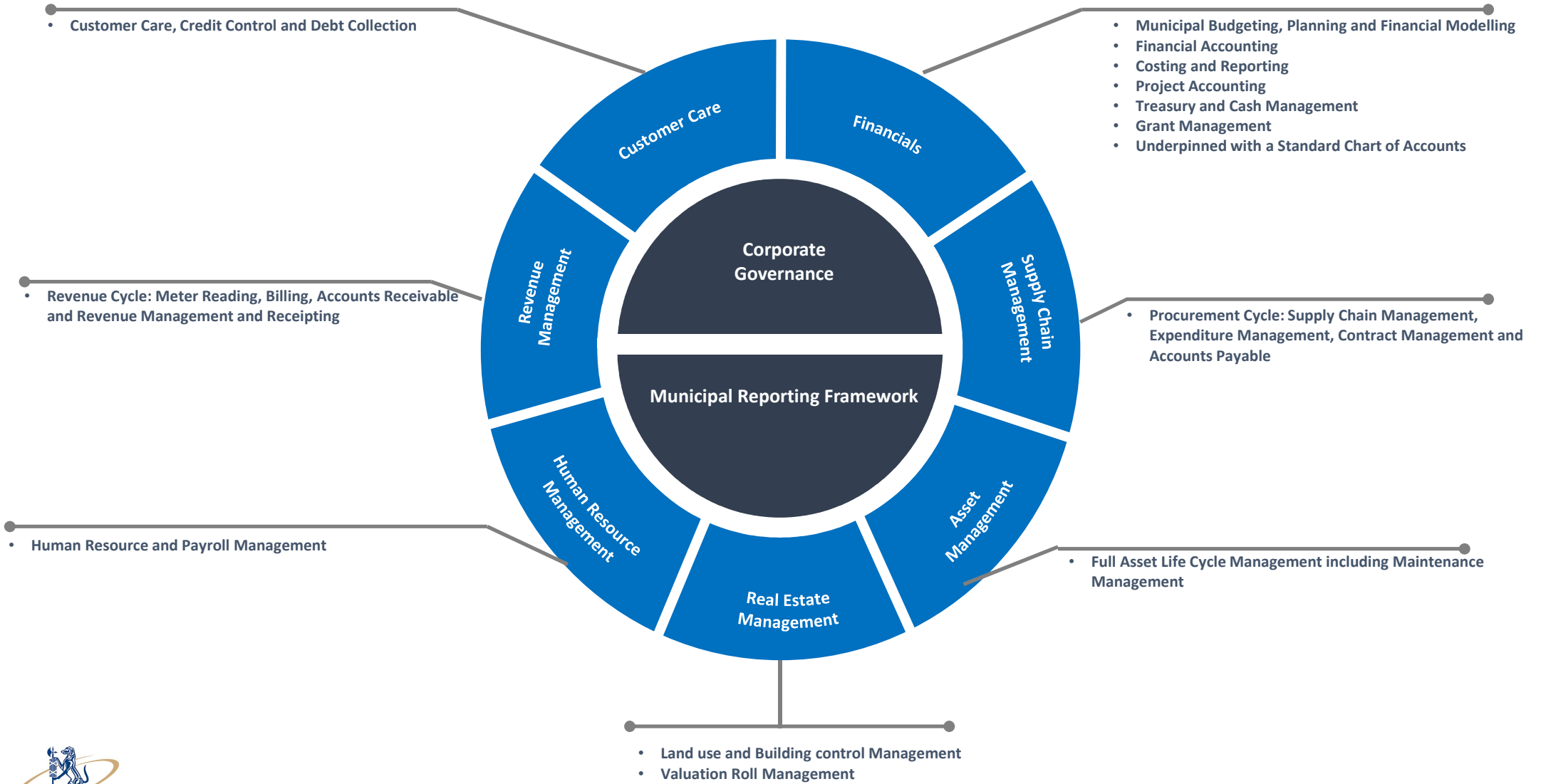
Health Services

Transport

Business (Trading, Markets, Licensing)

Safety (Traffic, Police)

Housing



Billing as a Service (BaaS)

CRM

Customer Management

Service Requests

Customer Care

Self Service

Correspondence

Service Delivery

Provisioning

Maintenance

Fault Management

Measurement

Disconnections

Billing

Tariff Management

Bill Generation

Delivery of Bill

Bill Trapping

E-Services

Collections

Receipting

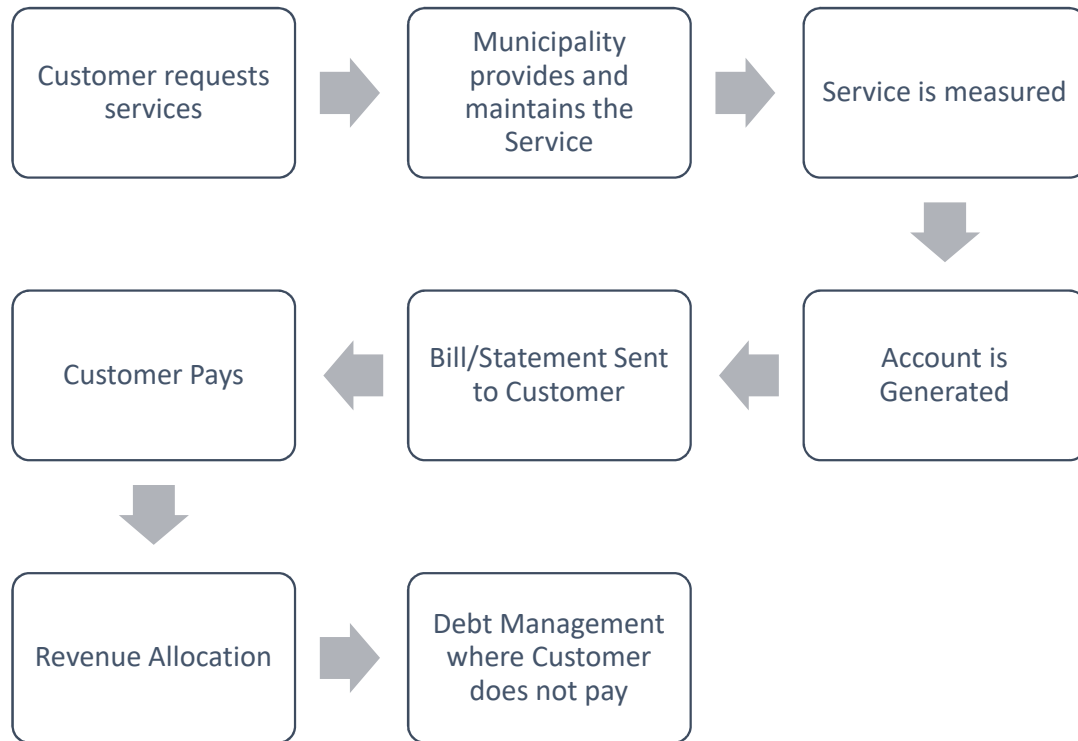
Reconciliations

Allocations

Debt Management

Reporting

How it Works

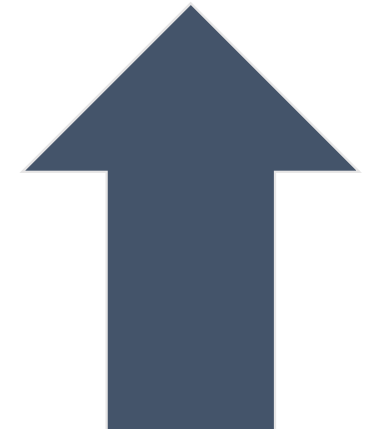


BaaS

- Readings sent to Vendor
- Vendor Generates Account
- Vendor sends Bill to Customer
- Customer Pays

Benefits to Municipality

- No billing system required
- No IT equipment/services
- Administration reduced
- Pay per bill generated



Land as a Service (LaaSS)

Property	Land Use Management	Valuation Roll
Registrations/Titling	Building Plans	Ownership
New Property Creation	Land Use/Zoning	Sales
Cadastre Mapping	Town Planning	Valuations
Rates Clearances	GIS Mapping	Supplementary Rolls
MSCOA	SPLUMA	MPRA

Land Administration Model

Vendor

Maintains all property transactions

Deeds Office/Surveyor General
Liaison

Provides SaaS for GIS, data
administration, business processes

Services related to cadaster
maintenance, gis mapping

Provides view/query services to
stakeholders

Municipality

Provides base data (aerial imagery,
admin GIS data etc)

Undertakes functions (planning,
valuations, rates clearances)

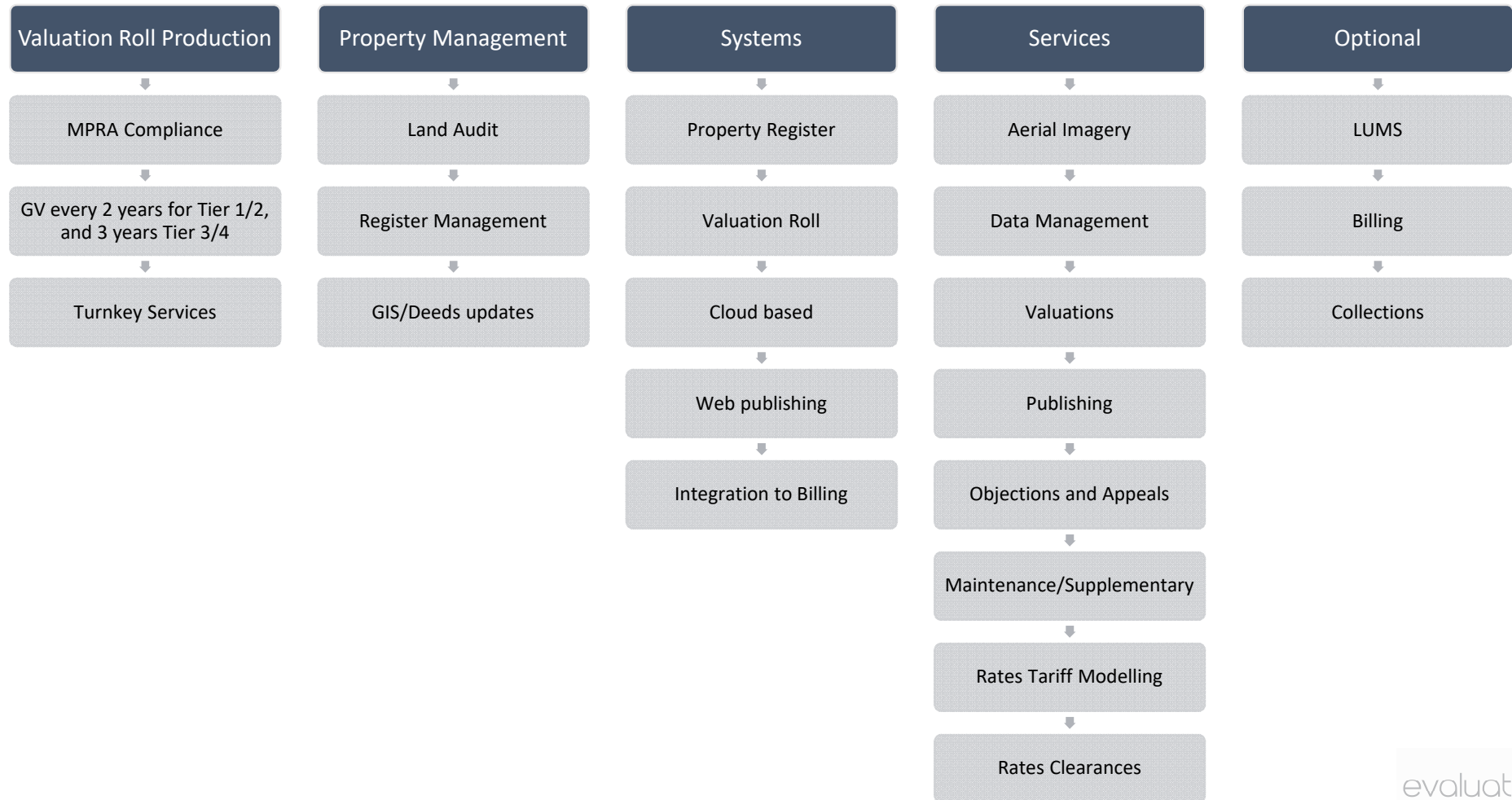
Integration to billing systems

Commercials

Per monthly property basis

turnkey SaaS, management and
maintenance

Valuation as a Service (VaaS)



VaaS – How it works

Customer contracts with Implementation Date specified, and a fixed contract term, 5-6 years

Vendor undertakes the full Function to comply with MPRA and meet the timeframes for publishing in year of implementation

This includes the preparation of the register, land audit, monthly deeds updates, imagery acquisition as required, valuations, online publishing, maintenance, objections and attendance to VAB hearings.

A minimum of 2 GVs produced, and annual supplementary valuations

Customer only pays when roll is implemented, in monthly instalments based on the rates amount generated.

VaaS

Exclusions

VAB Costs

Postage cost
of notices
(S49, S78, S52)

Integration
costs to Billing
Systems

Advantages

Frequency of
Rolls

Fair and equitable

No upfront costs

Legislative
Compliance

XaaS in the Smart City

Smart
Grid

Smart
Connect

Smart
Lighting

Smart
Water

Smart
Waste

E-services

Fines

Security

Where to for Municipalities

XaaS is here and expanding

Decide on what is core and XaaS the rest

Build strong contract/SLA management capability to manage vendor contracts and monitor service quality

Revise procurement challenges/issues/policies

Work with vendors that have financial backing, track record, accreditation and willing to share risk and reward

Ensure local economic development is supported by vendor

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