



**KONZA**  
Technopolis





## THE 38th ANNUAL SEMINAR

Theme: Disruption and Uncertainty- Positioning Accountants as change agents in a dynamic environment

Sub-Theme: **Economic headwinds and resilience**



KONZA  
Technopolis



KONZA  
Technopolis

## WHO WE ARE

### VISION

A leading global  
Technopolis and  
innovation hub



### MISSION

To develop a  
sustainable thriving  
smart city and a vibrant  
innovation ecosystem,  
contributing to Kenya's  
knowledge-based  
economy



# Strategic Growth Clusters



ICT/ITES



LIFE SCIENCES



ENGINEERING

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## Driven By:



RESEARCH &  
DEVELOPMENT



EDUCATION



COMMERCIAL  
DEVELOPMENT

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# 3 Pillars

## Business Development



### SO 1:

Attract, onboard and retain key investors and create a strong brand

## Knowledge Economy and Innovation



### SO 2:

Convene, Connect and Catalyze a conducive environment for technology start-ups and SMEs to thrive and scale in partnership with other actors in the Innovation Ecosystem,

## Smart City Services

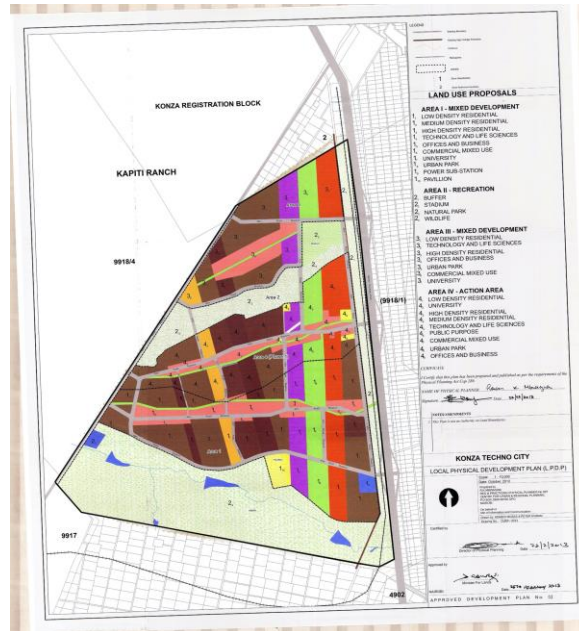


### SO 3:

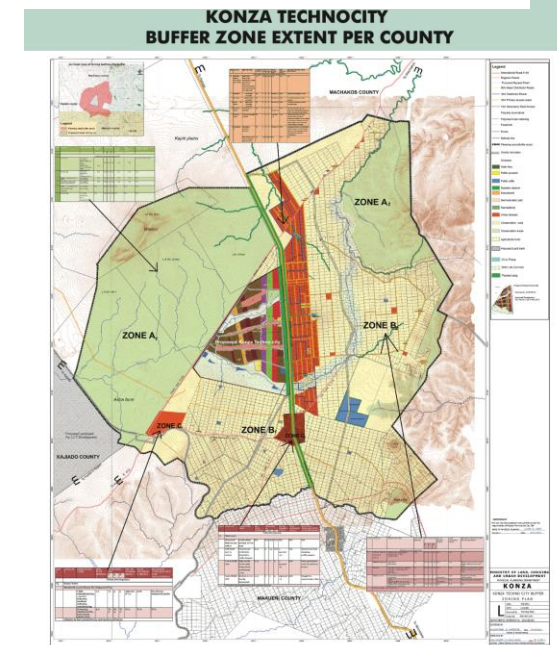
To deliver effective, responsible and efficient smart services for enhanced quality of life.

# A QUICK OVERVIEW

- **100% Government of Kenya Project**      **Master Planned City**      **60km from Nairobi**
- **5,000 acres**      **Green city with good quality of life**      **Smartest City SEZ STP**



- **Infrastructure for Phase1 Konza Technopolis nearing completion under development**



- **+10km buffer zone area around the Technopolis**

# KONZA TECHNOPOLIS: INFRASTRUCTURE ACHIEVEMENTS



**KAIST DESIGN & CONSTRUCTION**



**KONZA COMPLEX OFFICE**



**HORIZONTAL INFRASTRUCTURE**



**UNDERGROUND INFRASTRUCTURE**



**PHASE 1 DATA CENTER**



**PHASE 2 DATA CENTER**




**WRC**



# INFRASTRUCTURE SCOPE

## **Waste Water Reclamation Facility(WRF)**

Resiling Capacity of 6,000 cubic meters

 **Water Treatment Plant:** Output capacity 7.5Mega litres per day to 62 mega litres storage capacity of 13.7Mega litres

## **Streetscape**

40 km of streetscapes, landscaping of streets and parks.


## **Automatic Waste/Collection**

15 Km Vacuum Solid Waste conveying system, programmable Logic Controller system with 4 operation modes.


## **Utilities & Utility Tunnel**

170 km Drainage and water supply system; 15 km Irrigation and reuse System; 9 km Utility Tunnel


## **Landscaping & Parks**

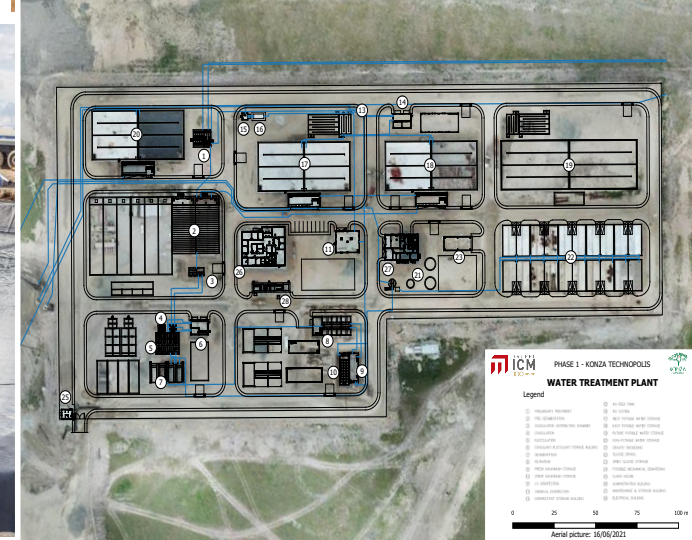
 About 10,000 trees and 50 different plant more than 15 km of cycling paths.

## **Electrical System & ICT Conduits**

 40 km of power lines, 1 main electrical station plus 50 electrical substations; about 500 km of ICT conduits.

## **Public Facilities**

 Police and Fire Station; Entrance and Security Feature; Welcome Center.



# Konza Data Center

- The **Konza Data Center** is **Tier III Uptime Certified**.
- The Data Center supports
  - Software as a Service (SaaS)
  - Infrastructure as a Service (IaaS)
  - Platform as a Service (PaaS)
  - Collocation.



# Flexible, Modern Modular Deployment

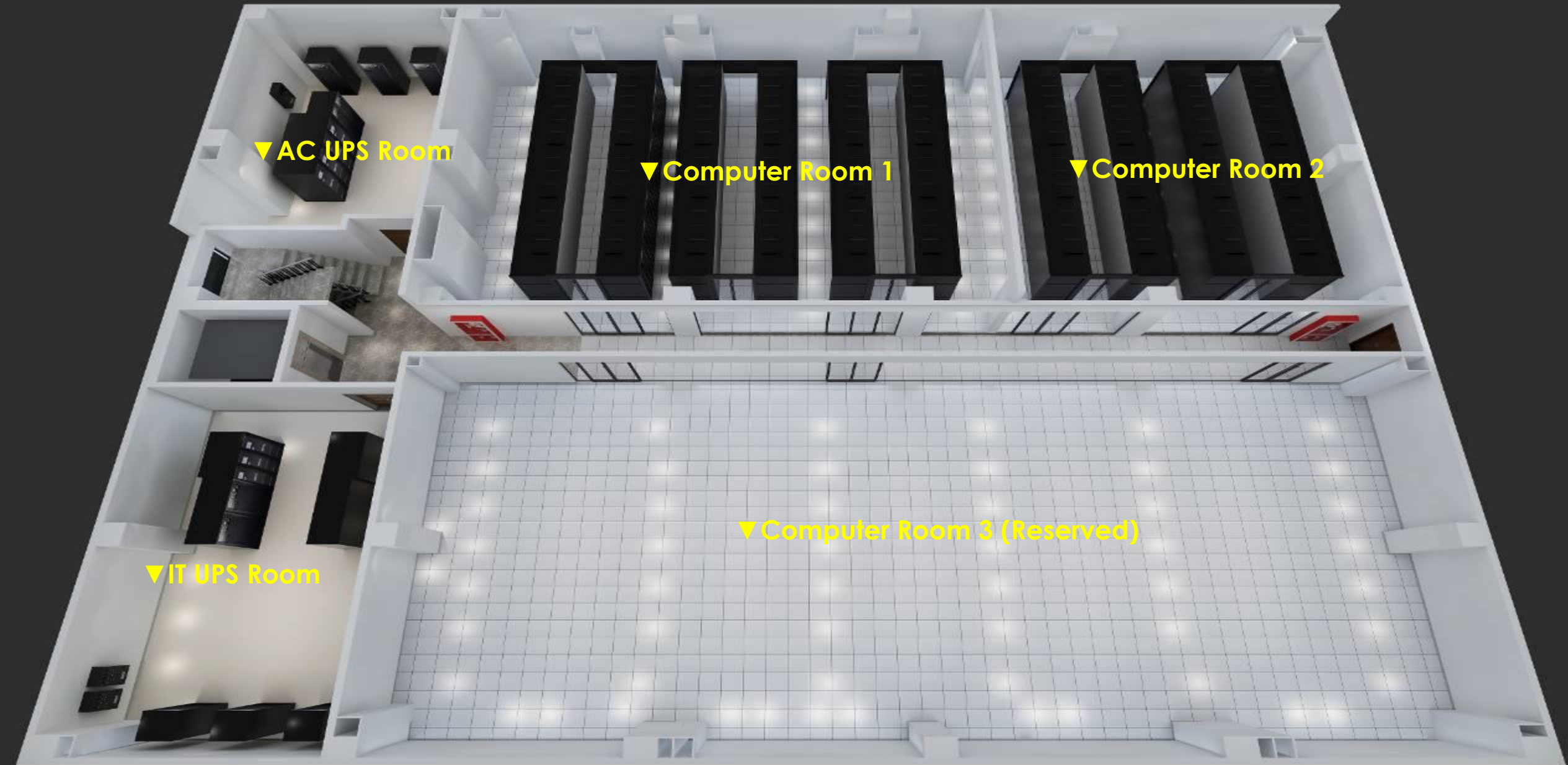
▼ AC UPS Room

▼ Computer Room 1

▼ Computer Room 2

▼ Computer Room 3 (Reserved)

▼ IT UPS Room



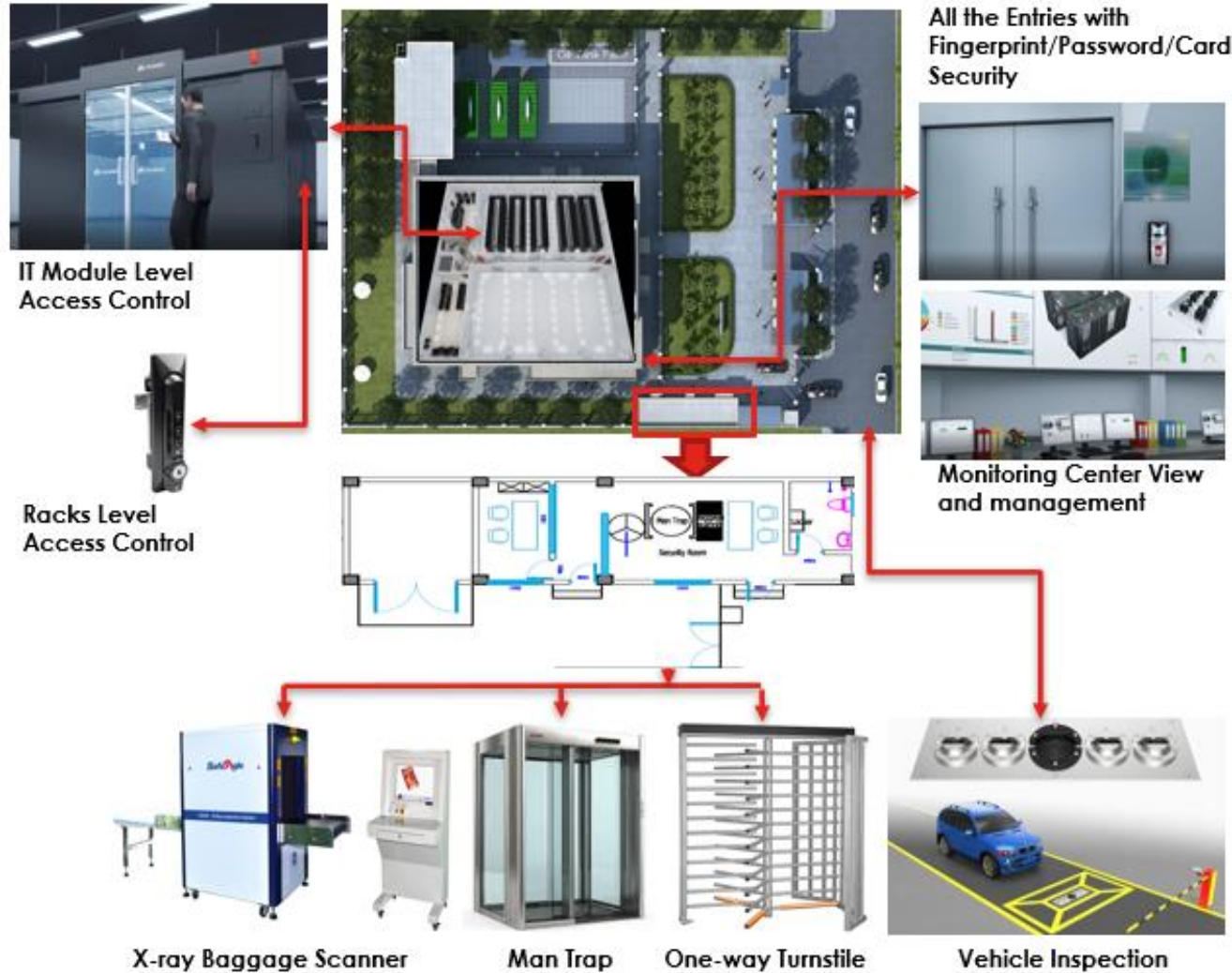
# International Standards

**Konza Ubunifu Center** has been designed and implemented in compliance with the following international standards and best practices



The implementation of **ISO 27001 on Information Security Management & ITIL (IT Infrastructure Library)** on ICT operations, procedures and processes is underway.

# Physical Security features



## Physical Security Measures Based on Data Center Security Requirement in TIA-942

### Level 1 – Campus Access Control

- Vehicle Inspection System
- Security Booths/Mantrap System
- One-way turnstile
- X-ray Baggage Scanner
- Register Station

### Level 2 – Room Access Control

- All the Entries
- Fingerprint/Password/Card Security
- CCTV Security

### Level 3 – IT Module Access Control

- IT Module Cold Aisle
- Racks Level Access Control

### Remote Management

- APP view and management
- Monitoring Center view and management
- Remotely control

# Security of the Cloud

**Virtual Private Cloud (VPC)** – The VPC Provides secure and isolated network environment. Different VPC are isolated from each other

**Virtual Firewall** – Virtualizes physical firewall or software NEs into firewalls that are logically independent of each other. Protect traffic of cloud servers.

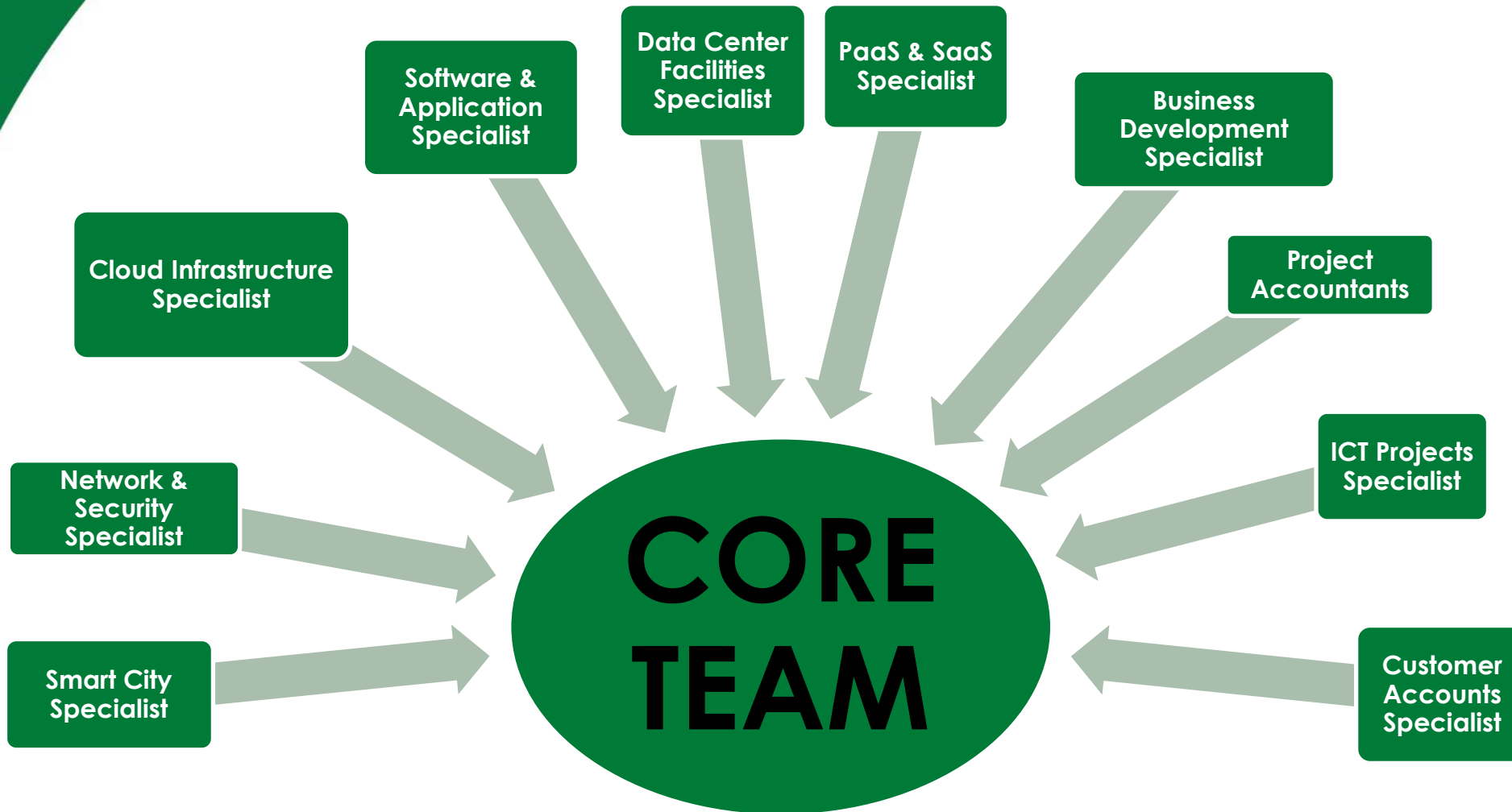
**Security Groups** – The security groups provides rules for filtering the network packets sent and received by VM ports

**Elastic Load Balancer** – The balancer distributes access traffic to multiple elastic container service that helps our customers achieve greater levels of fault tolerance for their applications.

Our cloud is equipped with **system security parameters** such as VM Isolation, user management, data storage security, cloud infrastructure security, O&M and operation management security.

We provide training to our customers on their responsibility regarding **OS hardening, Security group configuration** and adding **virtual firewall rules**.

# Steadfast Support Team



Our team supports customers during the entire onboarding process:

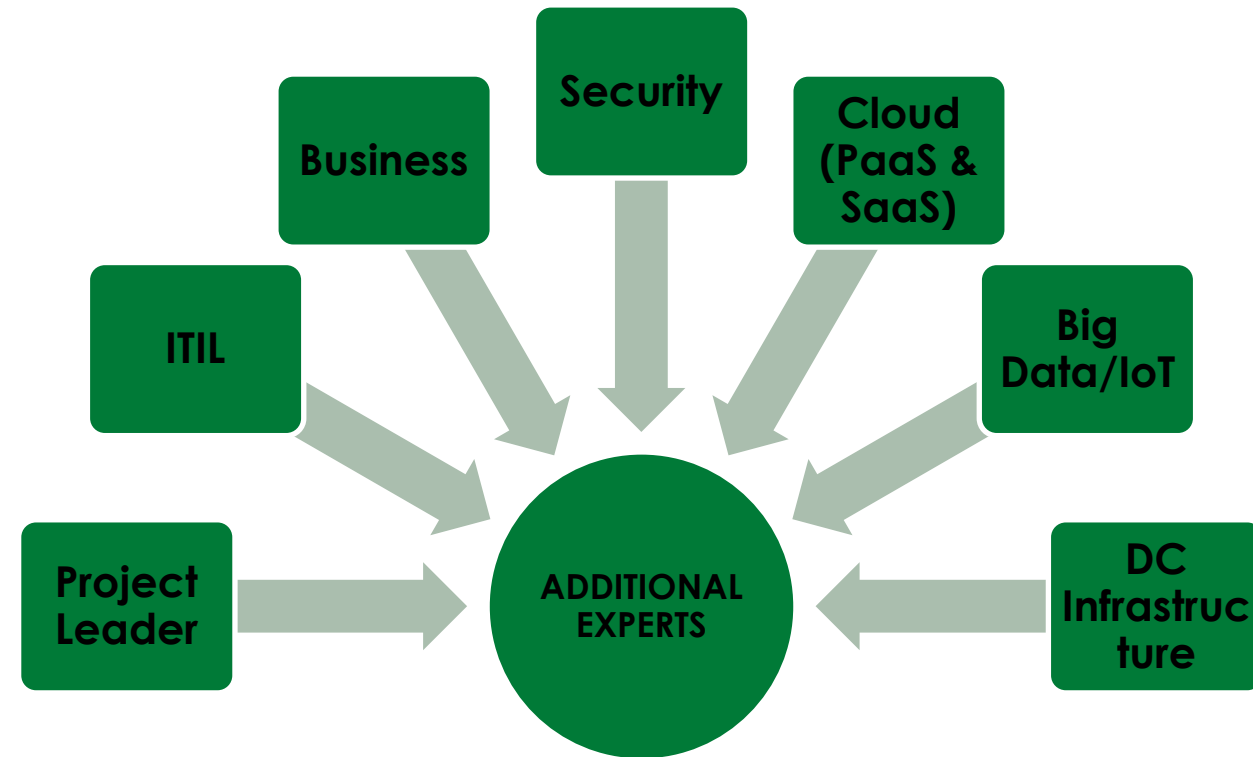
1. Migration planning
2. Allocation of resources
3. Testing
4. Training
5. After sales support

# Additional Experts

KoTDA is working with a consortium comprising Moi University, Eptisa & Viscar Industrial capacity ltd to complements the efforts towards operationalization of the data center.

## Key Experts in the Consortium

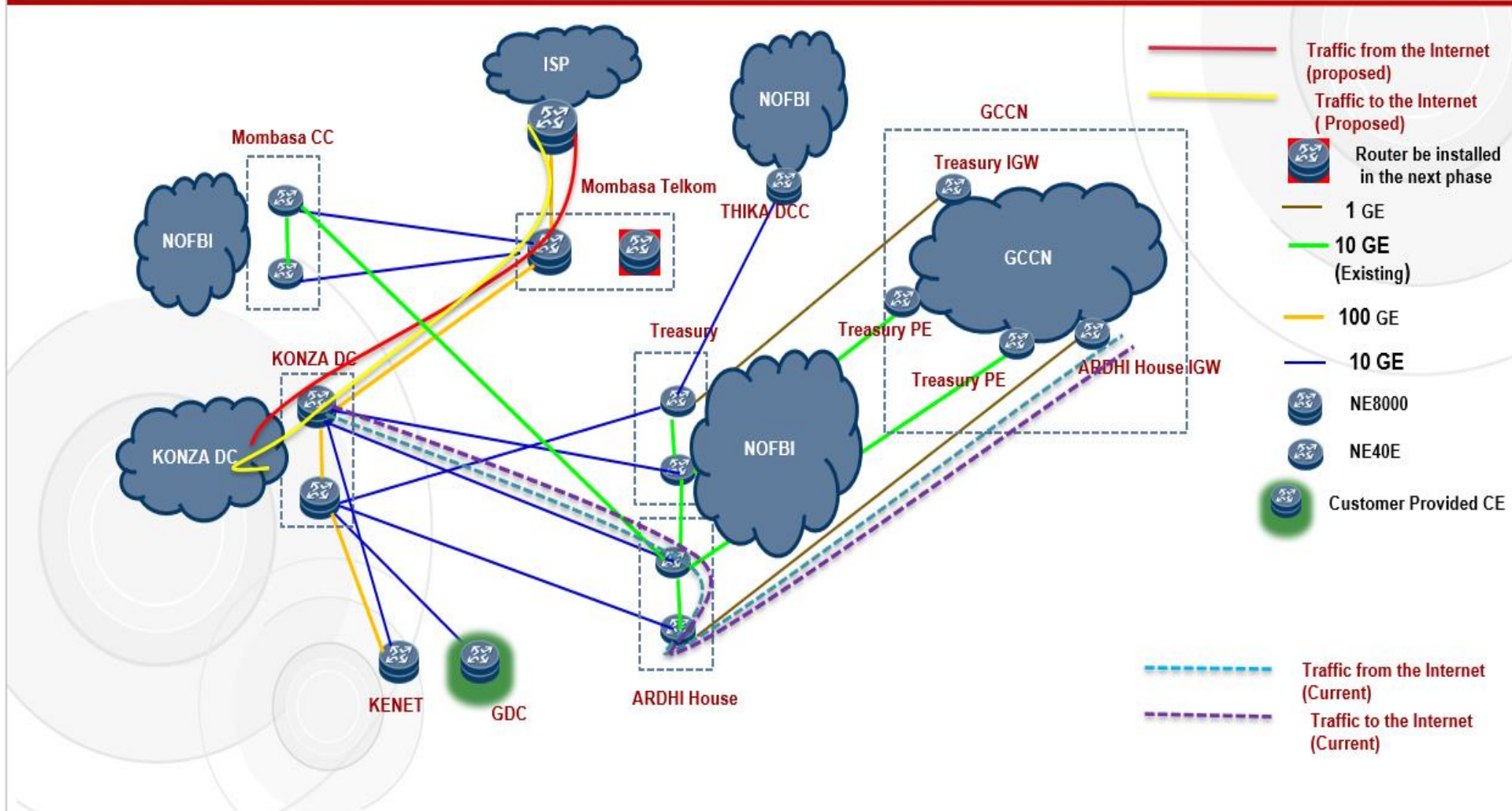
1. Project Leader
2. DC ITIL Consultant
3. DC Infrastructure Consultant
4. DC Security Consultant
5. DC Business, Sales & Marketing Consultant
6. Big Data, AI, Open Data, IoT Consultant
7. Smart City Operations (BMS, Water, Electricity, solid waste, environment etc) Consultant
8. Smart City Operations ITMS Consultant
9. Smart City System Architect
10. Cloud, PaaS & SaaS Consultant
11. Knowledge Economy Expert



NB 1: Consortium (Moi University, Eptisa & Viscar)

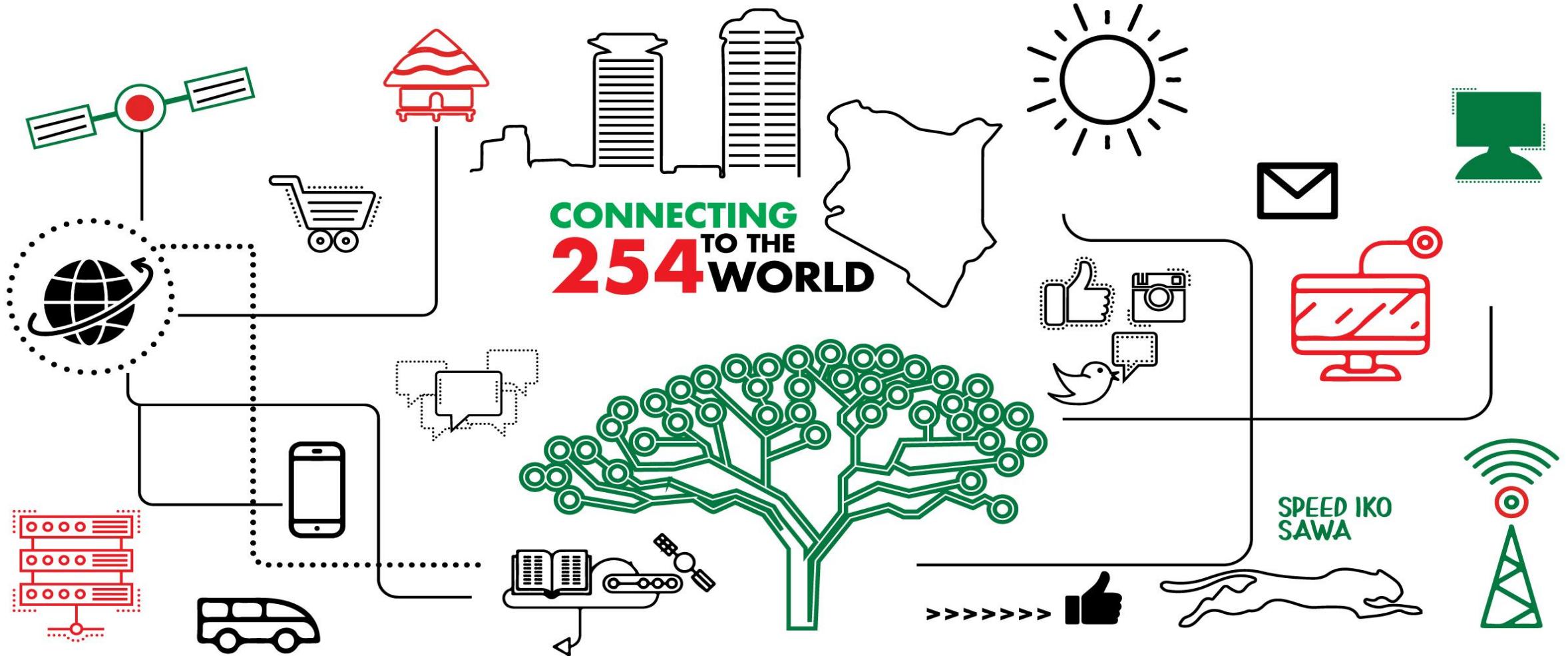
# Multiple Connectivity, Reliability

IP Network Architecture — Internet Traffic Flow, KONZA





# Keeping **you** connected





**KONZA**  
Technopolis

# Our Cloud Offering



# We eliminate these pain points

## Slow Business Launch and Complicated Lifecycle Management



Hardware purchase



Software installation



Service commissioning



Weeks

Time consumption

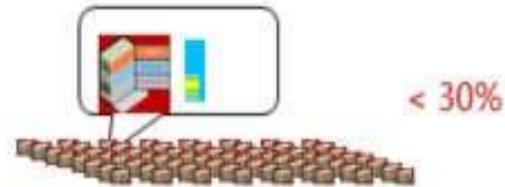
Hardware and software are procured separately, and service deployment is slow.



Hours or days

## High TCO

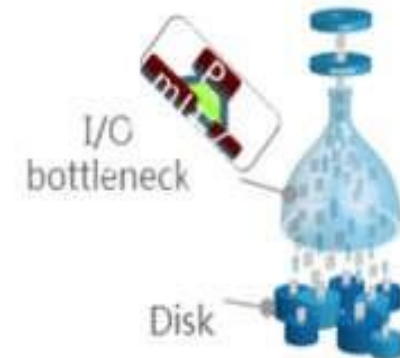
Resource utilization



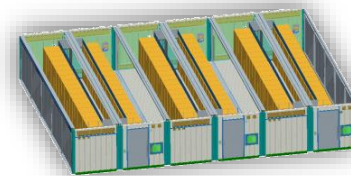
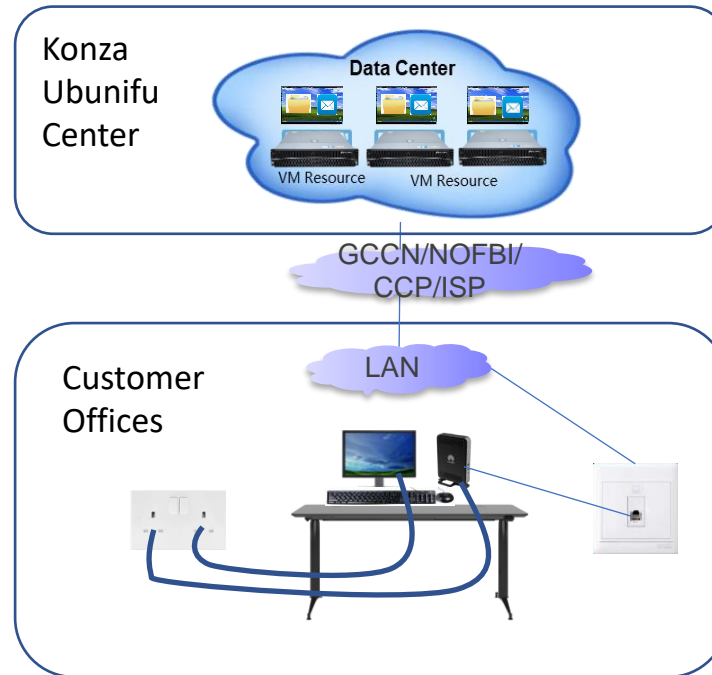
Low server utilization, expensive external storage, and low power efficiency

## Key Application Performance Constrained by I/O Bottleneck

I/O bottleneck



# PaaS, SaaS & Colocation Services

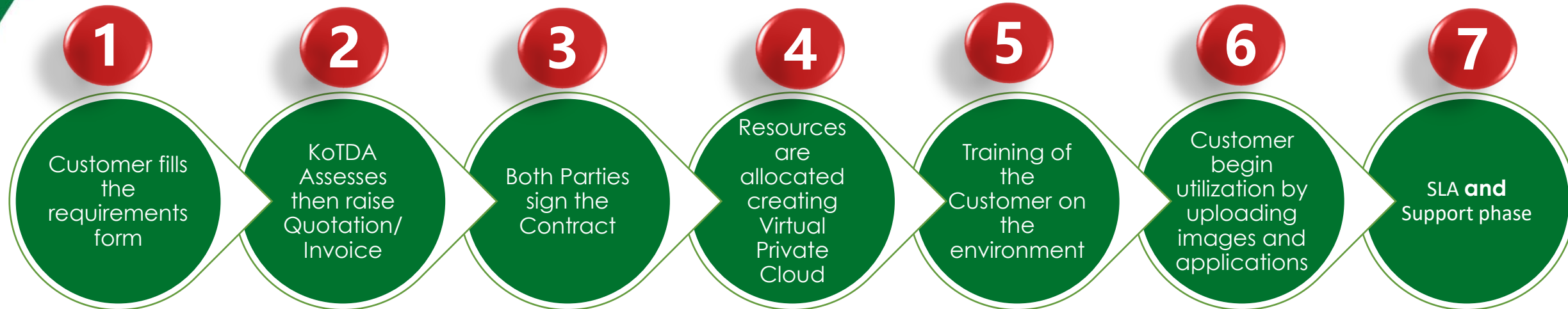


## Data Center Colocation

- Rack Space Renting



# Customer Onboarding Process



**Email us:** [cloud@konza.go.ke](mailto:cloud@konza.go.ke)

# NEW PROJECTS



Development of  
a Smart  
Vaccine  
Production  
Facility



Establishment  
of a Smart  
Agri-tech  
Centre of  
Excellence



Digital Media  
City to support  
Local and  
International  
Creative Economy

**VISION:**  
Africa's leading Creative Economy Hub



TV / BROADCAST

FILM

ANIMATION, GAME, VR (AI)

ICT, SOFT-HARDWARE

SUPPORT FACILITIES

**OBJECTIVES**

Positioning Kenya as an attractive filming location of international standards

Attract Global Investments in the film and media industry

Draw creative talent and stimulate linkages and exchange ideas

Open new entertaining and tourism possibilities

Incubating M&E industry and training youth to be experts

DIGITAL MEDIA CITY

# Investment Opportunities In Konza



**ICT/IT based**  
manufacturing, products  
and services



**Smart City facilities and Utilities:**  
Smart transport, lighting, energy,  
water, utilities, data among others



**Life Sciences:**  
Research centres, Bio-technology,  
Medicine, Tele-medicine,  
Pharmaceuticals, Hospitals among  
others



**Agricultural Tech Park:**  
Centres of Excellence, Research  
Centres, Food Technology, Value  
addition, Agro-processing



**Education sector:**  
Universities, Technical Institutions,  
Colleges and Schools



**Engineering services**



**Light Manufacturing,  
Industrial Parks, Logistics  
and Infrastructure**



**Robotics**



**Financial Services**



**Enterprise Incubation**



**Real Estate:**  
Residential, Commercial and Mixed Use  
facilities, Retail establishments, Hotels &  
Convention Centers



**Film, Entertainment  
& Recreational  
facilities**



**Use of Konza's world  
class Tier III Data Centre**

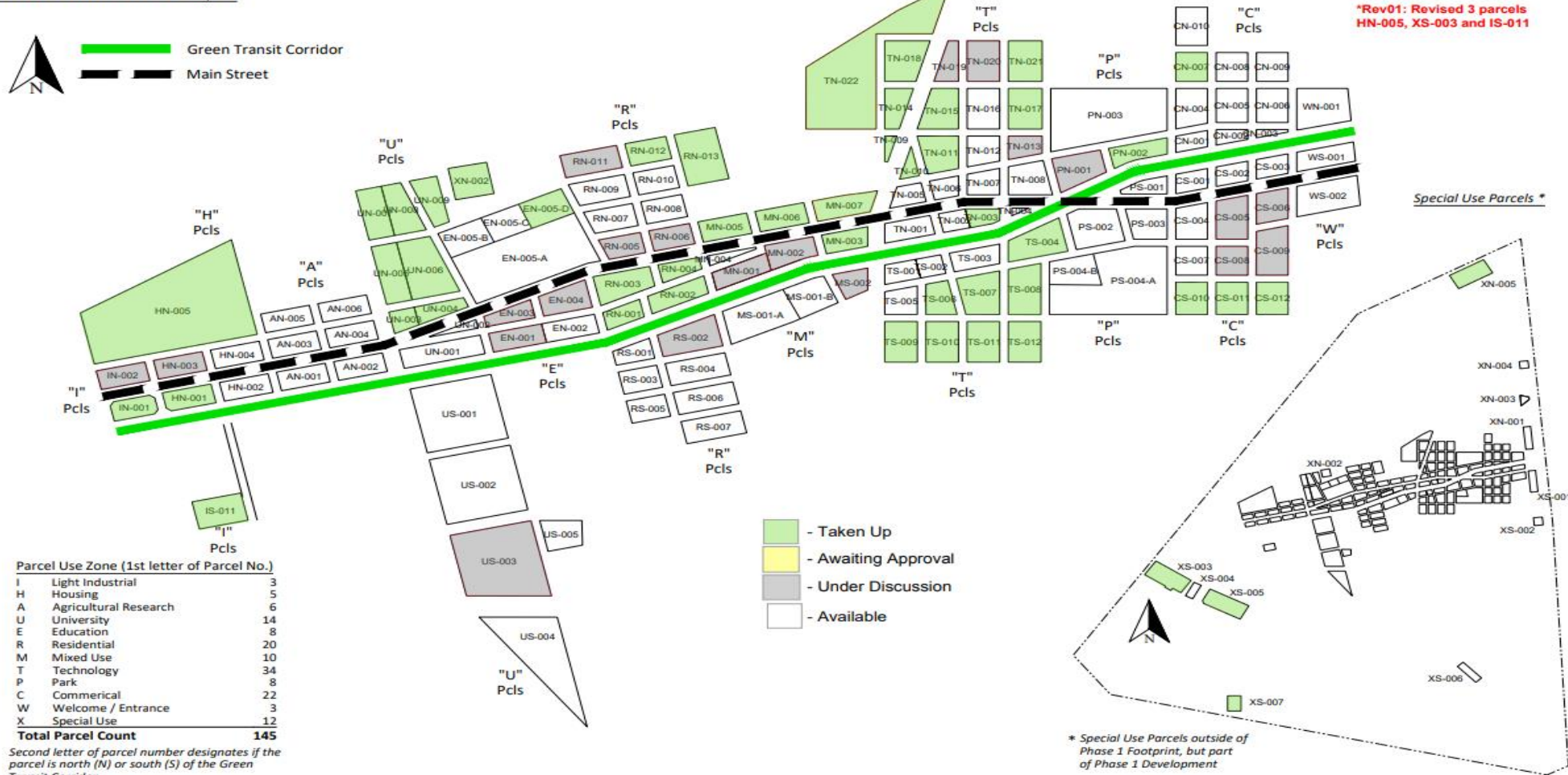
# INVESTOR UPTAKE

## Konza Technopolis

Phase 1 Key Maps - Rev01\*



Parcel within Defined Phase 1 Footprint



\*Rev01: Revised 3 parcels  
HN-005, XS-003 and IS-011

Parcel Use Zone (1st letter of Parcel No.)		
I	Light Industrial	3
H	Housing	5
A	Agricultural Research	6
U	University	14
E	Education	8
R	Residential	20
M	Mixed Use	10
T	Technology	34
P	Park	8
C	Commerical	22
W	Welcome / Entrance	3
X	Special Use	12
<b>Total Parcel Count</b>		<b>145</b>

Second letter of parcel number designates if the parcel is north (N) or south (S) of the Green Transit Corridor

\* Special Use Parcels outside of Phase 1 Footprint, but part of Phase 1 Development

# OPPORTUNITIES AND COLLABORATION – GREENING

## KONZA GREENING INITIATIVE

- The Authority plans to establish a 10 Million tree nursery to support greening efforts of the Technopolis and its environs
- Appropriate tree species will be planted in a series of proposed Parks and Open Spaces that are incorporated into the masterplan





# CREATING A VIBRANT INNOVATION ECOSYSTEM.

The Great COVID-19 Innovation Challenge is an initiative of KoTDA and Association of Country Wide Hubs



316 submissions from 47 counties

53%

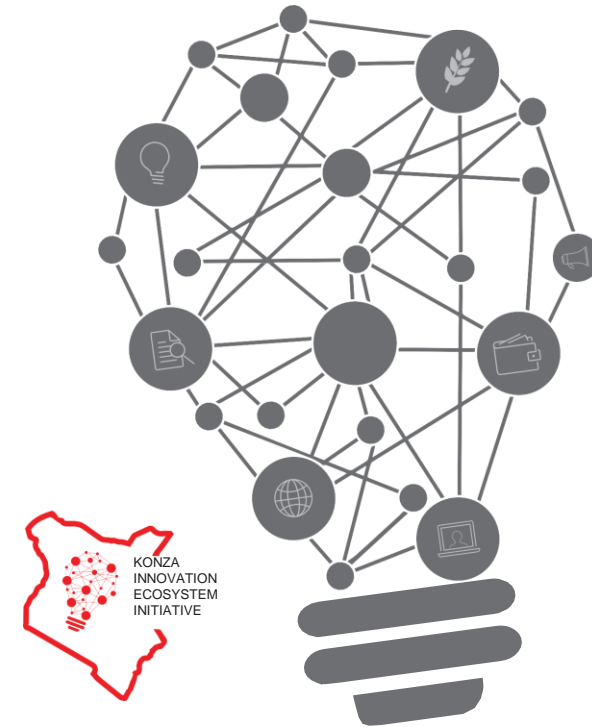
Health Systems Innovation for COVID-19

28%

Dignified work challenge for COVID-19

19%

Food Systems Innovation on for COVID-19





# FOCUSING ON OUR COMMUNITIES



Call Centre at  
KNH



Malili Corporate Social  
Responsibility (CSR)



County Commissioners  
Visit Konza



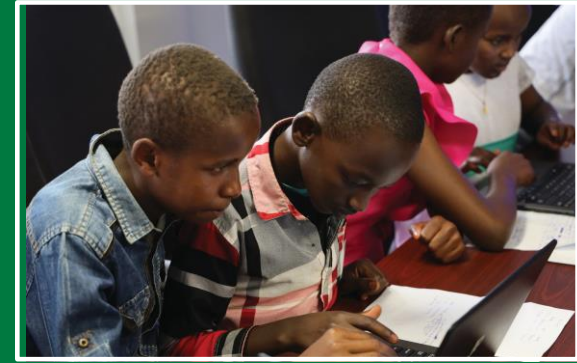
# FOCUSING ON OUR COMMUNITIES



**Akamba  
Council of  
Elders Visit**



**Children's Bootcamp**



**Building Capacity for the  
Future**

# Visit us



# THANK YOU

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**Join us...**

**Konza Technopolis...Technology In The Service of  
Humanity**

**Email us: [cloud@konza.go.ke](mailto:cloud@konza.go.ke)**