

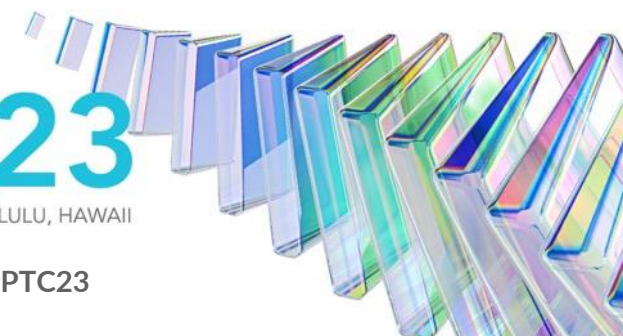


# IXAFRICA DATA CENTRE

NAIROBI, KENYA

NIRAJ SHAH

08:30-08:40



# Introducing IXAFRICA DC

East Africa's Largest carrier neutral campus

## **Prime Location**

- Strategically located in Africa's growing technology epicentre, the 17,300m<sup>2</sup> site is directly off Mombasa Road in Nairobi, Kenya

## **Sustainable by Design**

- Innovative design meets rigorous energy efficiency – target PUE 1.25
- sustainability and community at the heart of design

## **Carrier Neutral**

- Genuine carrier neutral Data centre
- Located in the heart of East Africa's densest concentration of all major network connectivity,

## **State-of-the-art**

- Purpose built campus development to meet the demands of the world's leading hyper-cloud and internet customers

## **Excellent Service**

- World-class customer care service
- comprehensive technical support backed by our self-service customer portal

## **Bespoke Data Halls**

- Customers are invited to work with our design team to meet specific requirements.
- Full project management



Designed for hyper-cloud scaling



22.5 MW IT power available



Campus site with 2 buildings + Teleport area



Purpose built Tier III+ data centre



15,582m<sup>2</sup> total footprint



8013m<sup>2</sup> colocation space



Phase 1 Available Q2 2023



PACIFIC TELECOMMUNICATIONS COUNCIL

PTC'23

15-18 JANUARY 2023 | HONOLULU, HAWAII

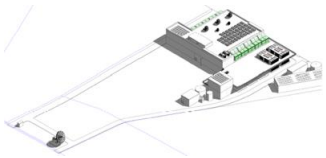


@PTCouncil #PTC23

# East Africa's only hyperscale campus 22.5 MW of IT power

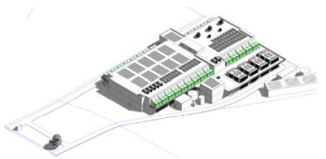
✓ Land acquired - Owned	99-year leasehold from 1987 (65 years remaining)
✓ Power sourced & designs approved	Two 11kV feeds from a two substations. Approved plans (power route) for a 66kV on-campus substation.
✓ Development capacity	Campus no 1 will have 22.5MW of IT power on current IXAFRICA plot. Additional plot identified to increase capacity to >40MW
✓ Hyperscale focused	iXAfrica is the only operator in East Africa able to offer a multi-MW carrier neutral facility to hyperscalers

## Data Centre 1 (opening Q2 2023)



- **Building size:** 4,314 m<sup>2</sup>
- **White space:** 1,653 m<sup>2</sup>
- **Data halls:** 2
- **Racks<sup>(1)</sup>:** 780
- **Power:** 4.5MW IT
- **Office space:** 900 m<sup>2</sup>

## Data Centre 2

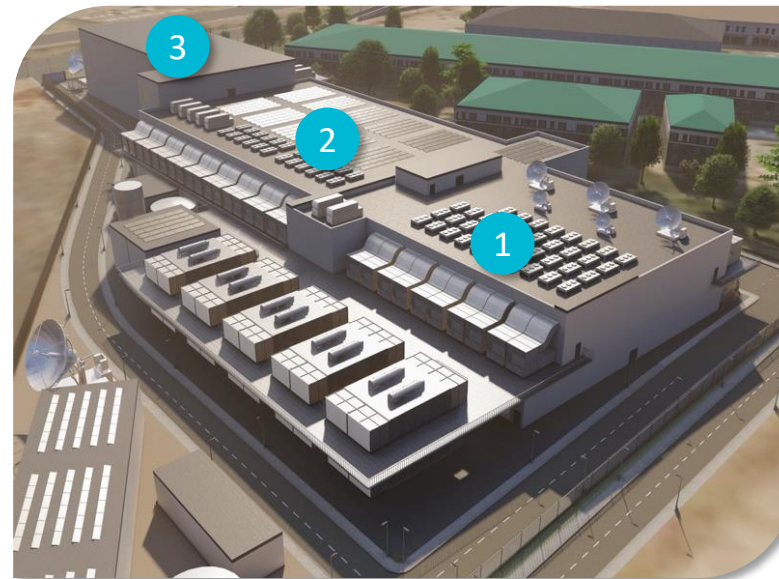


- **Building size:** 12,000m<sup>2</sup>
- **White space:** 6,360 m<sup>2</sup>
- **Data halls:** 6
- **Racks<sup>(1)</sup>:** 3,744
- **Power:** 18MW IT

## Satellite farm



- **Satellite teleport:** 4000m<sup>2</sup>



## Total campus

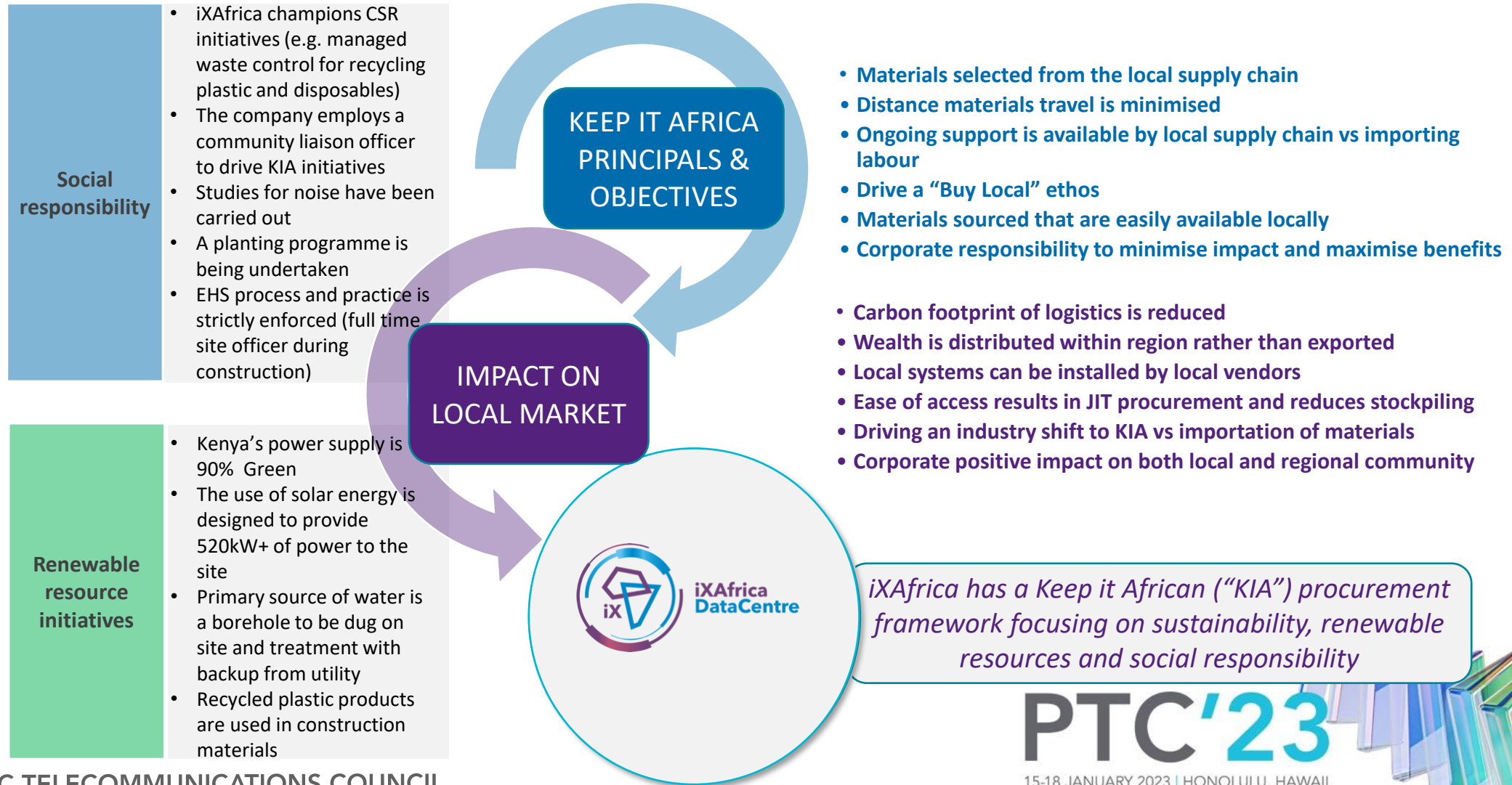
- **Building size:** 16,314 m<sup>2</sup>
- **White space:** 8,013m<sup>2</sup>
- **Racks:** 4,500
- **Power:** 22.5MW IT

# PTC'23

15-18 JANUARY 2023 | HONOLULU, HAWAII

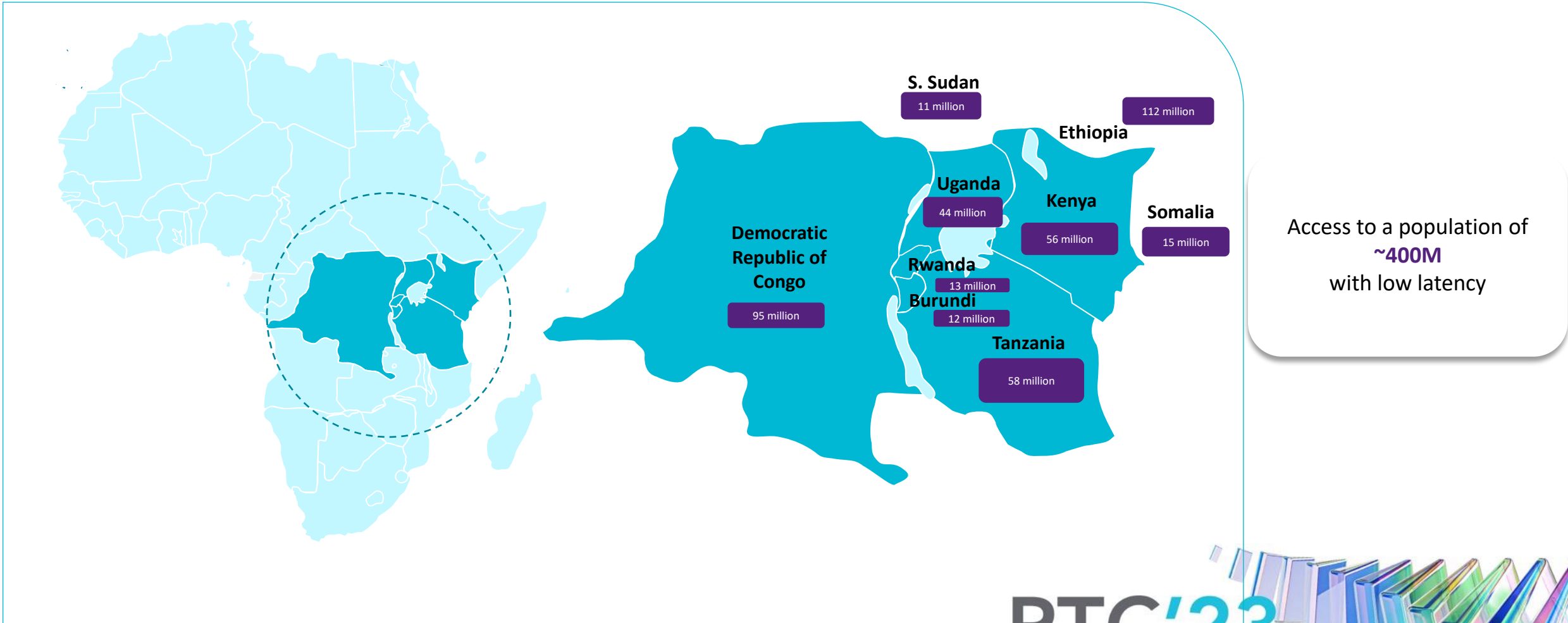
 @PTCouncil #PTC23

# Sustainability underpins campus design



# IXAFRICA Data Centre

Kenya is the gateway to East and Central Africa



# State-of-the-art Design

## Meet the demands of the world's leading hyper-cloud and internet customers

The IX Africa campus is a purpose-built tier III development which is concurrently maintainable with redundant distribution to all critical equipment, allowing 99.999% uptime



### POWER – Electrical and Mechanical critical infrastructure

- Target PUE 1.25 across campus
- Full site IT Power – 22.5MW
- N+1 Redundancy with four independent power trains
- One 66KV Gas Insulated substation
- Four 11KV distribution stations (11KV switchboards)
- 20 11KV diesel generator sets (2.5MVA each) with 70hr run time
- 28 11/0.4KV 2.5MVA Step-down transformers
- 28 400V 1MW UPS



### COOLING

- ASHRAE compliant for optimal efficiency and performance
- Data centre specific cooling technology offering compact footprint with low energy consumption (improving site PUE at partial IT load deployments)
- Autonomous Indirect Adiabatic Cooling (IAC) system
- Each data hall is designed to incorporate a minimum of N+1 IAC units
- Although water is not required to maintain cooling duty there is a simple distribution system and storage. IAC units provide full mechanical cooling, borehole water is used to maximize efficiency

- ❑ concurrently maintainable
- ❑ redundant distribution to all critical equipment allowing 99.999% uptime



# State-of-the-art Design

Meet the demands of the world's leading hyper-cloud and internet customers



## WATER SUPPLY

- Two diverse water supplies
- the utility company, NWSC
- Bore hole
- Water treatment plant
- Waste management
- Bulk storage of water



## FIRE DETECTION & SUPPRESSION

- Fire detection system throughout the building is based on Smoke & Heat detectors with sounders and beacon as required by standard and regulations.
- An Aspirating Smoke Detection system - VESDA- will be installed in the Data Hall and MMR's for early smoke detection of a fire.
- Dual action Sprinkler systems are used to protect the Data halls and the MMR's, in the event of fire. MIST
- A Dry Sprinkler system in other areas - offices, corridors, storage, etc. protecting the personnel.



## SECURITY – MANNED – PHYSICAL – DIGITAL - DATA

- 7+ levels of security
- Vehicle and pedestrian air locks
- Colour motion activated HD CCTV
- Motion activated lighting (solar for the external external)
- External 24/7 manned guard house controlling both pedestrian and vehicle access into the campus
- One way traffic system - fully enclosed campus
- Non contact secure access security system and processes using biometric access control with Face Recognition
- Redundant and Segregated internal Network Infrastructure utilizing logical and physical network segregation where required



PACIFIC TELECOMMUNICATIONS COUNCIL

# PTC'23

15-18 JANUARY 2023 | HONOLULU, HAWAII



@PTCouncil #PTC23

# Carrier Neutral

Concentration of major network connectivity, offers genuine carrier neutrality

- Access an ecosystem of 20+ carrier networks
- 4 secure, diverse fibre entry points
- 4 independent MMRs
- Demarcation hand-off frames
- Each Data Hall connects to each MMRs
- Zone on roof for dedicated GPS/dishes
- Teleport

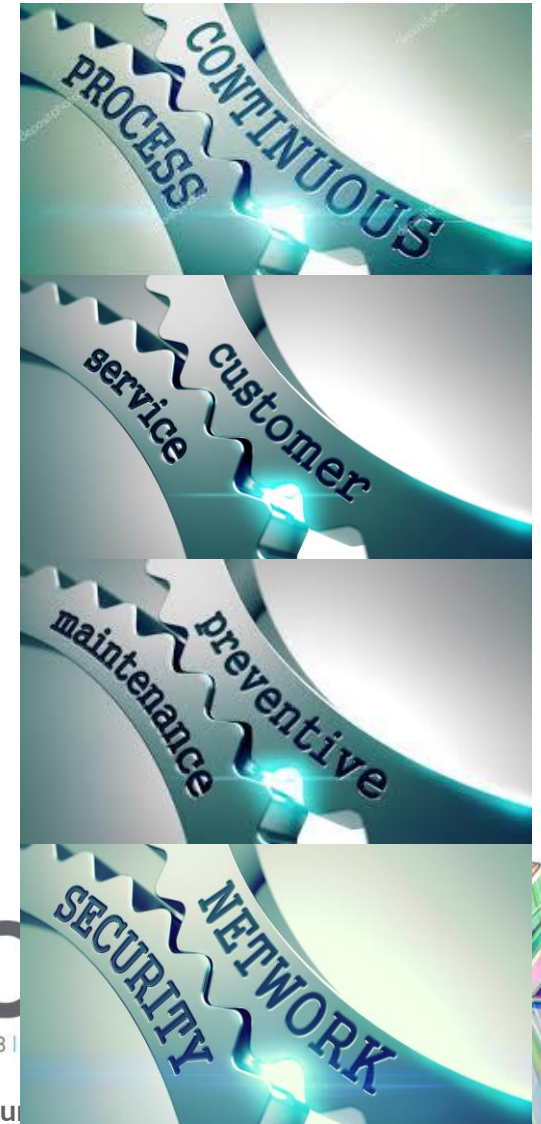




# Excellent Service

World-class customer care service with comprehensive technical support

- Our recruitment team focuses on talent and hires professionals in Engineering with expertise in:
  - ❖ Electrical
  - ❖ Mechanical
  - ❖ Cooling
  - ❖ Networking
- Fast response 24/7/365 on-site support
- Project management and build out
- Installation and support services
- Site logistics support and management
- Self-service customer portal and reporting
- Remote and smart hands
- Managed deliveries
- Meeting room space, hot desk zone and free WiFi
- Welfare zone for customers



A person wearing a light blue button-down shirt is shown from the chest down, focused on drawing on a large architectural blueprint. They are holding a green pen in their right hand and pointing with their left hand. The blueprint is spread out on a table, showing various technical drawings and grids. The background is softly blurred, suggesting an office or design studio environment.

# Bespoke Data Halls

Working in collaboration with hyper-scale customers to meet specific requirements

- Bespoke dedicated Data Hall and suite designs
  - Data Halls can be divided for different size deployments
  - Customised power and containment systems
  - Accommodate different density requirements
- 
- Security enhancements over and above existing systems
  - A multitude of rack sizes can be employed
  - Designed to meet different redundancy models
  - Distributed redundant, block redundant or 2N

# ASANTE! MAHALO!

## Disclaimer

The information in this document do not constitute or form any part of, and should not be construed as, an offer or invitation to sell, or issue, or any solicitation of any offer to purchase, subscribe for or otherwise acquire any share or other securities in IX Africa Data Centre Limited (“IXAfrica” or “IXADC” or the “Company”) in any jurisdiction, nor shall it or any part of it form the basis of, or be relied on in connection with, any contract therefore. No reliance may be placed for any purpose whatsoever on the information or opinions contained in this document and the presentation or their completeness. No representation or warranty, expressed or implied, is given on behalf of IXAfrica or any of its respective directors, employees, agents or advisers as to the accuracy, completeness or fairness of the information or opinions contained herein or made in the presentation and, save in the case of fraud, no responsibility or liability is accepted (and all such liability is hereby excluded) for any such information or opinions.

Readers of this document and recipients of the presentation are reminded that the information in this document has not been verified and is liable to change and that any decision to acquire securities in IXAfrica should be made only on the basis of a detailed investigation of IXAfrica. The information in this document may not be reproduced or further distributed to any other person or published, in whole or in part, for any purpose.



# PTC'23

15-18 JANUARY 2023 | HONOLULU, HAWAII

 @PTCouncil #PTC23

