

 South Africa

Affordable, Uncapped Wi-Fi at National Scale



About project

Project Isizwe is a non-profit organisation that partners with funders and Internet Service Providers to provide equitable internet access to underserved schools and communities.

They **replaced Meta's retired Express Wi-Fi with Powerlynx** to keep its mission alive: "equitable, uncapped internet in every classroom and community". Powerlynx now orchestrates every hotspot, voucher, advert, and analytics, letting the Isizwe team run a country-wide network from one dashboard.

Connected users

1 Free / affordable hotspots deployed

1002 hotspot sites in 8 provinces

2 Wi-Fi for education

115 schools connected (**70 000+** learners & teachers)

3 Monthly active online users

300 000+ active users monthly

4 Connected community users

600 000+ users from from **60** underserved communities

Equipment used

Project Isizwe's hardware setup is flexible yet standardised, centred on MikroTik and Cudy / Cambium APs.

 **MIKROTIK**

cudy

 **Cambium™
Networks**

Core challenges

- 1 **Hyper-diverse footprint** – schools, townships, mines, malls, wind- & solar-farms need different rules and sponsors.
- 2 **Low-income users** – data must be free or cheaper than R5/day.
- 3 **Tiny operations team** – automation, self-service onboarding and zero-touch updates are essential.
- 4 **Hybrid funding** – mix of CSR sponsors, advertising and voucher sales.

Powerlynx solution highlights

- 01 **Cloud-Hosted Hotspot OSS/BSS**
no on-prem servers; multi-vendor support

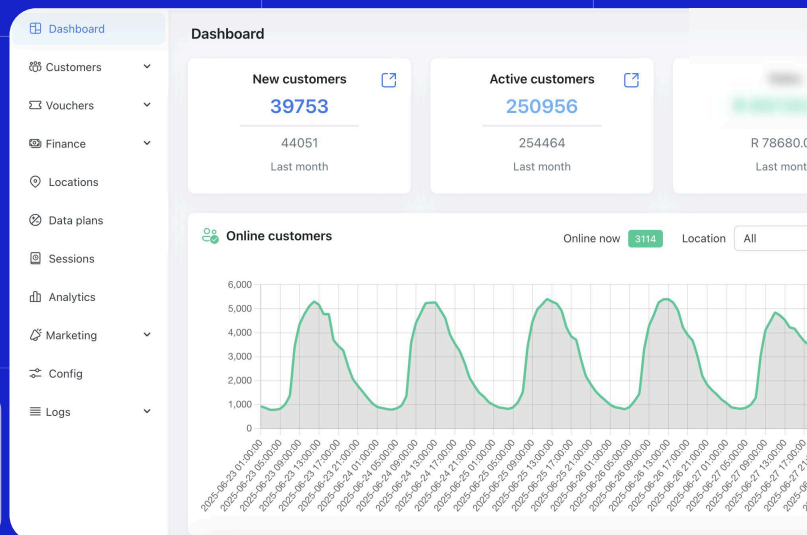
- 02 **Scalability**
The system is highly scalable and supports hundreds of thousands of online users.

- 03 **No-Code Captive Portal Editor**

- 04 **Integrated Payment Gateways**
netcash® Voucher

- 06 **Voucher Generation**
Easy generation and distribution of Wi-Fi vouchers.

- 08 **Multi-Location Management**



- 05 **Flexible Data Plan Configuration**
Speed, Price, Availability, # of devices, Limits: time / data / usage, Validity

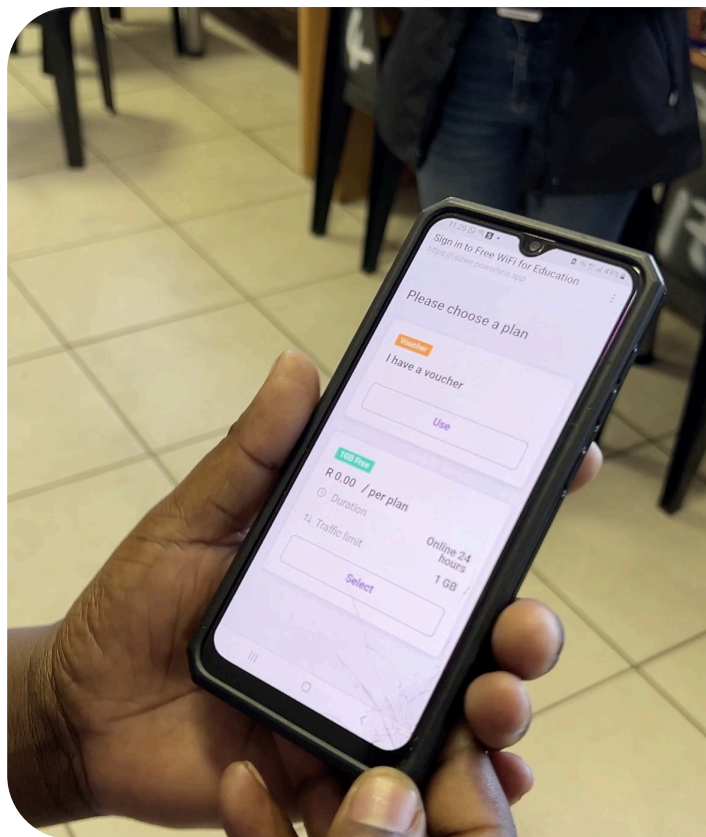
- 07 **Wi-Fi Advertising**
Image or video ads during Wi-Fi login to show sponsored ads or promote internal offers.

- 09 **Notifications, Status Page**
User notification about data usage, access expiry, or payment status.

Sector-by-Sector Impact

Wi-Fi in Support of Education

- **115 public schools** now enjoy uncapped classroom Wi-Fi; daily caps apply only off-campus.
- **70 000 learners & teachers connected** in 2024.
- Captive portal shows school logo, OTP login and 1 GB/day plan
- Integration with Walebone DNS resolver to filter and block malicious websites and sensitive content.



Vision roadmap: connect 16 000 unserved SA schools by 2030.

Uncapped R5 Wi-Fi

- R5/day (\approx US \$0.25) for unlimited data.
- Community resellers earn margin on voucher sales; Powerlynx auto-creates users & enforces plan limits.
- Deployed in Lamontville, Mpophomeni, and Dunoon
- Covers over **18,000 homes**.
- 130+ high-range APs and 320 home extenders installed
- Over **3,000 unique users**, with **1,000+ monthly paying customers**.



Sector-by-Sector Impact

Wi-Fi for Economic Growth

- Free guest Wi-Fi in **7 township malls** reaches **30 000 shoppers/month**, 500 MB free per user.
- Splash pages with banners and video ad promos from sponsors.

| Campaigns | | | |
|-----------|-----------------------------------|------------|------------|
| ID | Name | Start date | End date |
| 1 | Bridge City | 2024-03-26 | 2025-08-31 |
| 2 | Diepsloot | 2024-03-28 | 2025-02-28 |
| 3 | Heidelberg | 2024-03-28 | 2025-02-28 |
| 5 | Eyethu | 2024-03-28 | 2025-02-28 |
| 6 | Murchison | 2024-03-28 | 2025-02-28 |
| 7 | Eyethu WeCare Food Security | 2025-03-27 | 2025-05-01 |
| 8 | Diepsloot WeCare Sporting Chance | 2025-04-08 | 2025-05-01 |
| 9 | Motherwell WeCare Sporting Chance | 2025-04-08 | 2025-05-01 |
| 10 | Sontonga WeCare Sporting Chance | 2025-04-08 | 2025-05-01 |



Free WiFi for mining and solar and wind farm communities

Glencore Coal

- Deployed 32 free WiFi hotspots across 28 physical site locations
- 34,000 monthly active users connect to the internet

Glencore Ferroalloys

- 25 free WiFi hotspots with 5000+ monthly active users

Solar farm communities enabled by Acciona

- 10 sites with 6000+ monthly active users

