

Advancing Sustainability Through Continuous Intelligence

An Interview with Drakenstein, Utility Project in South Africa

Guest speakers



Shashwat Khare
Chief Marketing Officer, ETAP

- 20yrs of experience in Project management, Business Development, Sales and Marketing
- Responsible for the strategic marketing planning and deployment at ETAP



Alvin Naidoo
Managing Director, ALTEK

- MD of Altek (ETAP System Integrator)
- Extensive experience in substation automation, power system modeling, and industrial networking
- Key competencies in Substation SCADA Systems
- Involved in various automation and SCADA projects
- Experience spans municipality distribution, mining, manufacturing, and renewables

Altek Company Profile



Altek is the system integrator of ETAP and an EcoXpert for Schneider Electric in sub-Saharan Africa.

Altek is the leader in Electrical SCADA and Substation Automation. Core competencies lie in the following areas:

- Substation Automation
- Energy Management
- Power System Modelling (ETAP, DigSILENT and PSCAD)
- Smart City Design and Integration
- Advanced Power System Studies (ETAP, DigSILENT and PSCAD)
- Electrical Design
- MV and LV Panel Fabrication
- Electrical Maintenance and Testing (HV and MV)



Altek's Markets



Mining



Manufacturing



Utilities



Facilities



Renewables

About Drakenstein Municipality



- Local municipality located within the Cape Winelands District Municipality, in the Western Cape province of South Africa.
- Made of the following towns Paarl, Wellington, Gouda, Saron and Hermon



In collaboration with **ALTEK**

How ETAP improved Drakenstein Municipality's Electrical Network

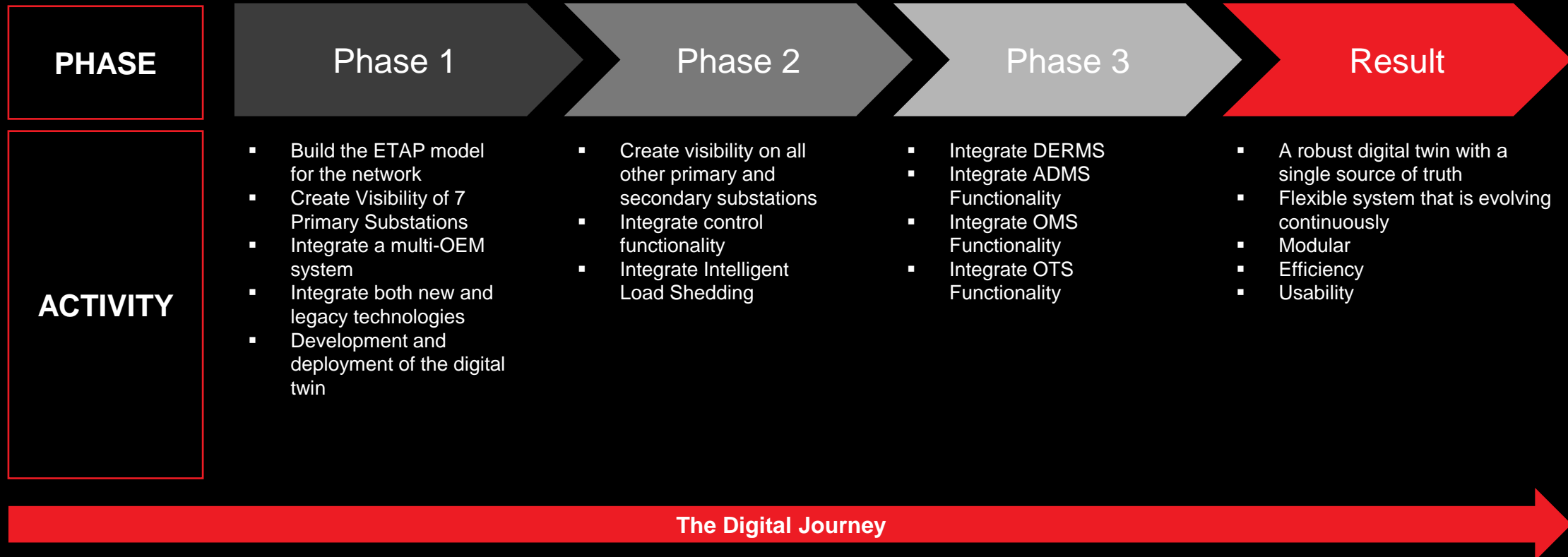
Challenge

- Lack of visibility of electrical network and manage loadshedding
- Digital Model of the network for easier electrical equipment management
- Integrating multiple vendor IED's, RTU's and measuring equipment
- Creating a system that accommodates both legacy and newer technologies
- System needed to be designed to introduce additional renewable technologies



In collaboration with **ALTEK**

The Digital Journey



etap[®]

In collaboration with **ALTEK**

How ETAP improved Drakenstein Municipality's Electrical Network

Challenge

- Lack of visibility of electrical network and manage loadshedding
- Digital Model of the network for easier electrical equipment management
- Integrating multiple vendor IED's, RTU's and measuring equipment
- Creating a system that accommodates both legacy and newer technologies
- System needed to be designed to introduce additional renewable technologies

Solution

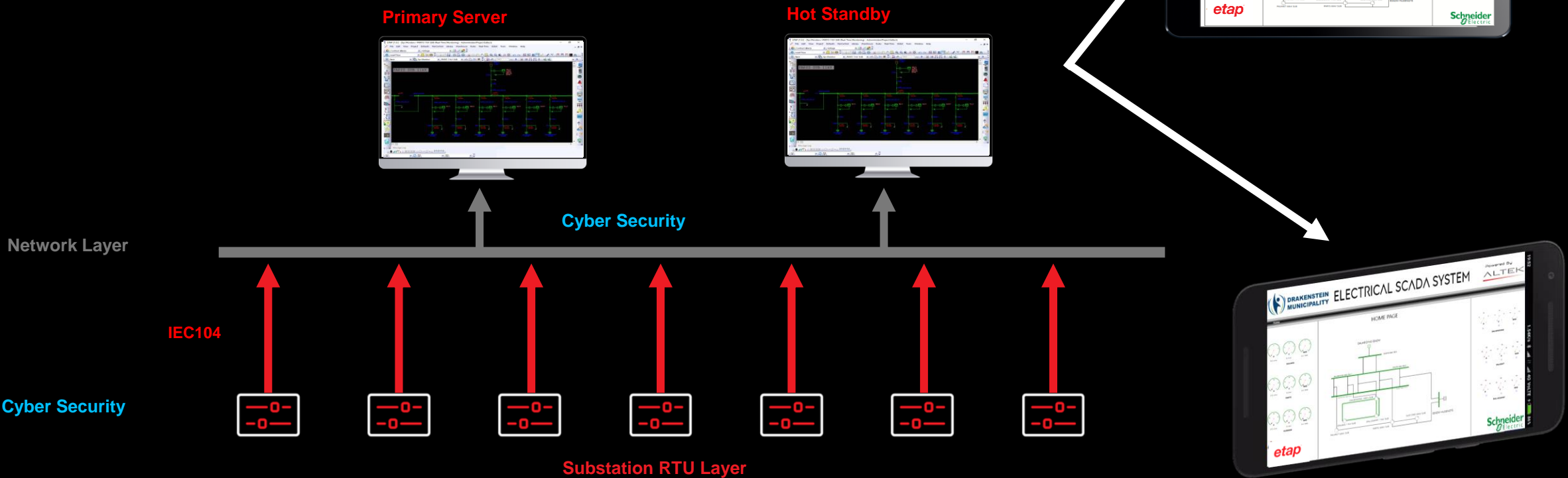
- ETAP Digital-Twin Platform
- ETAP SCADA
- PSMS



In collaboration with **ALTEK**

About the Project

The Following SCADA Architecture was chosen:

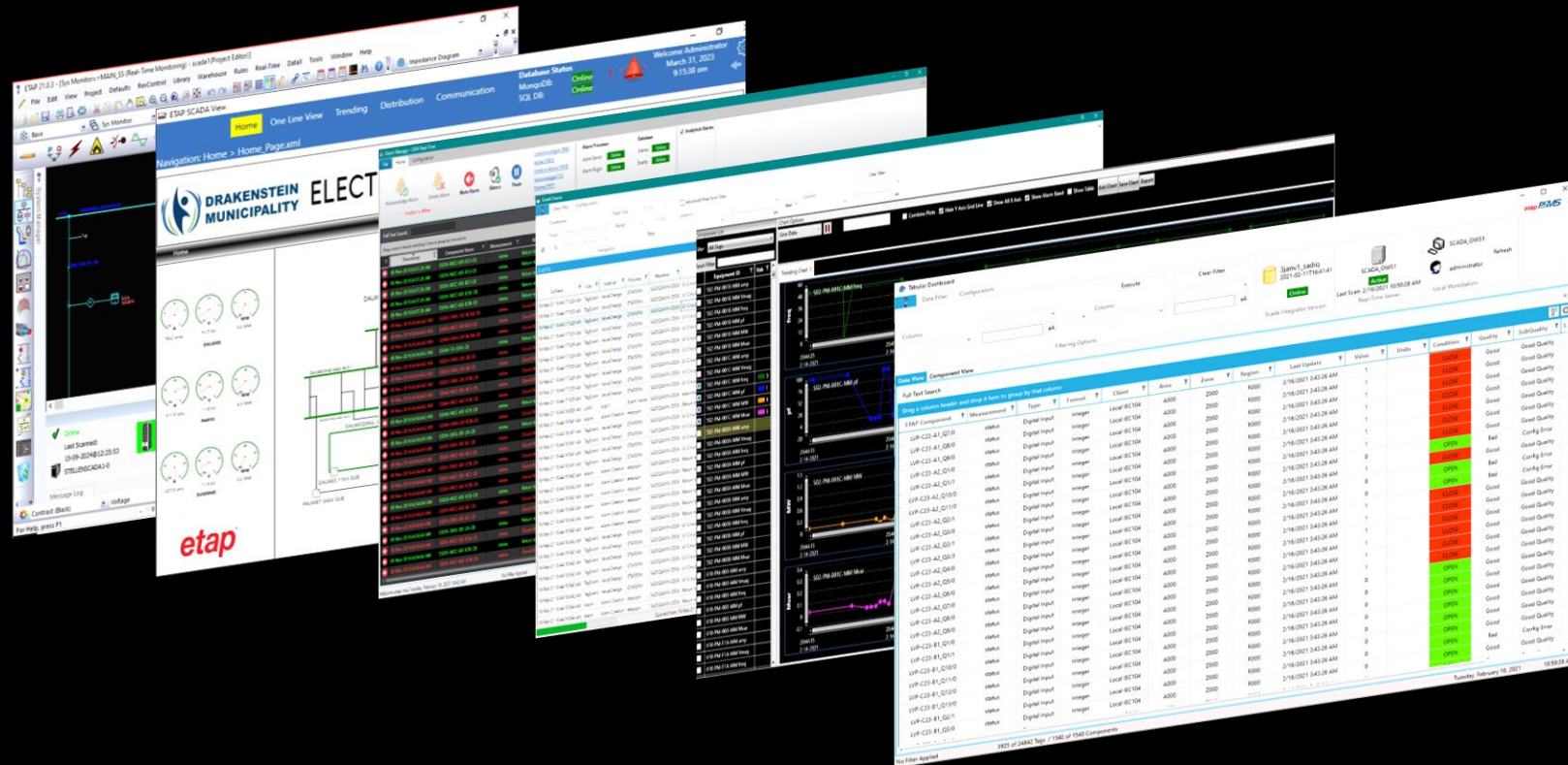


etap

In collaboration with **ALTEK**

About the Project

Six views in one unified platform



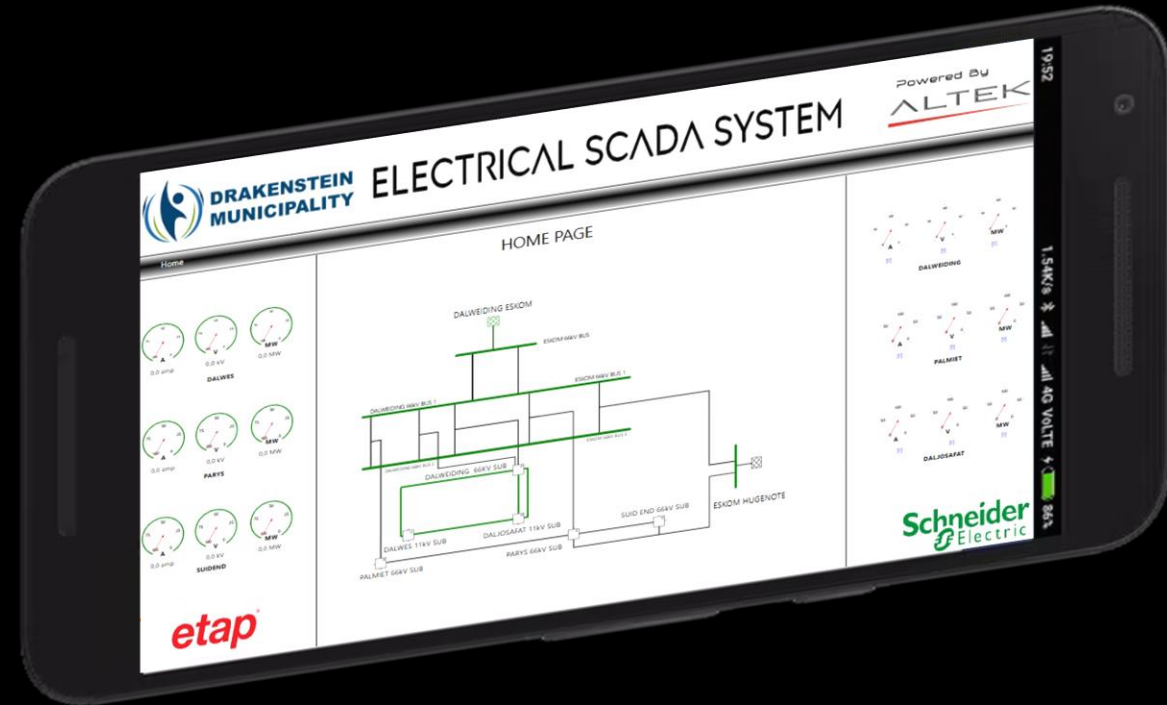
In collaboration with **ALTEK**

About the Project

Deployed Interfaces:

Mobile View

- All Key Employees
- Monitor Network
- View/ Acknowledge all alarms
- View Events
- View Trends



In collaboration with **ALTEK**

How ETAP improved Drakenstein Municipality's Electrical Network

Challenge

- Lack of visibility of electrical network and manage loadshedding
- Digital Model of the network for easier electrical equipment management
- Integrating multiple vendor IED's, RTU's and measuring equipment
- Creating a system that accommodates both legacy and newer technologies
- System needed to be designed to introduce additional renewable technologies

Solution

- ETAP Digital-Twin Platform, ETAP SCADA , PSMS

Results

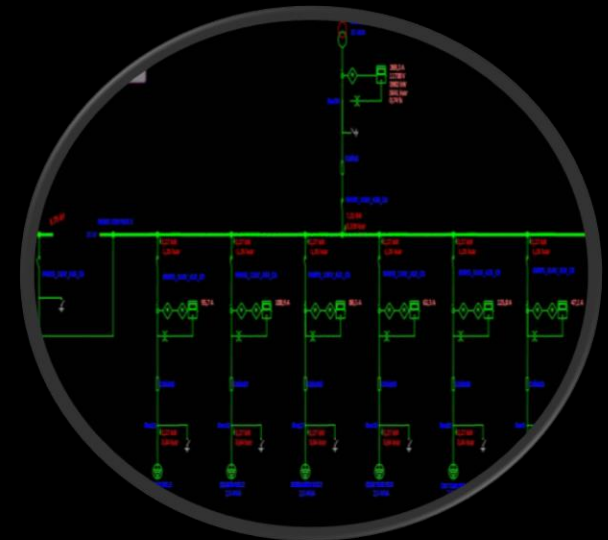
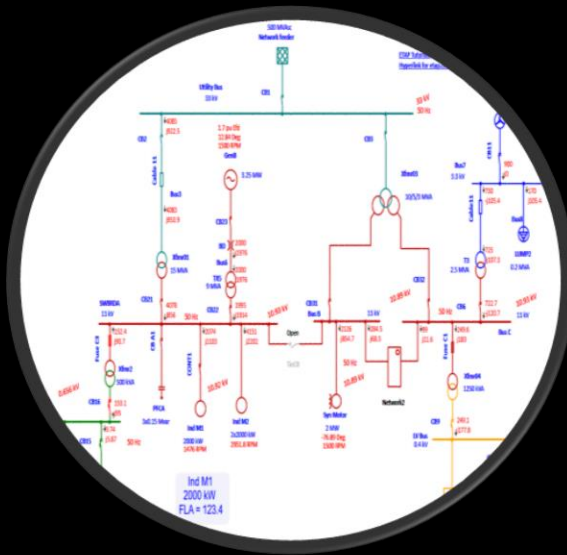
- Vendor Agnostic, Unified Platform integrating both legacy and new technologies
- Comprehensive visibility of the electrical network
- Improved Settings for Optimized Performance
- Improved outage reaction times resulting in shorter outages
- Creating Digital Replica of the entire Electrical Network



In collaboration with **ALTEK**

Benefits

A Unified Platform



In collaboration with **ALTEK**

Customer satisfaction



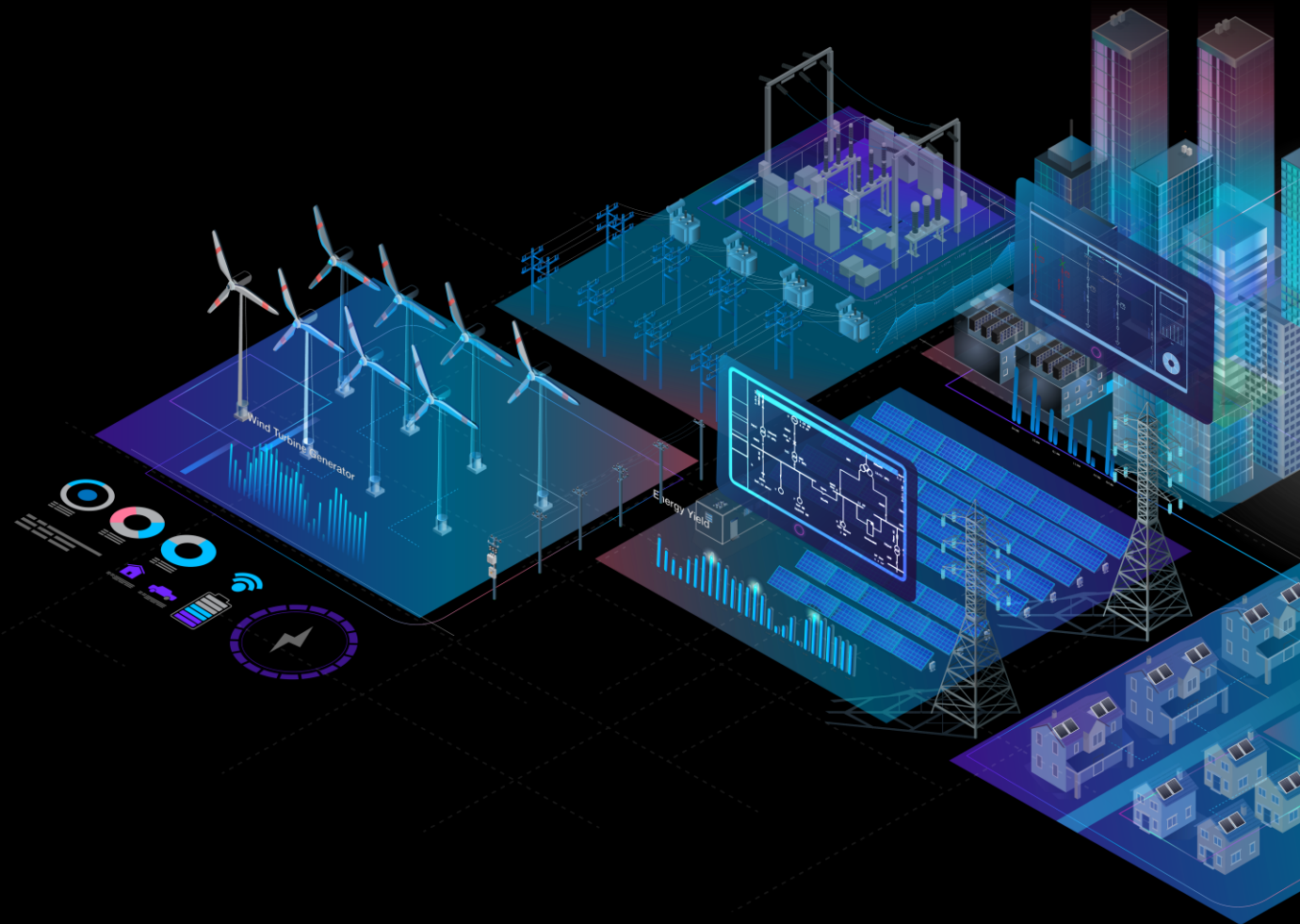
- Overall Satisfaction
- Technical Support Satisfaction
- System Quality
- Ease of Use



- Single Source of Truth
- Digital-Twin for better visibility till load level
- Operating Philosophy Development
- Contingency Planning
- Protection Optimization with event playback
- Reduced callout time, resulting in shorter outages

The Digital journey

- ✓ Ease of use working together with the customer, driving digitalization in accordance with the customer's vision
- ✓ Creating a unified robust platform
- ✓ Developing a future ready modular system that is continuously evolving





Thank you