Smart **Struxure**™

VOX Telecom

CUSTOMER BENEFITS

- Significant energy savings
- Multiple system integration
- Ease of use and maintenance

PROJECT AT A GLANCE

Data Centre and office building with integrated building management for HVAC, power, fire, water, temperature, UPS and generators

Location: Johannesburg, South Africa

Number of Buildings: 5

Square Feet:
Office: 7,000 square meters
Data Centre 370 square meters

Technologies implemented:
SmartStruxure™ solution for monitoring & control of:
- Chiller plant, air conditioners, air handling units, and temperature monitoring
- Generators, UPS, flood alerts, gas suppression monitoring, power usage, and fire alarms

StruxureWare Power Monitoring
- PUE's (power usage effectiveness) calculations
- Power quality reporting
- Consumption profiling
- Bill verification

Lighting control
- Occupancy sensors

Vox Telecom is a leading telecoms company providing solutions in data, Internet, telephony, visual communications, managed services & cloud services. A review of their campus in Johannesburg, South Africa revealed opportunities to improve efficiency in both operations and energy costs. Vox Telecom selected Green Wave Automation (www.greenwave.co.za), a valued partner of Schneider Electric, to help them address the following challenges:
- Several disparate systems that limited visualization across the whole enterprise
- Limited access to power metering and data to analyse usage
- Less than optimal tariff structure
- High energy costs

Green Wave Automation and a dedicated team from Vox Telecom worked together from the design phase through to completion to ensure the project went smoothly. Green Wave Automation used their experience and understanding of Schneider Electric's system capabilities to create a customized design that addressed all of Vox Telecom's concerns.

Make the most of your energy℠

Schneider **Electric**

[Telecom] Vox Telecom

> "We looked at other technology suppliers, but they had limitations in offering the power management and BMS as one integrated solution. The suppliers that could offer it, were vastly more expensive."
>
> **Gary van den Berg**
> **Infrastruxure and Facilities Manager**
>
> **VOX telecom**

The project was implemented in several phases, each phase building on the previous, to ultimately deliver a fully integrated solution. The first phase included installing Schneider Electric power meters to start capturing data essential for decision making. StruxureWare Power Monitoring software was used to provide core metering data, detailed reporting of power quality, consumption patterns and bill verification.

StruxureWare Power Monitoring software helped uncover energy waste, unused system capacity and show new ways to extend equipment performance and life span. Its cutting-edge flexibility and compatibility enable a scalable approach to implementation and created an open system that integrated with other Schneider Electric and third-party devices.

After this phase was completed, Vox Telecom was able to calculate their data centre PUE (Power usage effectiveness), which compares a data centre's usage to industry standards. With this information Vox Telecom was able to prioritize which data centre to tackle first.

During the discovery phase, Green Wave Automation determined that lighting was another area that could provide a quick return on investment. More energy efficient lamps and occupancy sensors that reduce energy waste were installed in another phase.
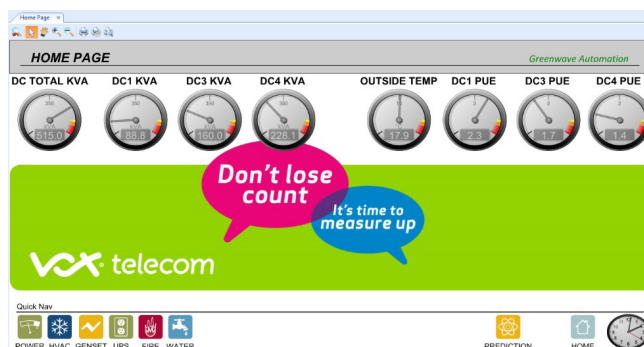
SmartStruxure solution was selected as the integrated Building Management System (iBMS) that would tie together all of the disparate systems and provide a single, easy-to-use interface to monitor, manage and control the entire enterprise. Powered by StruxureWare Building Operation enterprise level software,

SmartStruxure solution is a state-of-the-art iBMS with all of the features and functionality that the customer was looking for including:

- Single solution that integrates many disparate systems into one
- User-friendly interface that can be customised
- Remote monitoring and control via the web and mobile applications
- Native support for open protocols
- Simplified day-to-day operations
- IT friendly and secure using the latest technology
- Local and international support

The results thus far have been impressive. Feedback from Vox Telecom is that the whole process exceeded their expectations. Green Wave Automation did an outstanding job of designing a solution that met all of the requirements and delivered everything on-time and within budget. Costs are down sigificantly due to more efficient equipment control. Vox Telecom was also able to select a better tariff to suit their power usage which further reduced their electricity bills. The anytime, anywhere access to live data has enhanced overall management of the facilities and improved operational understanding. Vox Telecom is planning to expand the system to all regional offices.

Dashboard at Site

Schneider Electric One High Street, North Andover, MA 01845 USA   Telephone: +1 978 975 9600   Fax: +1 978 975 9698   www.schneider-electric.com/buildings