

UPTIME IN PAPUA NEW GUINEA

MANUFACTURING CASE STUDY





BACKGROUND



Kenmore is the largest group of companies in Papua New Guinea (PNG) with over 1400 staff spread over 18 locations across the country.

Kenmore comprises of a group of diverse companies in various sectors including manufacturing, agriculture, property, transport, and finance.

CHALLENGE

The Kenmore Group wanted to standardise their data centres and various on-site infrastructure; the aim was to improve the processing speed and data security across multiple business units. The current set-up was causing many issues and challenges.

NO IT PERSONNEL ON SITE

The lack of specialist IT personnel on-site meant lack of visibility and control.

HIGH ENERGY COSTS

Energy bills for one server room were consistently over AU\$3,000 per month during summer, with similar costs in other locations.

AD-HOC SERVER ROOMS

IT infrastructure had been deployed in an ad-hoc fashion. This led to inconsistent configurations, unclear procedures and little central management.

UNSTABLE ENVIRONMENT

Power supplies, temperature, altitude, humidity, installer capabilities, and a myriad of external factors are constantly in flux from one location to the next across a network.

SMART MANUFACTURING

Manufacturing is swiftly transitioning into smart manufacturing as organizations embrace cutting-edge technologies to streamline operations and enhance efficiency. Incorporating artificial intelligence, robotics, and the Internet of Things (IoT) enables manufacturers to gather, analyse, and utilize data instantaneously, refining decision-making processes and enriching the manufacturing landscape.

Smart manufacturing revolutionizes organizational practices, empowering them to enhance quality, minimize downtime, boost productivity, and swiftly adapt to market fluctuations.

At the core of this digital transformation lies edge computing, facilitating real-time data analysis and reducing latency for improved efficiency and productivity. Processing data at the network's edge, close to its source, empowers manufacturers to swiftly address issues as they arise, heightening decision-making capabilities and refining the manufacturing journey. The adoption of micro data centres facilitates the seamless implementation of an edge computing strategy for companies.



SOLUTION

Initially Kenmore replaced one of their server rooms with two Zella Pro micro data centres. All the existing IT equipment including the UPS was transferred directly from the existing server room into the Zella Pros.

Power consumption was monitored for six months before the Zella Pro installation and for six months after.



12 months of data showed the cost of energy reduced from over \$100 to \$30 per day giving a confirmed pay-back period of three years.



Subsequently, Kenmore replicated the same solution across 18 locations. This means they now have:

- A standardised solution across the board.
- Centrally monitored and managed infrastructure.
- Highly energy efficient solution to reduce costs and carbon emissions.
- Minimised downtime.

"This micro data centre solution is rich in features. Whether its dealing with high temperatures, or it's receiving too much power, it generates an alert to our staff. So, immediately we know that there's a problem with the power supply coming in from external power and can check that.

It has its own security features and cameras. It can detect people and record the last person to use the unit which helps us to manage our infrastructure better. The unit is very robust, compact product so it's ideal for a place like PNG. But still it's quiet enough to put next to your table and looks neat and tidy.

We've put these units in 18 of our locations and not had an issue."

Ferdinand M. Daroya Chief Information Officer, Kenmore

ZELLA Pro INDOOR MICRO DATA CENTRE

A Zella Pro is a compact, portable and secure micro data centre that eliminates the need for a traditional on-premise server room.

It's an all-in-one, easy, and fast deployment solution, that can be installed in a matter of hours.

Zella Pro includes precision cooling, cyber and physical security, rack mounted switchboard, ORU PDU and it's ready to be populated with your IT equipment.

Ready to be deployed at the Edge.







Zella DC is a market leader in edge-enabling solutions. With a comprehensive range of indoor and outdoor Micro Data Centres and scalable Containerised Data Centres, Zella DC offers a standard turn-key configuration ready for swift deployment and installation, enabling secure, reliable, and controlled environments for IT and OT equipment anywhere.

With expertise gained over the past decade, Zella DC has deployed Micro Data Centre solutions worldwide, meeting diverse requirements across numerous industries and environments. Zella DC excels in overcoming the unique challenges associated with edge and distributed deployments, providing standardisation and proven solutions.

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