



ABOUT THE COMPANY

The customer provides a diverse range of communication services to numerous users in the country and owns and operates its own carrier-grade voice, data and internet network infrastructure.

Background

The customer is one of Australia's leading telecommunications companies, providing communication services that are reliable, fast and cost effective.

The telco is committed to achieving efficiency throughout the organisation, and the IT environment.

Case Summary

Location: Australia

Vertiv Solutions:

- eCap Energy Optimisation Service

Critical Needs:

The customer wanted to identify areas of potential energy savings in its IT facility so it could better plan for efficiency and cost-saving.

Results:

Applying Vertiv's eCap Optimisation service, the customer was able to identify potential energy cost savings of up to 37 per cent, as well as a reduction of cold air requirement by 80 per cent, reducing carbon footprint and enabling future efficiency throughout the facility.

AUSTRALIAN TELECOM PROVIDER

A Vertiv Case Study

The Situation

In 2016, The customer realised it needed to achieve greater IT capacity in its data centre to support its business growth. It also wanted to identify potential energy and cost savings across its IT environment. The Telco consulted with Vertiv to perform an eCap Energy Optimisation Service in its data centre. This provided a detailed analysis of where energy is being used, leading to major efficiency, capacity and cost-saving benefits.

The Solution

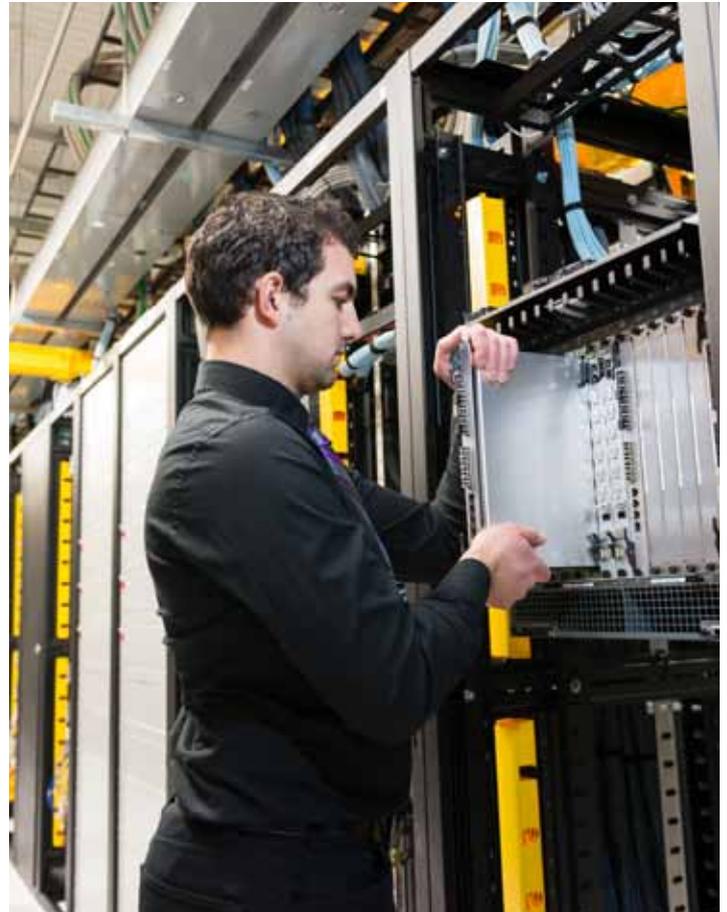
Vertiv initially performed a free 'snapshot' two-hour site visit, during which it identified the following benefits that could be achieved through the eCap Energy Optimisation Service:

- Reduction in data centre cooling and electrical operating costs by 37 per cent
- Reduction in operational costs.
- An increase in data centre capacity of 57 per cent
- Receipt of a single payment for 10 years projected energy saving through the NSW Government Energy Savings Scheme (ESS) after just six months of project completion.
- A full return on investment (ROI) within three years.

"This snapshot report revealed a business case we could not ignore," according to a company official. "We needed extra IT capacity for our business to continue to grow. Vertiv showed us how we could achieve that with the infrastructure we had in place, along with reduced operational costs and reduced greenhouse gas emissions." At the time of assessment, the customer was using ten computer room air conditioning (CRAC) units – devices that monitor and maintain the temperature, air distribution and humidity in the data centre to tight tolerances. Vertiv was eventually able to place four of these CRACs on standby.

The visit led to Vertiv performing an eCap optimisation service, the only such service in Australia guaranteed to deliver the NSW Government's ESC or 'esky' reimbursement. The process starts by monitoring how energy is consumed throughout the entire data centre to establish a baseline, with power metering deployed across all key devices to achieve this.

Armed with this data, Vertiv then set out to 'retune' the room. This was performed by Vertiv's customer engineering team who ensured no impact to the day-to-day operation of the data centre and the business it supports.



"Data centres typically require a large upfront cost," said the company spokesperson. Vertiv. "This means the investment needs to justify itself so the infrastructure stays operational for years. During that time, the level of efficiency tends to decline. The Vertiv eCap service enabled the customer's data centre to breathe again, freeing up capacity and increasing efficiency." This was achieved primarily by controlling the amount of cold air being delivered to the data centre racks and separating the cold and hot air, rather than allowing them to mix throughout the data centre.

The other major benefit to this exercise was to increase in IT capacity, a vital need for companies to grow and launch new digital services. Such dramatic increases in capacity might have been delayed until investment for a new data centre infrastructure could be found, meaning large CAPEX costs and a delay in gaining the ability to launch these services.

"All businesses, and Telcos are certainly no exception, are relying more and more on digital services to run their businesses," said Robert Linsdell, managing director of Vertiv in Australia and New Zealand.

“As the reality of developments such as 5G and IoT set in, all companies will need the right infrastructure in place to deliver the services customers will soon require.”

The Benefits

With its newly-optimised data centre through eCap, The customer received **a single payment for 10 years’ projected energy saving from the NSW Government through ESC.**

But that’s just where the cost savings story begins.

The initial snapshot assessment pointed to 37 per cent cost savings from the optimisation exercise. With the recent increase of almost 20 per cent in electricity costs across New South Wales which began on 1 July 2017, **the real savings will actually be higher, while the expected time period on achieving a full ROI will be reduced.**

The reduction in unnecessary use of data centre cooling assets also means less wear and tear on these assets, meaning **further reductions in maintenance costs.**

The service led to a reduction of the cold air needed by 80 per cent. In terms of energy saved, this is the **equivalent of taking around 60 residential homes off the grid.**

Aside from cost and energy savings, the deployment also increased IT capacity by 57 per cent – that **means the potential to deliver 57 per cent more business services** from existing infrastructure. Essentially, it means breathing space for the customer’s business to grow.

Through deploying a networked metering system, the optimisation process also gives the customer **better visibility** over its infrastructure, which means future efficiencies and cost savings can be identified quickly and easily.

“Vertiv has given a new lease of life to our data centre,” the company spokesperson. This has a direct impact on our business and future objectives. Freeing up capacity and costs means we can invest more into the services we deliver to customers, all the while saving costs and reducing our carbon footprint.”

“When it comes to effective optimisation, you need three domains of expertise,” said Linsdell. Vertiv. “Monitoring energy consumption, air flow management, and optimising the mechanical services – that’s our bread and butter at Vertiv and we can deliver similar levels of optimisation to any data centre.”



Summary

The eCap optimisation service allows the customer to achieve maximum savings and free up to 57 per cent additional IT capacity in its data centre, while enabling it to save costs and focus on business growth knowing its data centre can support the extra load.

Through monitoring energy consumption, redirecting cold air flow, and optimising the cooling assets, The customer has reduced cooling system operational costs by 37%, received a single payment for 10 years projected energy saving through the NSW Government Energy Savings Scheme (ESS) after just six months of project completion, stretching to further significant cost savings by helping the customer avoid investing into a new data centre facility.

For more information on the eCap and other infrastructure solutions, please visit www.VertivCo.com



eCap

VertivCo.com

© 2018 Vertiv Co. All rights reserved. Vertiv, the Vertiv logo are trademarks or registered trademarks of Vertiv Co. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness herein, Vertiv Co. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications are subject to change without notice.