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Data Centre Consolidation Generates Big Gains for UK Telco

Major UK telecommunications firm transforms cost into a revenue generation opportunity

Bell Integration helps this leading telco rationalise its legacy DC infrastructure - generating commercial and operational gains that add up to over £1 million a year.

Background

Connecting to a better future

A UK Telecommunications organisation committed to reducing its impact on the planet by reducing its greenhouse emissions by 50% by 2025, purchasing all its power from renewable sources by 2025, and reselling or recycling 100% of its redundant network equipment, the company is on a mission to improve asset utilisation and create a greener future.

To help realise this vision, the UK IT infrastructure team embarked on a project to rationalise the server, storage and networking assets utilised by the business, which reside at the company's customer colocation datacentre space in Hertfordshire.

"As an organisation that has grown significantly through mergers and acquisitions over the years, we knew there would be multiple 'zombie' energy sapping servers that needed to be pulled. Added to which, as a fast-moving business, we're constantly introducing new services – all of which contribute to server sprawl over time," explains the company's UK Head of IT Infrastructure.

"Our aim was to decommission and eliminate redundant legacy assets, rationalise and reduce our operational footprint, and return any recovered rack space to our Cloud and Hosting Services division for commercial resale to customers."

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The requirement

Creating a strategy for success

Rationalising the company's legacy IT environment would be no easy task.

Since no one team 'owned' the space, the process of organic change over the past 15 years, coupled with people moves, meant that there was no single centralised inventory of what equipment was located in the racks or what applications and services these assets were supporting, as Head of IT Infrastructure explains.

"Our IT, networking and security teams have free access to the DC, and over time, this had created a gridlock of complexity as individual teams respond to the evolving demands of the business."

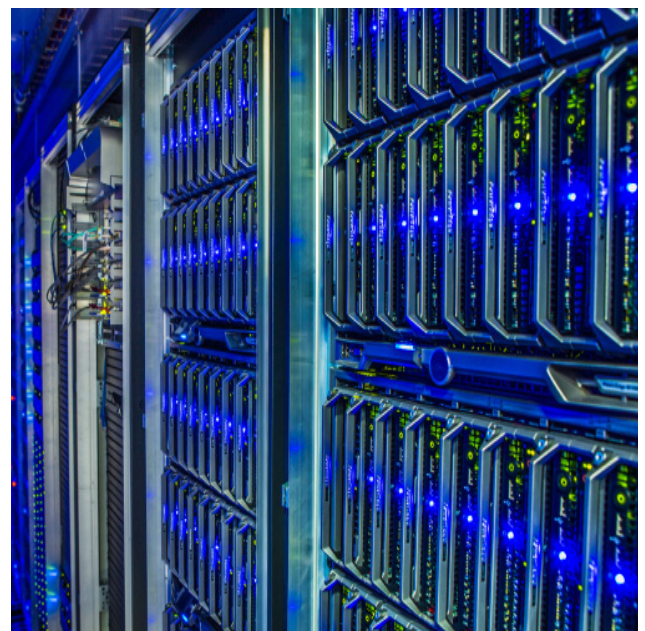
Previous equipment decommissions alone meant around 200 assets were now consuming 60 full equipment racks, with very low space utilisation in each rack. A situation that meant the space available for sale to co-location customers was now severely constrained.

In addition to not having the visibility it needed to identify and purge any redundant infrastructure, the telecommunications firm lacked the specialist know-how or manpower required to undertake a consolidation project of this scale.

"Data centre consolidation is a once-in-a-career event for most IT professionals. To ensure no business units, services, people, or processes were impacted by the project, we needed to be certain that the entire environment was appropriately evaluated before any structural 'lift and shift' work began," comments the Head of IT Infrastructure.

This is why Bell Integration was asked to design and lead a mission-critical data centre consolidation programme to turn the firm's planned transformation vision into reality.

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The solution

A comprehensive approach

Bell Integration proposed a two-phase approach to ensure the project delivered on return-on-investment targets, and that business-as-usual operations were maintained as the consolidation programme was executed.

First, Bell undertook a complete physical and logical audit of all infrastructure contained in the racks. These results were then built into an interactive Visio document cataloguing the physical infrastructure, including all dependent infrastructure and interconnects, to provide a logical and virtual view of the entire estate. This proved key to the project's success, as the firm's Head of IT Infrastructure explains.

"Bell's detailed evaluation gave us a detailed 'single version of the truth' which revealed we could decommission around 25% of hardware. Using these insights, Bell was able to design a solution that would consolidate live assets into as few racks as possible, virtualising or decommissioning assets where appropriate."

Tasked with creating the blueprint that would enable the UK telco to do more with less and significantly reduce its infrastructure footprint, Bell Integration worked closely with the firm's senior IT decision-makers to establish a consolidation plan that would deliver reduced costs and energy consumption through the more efficient use of IT resources.

"Determining the physical layout of the new environment was a bit like solving a giant Rubik's Cube challenge - consolidating equipment into as few racks as possible. Once their senior consultants had designed the entire target environment, Bell's specialist teams got to work and began the painstaking process of rationalising the entire estate."

Despite restrictions resulting from the first Coronavirus UK lockdown, the entire second phase of the project - from planning to execution - was completed in just five months.

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The outcomes

Realising measurable gains

The DC consolidation initiative has generated significant operational costs and carbon savings for the telco firm's UK business.

In total, Bell Integration decommissioned 99 physical assets. The combined reduction in power usage, support and maintenance costs, and the need for future upgrades to all this decommissioned infrastructure equates to an annualised OPEX saving in excess of £870K.

The rationalisation project has also produced a significant commercial opportunity for the company's Cloud Hosting division. In total, 35 full racks were returned for resale to customers, with a further two racks returned to the company's internal networks division.

"This represents a major 'give back' to the business that has the potential to generate additional annual revenue

in excess of £300K a year. Added to the savings already created in our own IT operations, this represents a significant contribution to the bottom line that more than validates the entire project," explains the Head of IT Infrastructure.

Looking to the future, there are plans to further optimise the firm's UK IT operations by introducing additional virtualisation technologies in the next 12 months.

"Virtualisation will give us a hyper agile, flexible and automated environment that makes it faster to spool up new services while further reducing the cost and environmental impact of our IT operations."

"As we embark on this next phase of our journey to become best in class, Bell Integration will play an integral part in helping us realise this vision."

Why Bell Integration?

The telecommunications company's Head of IT Infrastructure outlines the multiple advantages of leveraging Bell's expertise and specialist know-how.

"Partnering with a trusted supplier is critical for a project such as this, where the stakes are high – and the potential ROI is significant if everything goes as planned."

"While cost and carbon reduction was a key anticipated outcome, successfully executing a data centre consolidation requires a highly experienced team and subject matter experts."

"Having worked with Bell Integration, we knew they had the right legacy system expertise and methodologies needed to create and drive the consolidation strategy. That included undertaking an in-depth assessment of key system interdependencies and putting in place rigid controls to ensure no critical business processes or services were disrupted."

"Next year we'll be using Bell to drive our virtualisation project. Ultimately, they know our business and how to get things done – which for us all adds up to more predictable outcomes," he concludes.

Contact us

With over 25 years' of experience and offices across the globe, Bell Integration delivers Data Centre, Cloud and End User services within some of the world's most prestigious customer environments. With capabilities covering technology provision, consulting, project & managed services and asset retirement services, we add value to our customers at several touch points throughout the life-cycle of their IT environments.

See how Bell Integration can help your business succeed. Please contact us on marketing@bell-integration.com or visit www.bell-integration.com

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