

CASE STUDY

CASE STUDY: BMRB



Design and build service passes research company's scrutiny

BMRB is one of the UK's longest established research agencies and today it is also one of the largest and best resourced agencies in Europe. The company provides high quality research solutions in six specialist areas; media, omnibus surveys, social policy and public interest research, customer and employee research, TGI surveys as well as consultancy surveys.

The speed and accuracy with which BMRB is able to process the large volumes of data it collects on a daily basis, is critical to the service it provides to major enterprises, whose business decision-making is often illuminated or supported by BMRB research insights. "We have a huge team of interviewers collecting data" says Allan Fitzwater, IT manager at BMRB. "Each evening, this data must be downloaded, processed, collated and turned into useful information, and every byte of it comes through this data centre."

Technology at the heart of service provision

BMRB's West London IT centre is one of the most important buildings to the organisation. In addition to its data processing function, the company also has over 1000 networked users, connecting from offices all over the UK. In addition, its highly mobile workforce is also able to connect from remote locations.

The company has a progressive view of IT and works closely with manufacturers to make the best use of technology to improve productivity. To support its business and operational requirements, the company needs a highly available data centre which is state of the art, fast and secure with a resilient internet connection. Additionally, BMRB requires an infrastructure which is adaptive and scalable to support future developments in IT.

"We are early adopters" says Allan Fitzwater, "but we like to do things properly. We trial technology extensively, then adopt it if it is appropriate for our business. For example, we currently use IP to route all our phone calls to the US, where they break out and use local services. This brings a cost benefit to the business and we are now working with Cisco to pilot an IP telephony system which will be rolled out through the entire organisation if successful."

The challenge

To design, build and maintain a high availability and secure data centre to support business operations. The new facility to be specified to accommodate IT equipment with increasing power and cooling demands.

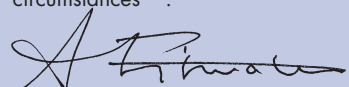
The solution

- Design and build data centre
- Roof mounted, 250kVA standby diesel generator
- 80kW APC Silcon UPS
- 80kVA N+1 CRAC units
- APC Netshelter VX racks
- FM200 fire suppression
- VESDA smoke detection
- Physical security with CCTV monitoring

The customer says



"The standby power system which Keysource designed and installed has already saved our bacon a couple of times. It is provenly able to provide a reliable and resilient supply for our mission critical IT operations in all circumstances".


Allan Fitzwater, IT Manager, BMRB





New facility to meet uptime demands

The company's recent move to new offices was driven by the need to provide better facilities to house the mission critical IT network, as well as the need for premises which better reflected the image of this organisation. "The old computer room was at the end of its useful life and had become unsuitable for our business. For example, we'd implemented two HP blade chassis as we had no way of increasing the number of servers other than by increasing density. However, as processing demand increased, we'd find that heat output was causing equipment failures."

BMRB data centres are part of a centralised IT strategy which provides services to other WPP Network research businesses. The company is subject to corporate legislation including Sarbanes Oxley and is therefore both highly sensitive and highly diligent about the protection of the data that it generates and stores. Additionally, the company data centres must be robust and resilient for internal customers.

Keysource central to project

"Keysource have provided an end-to-end service to get this facility up and running," says Allan Fitzwater. "From designing and laying out the space, to constructing the room, providing all electrical works including the installation of an electrical bypass switch, through to commissioning. We've been impressed by their understanding of what we were trying to achieve, as well as their knowledge of technologies to mitigate risk in data centres."

The design of the new data centre incorporates raised floor access and a false ceiling to harness thermodynamic effect efficiently and get the best return air temperatures to the floor mounted air conditioning units (CRACs). The room is specified to provide 80kW of cooling in N+1 configuration via 3x 40kW CRAC units, allowing for increase in the load as time goes on; "we wanted to overcome the problems we were having due to thermal shutdowns in the old facility and at the same time provide for the inevitability of increasing power densities." Continues Allan Fitzwater.

Power resilience

To ensure maximum availability, an APC Silcon 80kW UPS ensures a clean and regulated power supply, as well as 7 minutes runtime in the event of a power outage. This level of autonomy comfortably covers the 30 seconds that it takes for standby power to kick in. The entire load is protected by a roof mounted 250kVA standby power generator, housed in an NR 35 canopy to reduce noise emissions. Despite the urban setting, there is a lot of residential property nearby, and planning permission had to be gained prior to installation.

"The genset has saved our bacon a couple of times." Says Allan Fitzwater. "In fact, we had an outage on the day that it was commissioned. In the space of one weekend we suffered from three further outages. In addition, there was a problem with the electrical infrastructure within the building, so the generator has been essential for trouble-free operations while the fault was rectified. In the end this required two major schemes of work, so for this reason we take no chances and maintain on-site resources so that the

generator can be run for 10 hours continuously."

The new data centre incorporates an APC Environmental Management Unit, FM 200 fire detection and gas suppression, and features APC NetShelter VX cabinets for all IT equipment. A CCTV system provides additional physical security for the data centre.

Allan Fitzwater concludes "Having started with this business writing code for green-screen computers, we've clearly come a long way. Working with Keysource, we've implemented a state-of-the-art facility which will allow us to expand our network provision for the foreseeable future. Our experience of Keysource has been positive throughout the process of design, installation and commissioning – so much so that we couldn't think of a safer pair of hands to which to back off maintenance and service."

Pictures:

1. & 2. 8 x APC NetShelter VX equipment racks.
3. 80kW Silcon UPS.
4. 40kW floor mounted CRAC and fire suppression system.
5. Structured power distribution within a raised access floor.



Keysource Limited
North Heath Estate
Horsham
West Sussex
RH12 5QE

T: 01403 243333
F: 01403 243300
E: info@keysource.co.uk
W: www.keysource.co.uk