



A best practice solution for Newcastle College

preliminary consultation
help with tender documentation
energy efficiency assessment
complete design, build & delivery package
specialist project management

Sometimes it's difficult to know where to start when you need to expand or relocate your data centre. Keysource can offer a complete solution.

overview

➔ Newcastle College needed a new modern and resilient data centre. Keysource came up with a winning solution that 'fitted the bill' in all areas and provided the College with an efficient data centre capable of withstanding future growth and investment.

the challenge

➔ Newcastle College needed a single source supplier offering the whole remit of design, installation and project management expertise to build a modern, resilient data centre. The College needed to go out to tender, however they were unsure of exactly what was required from the refit and how to go about sourcing and providing specifications for the tender documentation.

the solution

➔ Keysource were already known to Newcastle College as having extensive experience of working within the public and education sectors. The stage-by-stage solution was achieved as follows:

- Keysource offered to carry out an initial technical audit of the existing data centre and the proposed new location to gain a better understanding of the commercial and operational needs of the new facility as well as providing specifications for the design and build tender documentation

data centre: · concept · design · delivery · management

- The College agreed, Keysource carried out the audit, and came up with a best practice solution for the new facility as well as a Performance Specification that could be built into the tender documents to ensure a resilient infrastructure
- The tender went out to the market, Keysource fully met the brief and won the contract
- Keysource's proposal for the refit (see 'Delivery' table) involved specialised knowledge and project management expertise, from coordinating structural alterations and IT requirements with the College staff to advising on security concerns such as potential fire hazards

Newcastle College were impressed by the expertise, knowledge, understanding and project management ethos that Keysource demonstrated. This was shown both theoretically in terms of assessing what was needed to achieve an energy efficient facility that would withstand future growth and deployment, and practically by way of validating Keysource's proposed designs through the use of Computational Fluid Dynamics (CFD) which showed exactly how the new facility would operate.

the benefits



- Newcastle College's early engagement with Keysource's Consultancy Services meant that Keysource were involved from start to finish and understood all requirements of the project
- The initial audit helped the College understand the needs of the new facility by highlighting structural and technical requirements, equipment needs, fire and security safeguards, along with airflow issues and how these could be avoided
- Keysource's use of innovative CFD Modelling software gave Newcastle College visible and tangible reassurance of the best possible solution for the new installation

Ultimately, Newcastle College were able to contract Keysource as the best company to do the job based on accurate and informative tender documents, a best practice assessment of the new facility, and a winning proposal that fully met the brief.

Delivery: Keysource's 'best practice' solution for Newcastle College

Structural

As the Principle Contractor, Keysource undertook:

- Internal Building Works: building a dedicated data centre area and separate plant room from 3 existing office spaces including internal raised floor and suspended ceiling construction
- External Building Works: installing a generator compound with surrounding security fencing

Technical

- UPS system: single system rated to 80KW
- Air conditioning system: a down flow system with external condensers sited directly on the roof
- Fire suppression: installation of an FM200 system with 'Very Early Smoke Detection Alert'
- Racks: 18 racks – 48U high
- Security: new door access systems using proximity entrance cards
- Environmental Monitoring: a rack mount unit monitoring temperature, humidity and leak detections, as well as air handling units, UPS, generator and fire alarm system
- Standby Power: 275kVA generator with internal diesel fuel tank

can we help you and your company?



Can we tender for your new data centre design and build project? Could your facility benefit from an energy efficiency assessment? Please get in touch...

Keysource Limited, North Heath Estate,
Horsham, West Sussex, RH12 5QE

T: 0845 2043333 F: 0845 2043334

E: enquiries@keysource.co.uk

W: www.keysource.co.uk

James Cole, Sales Director of Keysource says:

“Keysource are committed to client engagement at the earliest opportunity and this project demonstrates the value of early discussion between the client and our skilled technical teams. This helped develop accurate documentation and specifications which ensured a successful project outcome”

data centre: · concept · design · delivery · management