

Winner's case study

University of Aberdeen + partners Modernisation - Effectiveness and Efficiency in the Estate North East of Scotland Shared Data Centre

Section 1 About the project

Summary

This was a ten month, large-scale, complex and high risk project to upgrade the live primary data centre at the University of Aberdeen. The goal was to turn an aged data centre into a fit-for-purpose shared facility for all tertiary educational establishments in the North East of Scotland. A major project objective was to spearhead a shared-service approach, and deliver individual and sectorial savings through a highly carbon-efficient facility.

Project partners

University of Aberdeen.
Robert Gordon University.
North East Scotland College.
Workspace Technology Limited.

Section 2 The results

The problem

After 20 years of ad hoc investment and growth, the University of Aberdeen's data centre had reached a stage where it was ecologically unsustainable and not a suitable platform for future initiatives. Simultaneously, Robert Gordon University and the North East College of Scotland also required carbon and cost effective data centre facilities. A shared services model was adopted.

Tasks included major construction work, innovative technology deployment and relocation of all network / server kit whilst all business operations were kept running in a live data centre.

The approach

Due to the complexity risk of the project, extremely good governance and detailed planning were utilised at all stages. This included the work of the onsite supplier. Additionally, an open book and transparent approach was taken to costs and planning between the 3 HE / FE partners.

Our goals

The goals were simple, but nonetheless extremely difficult to achieve:

- Minimise business down time and data loss during all project phases
- Ultimately, provide excellent green credentials in terms of Power Usage Efficiency (PUE) and load
- Provide all partners with excellent customer service from the facility



Profile

- HEI / FEI
- ~ 56,000 students (includes full and part time students)
- 5000 staff
- Urban / Rural

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Obstacles and solutions

Obstacle	Solution
Shared service approach	Development of trust through excellent project governance, open book accounting and support of over-arching vision from senior management
Live Data Centre in term time	Minimise business down time through detailed planning and close liaison with the business units
Use of third party supplier using innovative solution	Tender specified and contracted with the supplier with regard to desired end results – PUE etc, NOT the detailed solution configuration. Risk moved to the supplier.
Complex, risky movement of all server and network kit in data centre	Detailed planning, use of formal in-house RFC system and close working relationship with on-site supplier work-force.

Performance and results

Unplanned downtime of less than 40 minutes across the whole project, with industry leading PUE figures and huge carbon and financial savings have all been delivered on time and on budget.

In achieving this goal, the partnership has delivered individual and sectorial savings through the creation of a highly carbon efficient facility. There has also been a significant improvement in its services to staff and students through the improved facilities.

Section 3 The future

Lessons learned

Team skills, pride and inter-institutional trust have been significantly developed and the NESSDC project forms a basis from which other shared initiatives will grow – a shared secondary data centre is nearing completion. Green can be the right choice on all levels!

Sharing your project

Project results and methodology have been disseminated through entering and winning various awards, including the UCISA Award for Excellence 2013 and the BCS / Computing IT Best Data Centre project 2013. There has also been a Universities Scotland case study and a number of organizational visits to the facility.

What has it meant to your institution to be a Green Gown Award finalist?

In summary this means a tremendous amount. This important sector-wide award is great recognition to the team for a prolonged and excellent piece of work. It also rewards the individual institutions' leap of trust in taking a true shared service approach to achieving our business and sustainability goals.

Further information

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