

# Implementing managed services – benefits and considerations

A summary of findings



# Contents

<b>Introduction</b>	<b>01</b>
<b>Summary of findings</b>	<b>02</b>
<b>Key benefits of using a managed service</b>	<b>04</b>
<b>Key considerations in implementing a managed service</b>	<b>06</b>
<b>Case studies</b>	<b>08</b>

## Introduction

This document summarises the findings of a research study carried out for Becta which examined the experiences across schools, further education colleges, adult learning providers and local authorities of using managed services for Information, Communications and Technology (ICT) provision.

The study used survey techniques to identify a range of establishments making use of managed services, and then identified representative candidates for structured interviews. In all, some 29 establishments provided detailed accounts of their experiences, from which the study was able to identify the issues that they encountered, features of good practice and a wide range of benefits that have resulted from outsourcing ICT provision. This is a summary of the findings, illustrated by a wide range of examples from schools and the FE and skills sector.

 The full report is available from Becta:  
[www.becta.org.uk/publications/managedservices](http://www.becta.org.uk/publications/managedservices)

### Procurement province-wide

In Northern Ireland, managed services funded by central government are providing high-quality provision and support for educational ICT to all schools, and supporting over 60,000 networked computers. Aggregating the purchase of the local area networking alone created savings of over £38 m compared with individual school purchasing.



## Summary of findings

The experience of managed services in the 29 establishments interviewed ranged from one to nine years. Five of the sites are in their second or third renewal of the contract. All of the establishments have a positive experience of their managed service and identify a range of benefits.

- In all cases, the decision to adopt a managed service approach was triggered by a catalyst (internal or external) which forced the establishment to review its ICT provision and services.
- The procurement of a managed service calls for skills in service definition and procurement and can be a major challenge. The most successful implementations sought external support through agencies or independent consultants.
- For most establishments, the process of engaging with a managed service provider has led to a better understanding of the costs associated with ICT and recognition that earlier provision had been underfunded. All the establishments interviewed commented that the managed service was both affordable and sustainable.
- The greater part of new ICT spend arises from new hardware procurement and installation but nonetheless, managed services deliver improved value for money from that investment.
- The small size of many primary schools can be a barrier and presents a particular challenge to commercial providers. School clusters and LA-wide models proved to be more successful for smaller schools. Two successful examples were found of secondary schools aggregating demand from primary schools so that their own managed service provider could support them.
- Comprehensive managed services, where most or all ICT provision had been outsourced, made the greatest impact on staff and learners and a greater contribution to the development of the establishment's e-maturity.
- Many establishments view management information and broadband provision as being 'mission critical' – more so than curricular ICT provision. The way in which the provision and support for these services is embedded, and often uncommented on, is evidence of their success.

- Schools in clusters or local authorities were most positive about their managed services when there was a greater level of involvement with the specification and procurement of the service.
- Individual establishments tend not to use an OJEU (Official Journal of European Union) compliant framework to support procurement but may rely on local advice and guidelines. Where the LAs had outsourced part or all of their service to the private sector, these had been through either OJEU procurement or a framework agreement through Becta or G-CAT.
- No examples were found of personnel being made redundant from individual establishments following Transfer of undertakings (TUPE).



### > A technology college in partnership with primaries

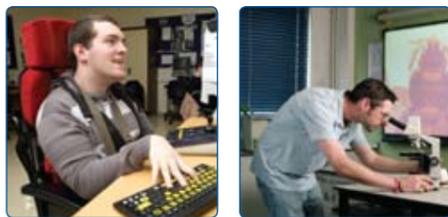
Richard Lander School, a specialist technology college in Cornwall, works in partnership with a software support provider to offer technical support and advice to eight partner primary schools. The cluster model gives access to technical support at a level that is appropriate for each school – and they only pay for the cost of the technician's training.

## Key benefits of using a managed service

- Increased reliability leads to greater staff confidence in ICT, which in turn gives an increased willingness to embed ICT in everyday practice. This has led to a wider range of experiences for learners and efficiency gains for staff.
- In cases where there is a managed service, the senior management team is more able to focus on teaching and learning developments for the school rather than having to deal with the technical issues.
- Many establishments identified a scalable and flexible solution as being important in managing both the transition to the managed service and institutional growth more generally. Requirements often became clearer after the service was introduced, with suppliers suggesting improvements and innovative solutions.

### > New build, new service culture

A new school building for Whitecross High School in Hereford provided the opportunity to make ICT an intrinsic part of the proposal. Seeking external advice and clarifying the school's needs at the start of the process was a key element to the success of the project. In addition, the school estimates that the managed service provides a cost saving of about 10 per cent for both the capital and revenue elements of the ICT budget when the wider benefits are factored in.



- Managed service providers were able to bring further training and development opportunities for both support and teaching staff. Training was typically delivered on site and specific to the needs of the establishment.
- Typical efficiency gains cited were reduced time spent dealing with technical problems, greater sharing of teaching resources, and better communication through emails and networked services.
- Predictability of expenditure was identified by most sites as an important reason for outsourcing, and most sites felt that this benefit had been realised.
- Many establishments reported significant savings from aggregated purchases through the supplier. Many were also able to trial technology before committing to a purchase.
- Managed services can generate revenue savings from providing access to the high levels of technical expertise that are needed infrequently without having to employ someone with those skills full-time or buy that expertise in through consultancy.
- Many sites identified improved learner confidence in ICT as a key benefit. Whilst the managed service is not totally responsible for this improvement, it is an important element in driving the staff confidence needed to make best use of this investment.
- Most sites reported an increase in the adoption of e-learning as a result of more reliable and robust ICT. They also reported better facilities resulting from capital investment associated with the handover to a managed service.
- Whilst a managed service will only be one component of a longer term change management programme, two to three years after their implementation, establishments provide clearer evidence of stronger growth towards the transformation into genuinely e-enabled organisations. It typically takes this amount of time for the confidence to result in real changes emerging.
- Some establishments noted the transfer of the risks associated with deploying and managing technical provision as being a key benefit.

## Key considerations in implementing a managed service

This research demonstrates that a managed service approach to all or part of the ICT service can offer a range of benefits to establishments in all sectors. However, there are a number of steps that establishments should take to ensure that they secure these benefits:

- It is essential for institutions embarking on a managed services path to set an 'as is' baseline in terms of existing processes, costs and service levels. Only by doing this will it be possible to measure the overall benefits and value of the managed service.
- If the current ICT is underperforming, there will be a need for capital investment in equipment alongside the managed element of the service. However, the managed element should provide extra value through greater reliability, increased confidence, and less staff time lost in dealing with problems.
- A senior member of staff needs to be given sufficient time and resource to oversee and champion the process, ideally from specification and procurement through to the final implementation.
- Draw up an output specification in terms of what users can expect to do in educational terms rather than stating what technology is required. It is important to invest time in understanding and articulating these benefits.
- Seeking specialist advice from the local authority or an independent consultant can help define the specifications and procure the most appropriate managed service.
- Procuring a managed service for ICT is a complex process, requiring clarity of the educational outcomes, business needs and functional requirements.

 Becta's procurement frameworks offer guidance on this process: [www.becta.org.uk/schools/managedservices](http://www.becta.org.uk/schools/managedservices)



- All technical and support staff should be involved from the beginning. This will support personnel issues such as TUPE and the unease that this can create. It should be noted that respondents highlight tangible benefits for transferred personnel including training and improved career paths.
- Establishing a sound and realistic service level agreement (SLA) that is aligned with the establishment's needs is an essential element to engaging any managed service.

### > A three-way partnership

Ben Jonson Primary School in east London has used managed services for a decade, but moving to new buildings provided the opportunity for a step change in the level of ICT provision. A three-way partnership of school, local authority and a private-sector provider ensured that resources and expertise could be brought on to the project at key points. Under the current contract, all teaching staff and pupils have much better access to ICT resources, and the ICT co-ordinator is able to focus more of his time on supporting staff and learners.

### > Technology on the move

Aylesbury College was three years into its contract with a managed service supplier when it moved buildings, but the strength of partnership made sure that the move didn't disrupt the ICT provision. Now the network is resilient, all staff and students use ICT as a matter of course in lessons. There are now fewer technicians running a much larger network which includes the telephone and CCTV systems.

## Case studies

### Outsourced provision + staff confidence = embedded technology

By fully outsourcing all its ICT provision, Orpington College has seen a dramatic improvement in reliability which has given staff the confidence to embed ICT in teaching.

Over the years, the college had developed two independent networks serving curricular and administrative functions. Network management time and resource was spent keeping these poorly integrated networks running, and their unreliability resulted in little confidence amongst the staff. This was evident in the lack of consistent use of technology to support learning across most teaching areas. Faced also with the need to establish a strategy for Information and Learning Technology and a planned expansion programme, the college was forced to rethink the way it was supporting technology.

The decision to outsource the ICT provision was taken early as senior managers felt it was important to bring in external expertise. It was also decided to contract an experienced procurement specialist before going out to tender. This specialist helped the college to clarify a vision for ICT within the context of its broader aims, and worked with senior managers to audit the existing provision. Enrolling this support was a key element in the success of the outsource solution. The college was able to use this expertise to ensure that potential suppliers were offering services that really met its needs and that were in line with market prices.

#### Benefits

- The senior leadership team now spends less time discussing and dealing with technology issues, and college managers can focus on outcomes, leaving the service provider to deal with day-to-day management issues.
- As confidence amongst teaching staff has improved, technology is being used more and more. The college has now developed more formal processes for embedding technology in learning through training and appraisal processes across all teaching areas.
- Owing to the previous under-resourcing of ICT, the introduction of the managed service increased the capital spend on ICT by around 20 per cent; however, the benefits are seen as good value for money and senior managers consider ICT spend to be appropriate.
- The managed service provider uses its position in the market place to gain good prices on new equipment on behalf of the college.

### From firefighting to e-learning

St Olave's is a boys' grammar school in the London Borough of Bromley and prior to outsourcing ICT provision, one teacher had sole responsibility for curricular ICT and maintenance of the network. A lot of time was spent 'firefighting' and the lack of specialist expertise resulted in large sums being spent on consultants brought in to fix problems. ICT was simply not being used effectively to support learning across the curriculum.

Having identified ICT as an area in need of significant development, the school took the decision to include computing as an element of its specialist status bid. This gave it a specific goal to aim for in improving its ICT provision and also aligned this improvement with its strategic aims.

The headteacher also decided to seek expertise from someone with experience in the commercial sector. A permanent position was created in the school and the first year was spent performing an audit of ICT provision, visiting other schools and developing a strategic plan for ICT. Outsourcing ICT provision was a key outcome of this.

The move to the managed service reflected a period of increased investment in ICT of the order of about 15 per cent on the revenue costs. However, this has changed a pupil:computer ratio of about 1:11 in 2005 to 1:2 two years later. Most teaching spaces have also been equipped with an interactive whiteboard and projector.

As a sign of its progress, the school's learning platform is integrated with the network and the website, giving a seamless experience between classrooms, study spaces and home. The science department put Year 9 support material online and logged its usage, and believes the significant increase in the science SAT results is attributable to this initiative. The school is also offering a cluster of six local primary schools an ICT-managed service as an extension of its own service.

#### Benefits

- The budget for ICT is now predictable and more controllable.
- Teachers are spending more time in lessons teaching as opposed to working around unreliable ICT, which has had a measurable impact on morale and confidence in using ICT.
- There is now a clear escalation path when technical issues cannot be solved on site.
- A good working partnership has resulted in a flexible service that has been able to meet the developing needs of the school.

### A step change in ICT use

Managed services have enabled Firside Primary School in Norwich to achieve a step change in its use of ICT. Before the introduction of the managed service, ICT was maintained by the ICT co-ordinator and the equipment based in the ICT co-ordinator's classroom, so other teachers and pupils were getting a limited experience of ICT. When problems arose that could not be fixed in-house, it was clear that specialist skills were needed.

After seeking advice from the LA and colleagues from the cluster, the decision was taken by the headteacher and the governing body to allocate capital funding to the building of an ICT suite. The LA helped to specify and procure the ICT suite and both installation and support were provided through a managed service. This service enabled the school to get regular support from a technician who understood the needs of schools and who was also familiar with wider ICT developments across the authority.

The managed service represented a new cost for the school as support was previously given from a member of the teaching staff. However, the school only pays for the pro rata cost of the technician's salary, and his expertise needed regardless of its source. The managed service also removed the burden of recruitment and line management of a potential technician, and other schools can share costs without needing to negotiate terms amongst themselves.

Much of the extra investment in ICT was in the form of capital purchases for ICT equipment and its installation. After three years, a second wave of investment brought interactive whiteboards, projectors and teacher laptops in every classroom. The school is now well resourced with ICT and staff continue to grow in their confidence and use of new technologies. A learning platform will come online soon and the school will continue to develop approaches to learning, with technology playing a key role.

#### Benefits

- The managed service ensured that the equipment in the suite was installed quickly, set up correctly, and staff had access to technical support when taking pupils into the room.
- A well set up, consistent and maintained approach to ICT across the school not only provided equal access to ICT for staff and pupils, it also developed wider staff confidence in ICT.
- The managed service allowed the senior management team to focus on ICT developments in terms of outcomes for the school as opposed to dealing with the technical issues.

### A cluster in the community

The Essex Adult Community Learning Service engaged a commercial company to provide network management services for a cluster of six sites in the west of the county.

Prior to the introduction of the managed service, individual tutors were responsible for maintaining hardware and the network. The result was a very unreliable set of resources that were inconsistently configured and often not networked, and keeping the system running consumed a great deal of tutor time.

However, the learning service benefited from a range of tutors with experience in ICT, and a strong consensus emerged to outsource network support rather than employing technical staff. A group of ICT tutors was established to manage the tendering process and they worked closely with the chosen supplier.

An immediate benefit was the improved reliability of the equipment, and alongside this, the removal of the burden of maintenance from tutors. There was also an increase in motivation, for teaching staff and students, and the service improvements were interpreted as a sign of increased value in these courses.

Employing a managed service was a new cost, as teaching staff had previously provided that service. However, the costs of the managed service were about half the cost of employing a full-time technician with the necessary skills.

Current plans are for all centres to be supported by a managed ICT service operated centrally, which will create opportunities for greater efficiencies through centralised procurement and services such as the learning platform.

#### Benefits

- Tutors can focus all of their contact time on working with students and have access to a consistent desktop suite of applications and configuration across the sites.
- The network enables tutors and students to log in on any workstation and retrieve work and promotes the sharing of resources.
- Having a reliable, networked ICT infrastructure has widened opportunities for learners, as the service felt confidence in offering courses such as digital photography and web design.

## New contract, new services

When the time came to renew its existing managed services contract, St Helens local authority took the opportunity to review ICT provision and set new priorities.

St Helens first introduced a managed service for its 68 schools in 2002 and adopted a collaborative approach from the outset to understand their requirements. When the contract came up for renewal, the authority consulted widely to set priorities for the new service, and decided to focus on teaching and learning facilities, more proactive support, and an increase in service levels. These priorities, together with value for money, formed the basis of the tender selection criteria, and the current supplier was duly appointed.

Moving from one supplier to another presented some challenges but was greatly assisted by a transition strategy which clearly identified quality and service required. Good project management and comprehensive documentation were important to the handover of the infrastructure, both centrally and locally.

The schools now all have reliable and resilient networks and receive a high level of service and customer care. The supplier centrally monitors servers and computers, and combined with a preventative maintenance regime, anticipates and avoids failures and downtime.

An education expert is provided by the supplier to each school one day per term (or more if required) to look at the education vision for each school, how it fits into the wider strategy of the local authority, and ILT progress and plans – a process which helps good practice to be shared across schools.

### Benefits

- Schools have been able to choose different service packages and service levels according to their priorities and budgets.
- Staff confidence using ICT in their lessons has steadily increased – due in part to increased reliability of the ICT facilities and the supplier quickly resolving problems.
- Some schools have a full-time technician in school provided by the supplier. This supports continuity in the service provided and the schools do not have to worry about dealing with absence or capability issues, as the supplier manages this.

## Further information



The full report, *Implementing managed services – benefits and considerations*, which contains 13 detailed case studies, is available from Becta: [www.becta.org.uk/publications/managedservices](http://www.becta.org.uk/publications/managedservices)

## Acknowledgements

Becta would like to thank HH Education Services, who conducted the research, and the establishments and staff who contributed to the survey and took part in interviews. This report would not have been possible without their support.

© Copyright Becta 2009

You may reproduce this material, free of charge, in any format or medium without specific permission, provided you are not reproducing it for financial or material gain. You must reproduce the material accurately and not use it in a misleading context. If you are republishing the material or issuing it to others, you must acknowledge its source, copyright status and date of publication. While great care has been taken to ensure that the information in this publication is accurate at the time of publication, we accept no responsibility for any errors or omissions. Where a specific product is referred to in this publication, no recommendation or endorsement of that product by Becta is intended, nor should it be inferred.

Millburn Hill Road  
Science Park  
Coventry CV4 7JJ

Tel: 0800 877 8777

Fax: 024 7641 1418

E-mail: [customerservices@becta.org.uk](mailto:customerservices@becta.org.uk)

[www.becta.org.uk](http://www.becta.org.uk)