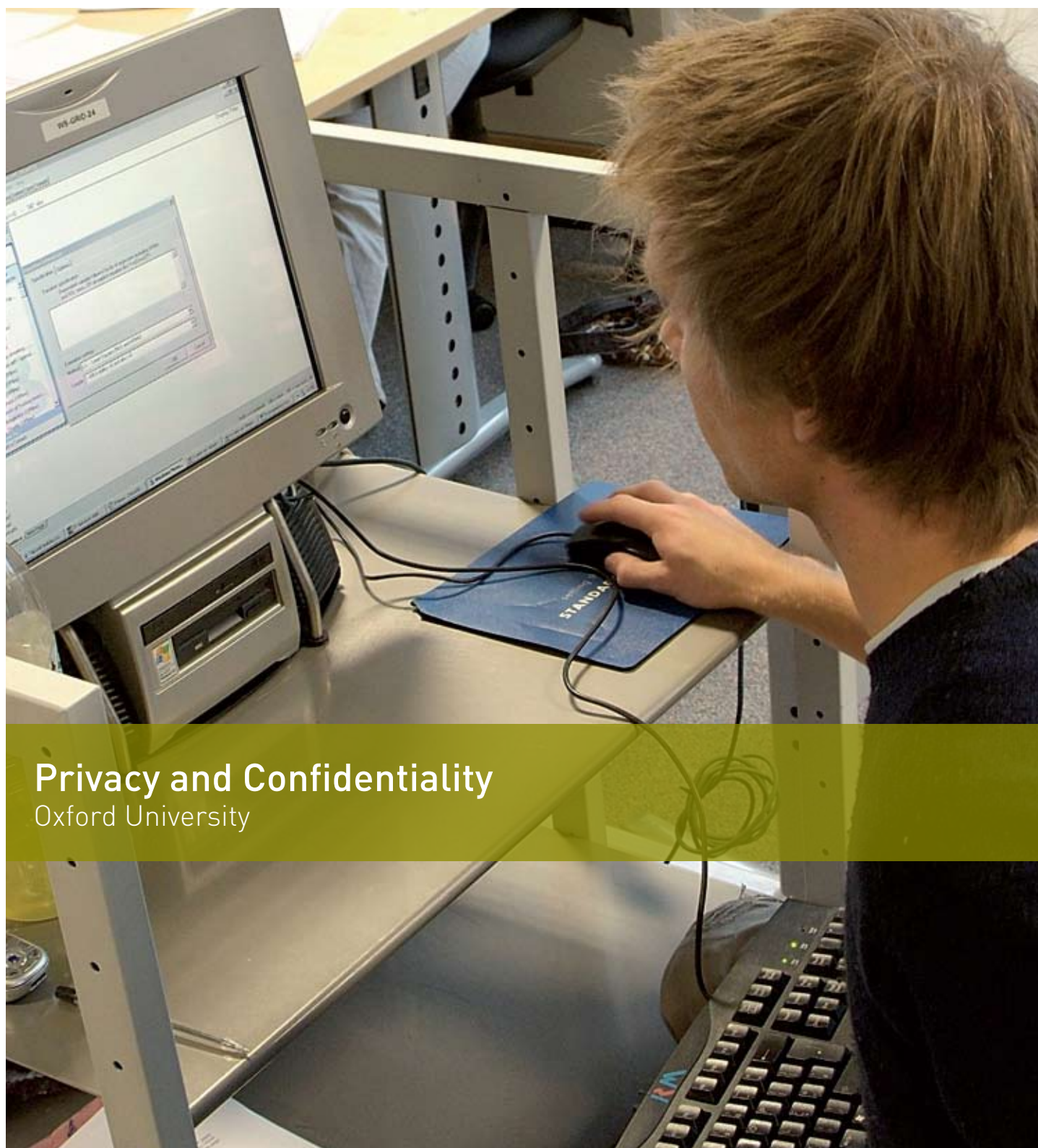


Outsourcing Email and Data Storage

Case studies



Privacy and Confidentiality
Oxford University

Introduction

Oxford University Computing Services (OUCS), in procuring a groupware solution for the University, gave serious consideration to outsourcing email to a third party service. However, in the end they decided to implement an in-house solution.

Oxford was the first University in the English speaking world, and for nine centuries has provided a first class education. With around 12,000 undergraduates and over 7,300 postgraduates; the University also employs 8,500 staff.

Oxford University had an email system for students and staff which had been working well enough for many years. However it lacked many key features of modern groupware and as a consequence was starting to show its age. There were no shared calendars, no central calendar service, no document sharing (beyond that available in the virtual learning environment (VLE)). In the modern era of electronic communication and collaboration, these features are now considered essential and were starting to be requested by departments across the University.

If OUCS did not undertake a groupware procurement exercise than it was very likely that departments and colleges requiring such services would provide their own solutions, which would result in localisation and fragmented provision.

A full and in-depth procurement activity was undertaken by representatives from across the University with OUCS giving technical advice. The use of outsourced third party services such as Microsoft Live and Google was given serious consideration. However after much work and analysis the decision was made to provide an in-house service using a proprietary solution.

Description of activity

The OUCS mission statement says that it aims to provide high-quality and cost-effective IT services that meet the needs of the University and its members. It also strives to promote effective communication throughout the University IT community.

Oxford University had an email system for students and staff which had been working well enough for many years. However it lacked many key features of modern groupware and as a consequence was starting to show its age. The University shared documents across the institution through the University Virtual VLE. Within the email system there were no shared calendars and no central calendar service. In the modern era of electronic communication and collaboration, these features were deemed to be essential business requirements and were starting to be demanded by departments across the University.

The University decided that it should undertake a groupware procurement process to select a solution that OUCS would, in turn, be charged with delivering. Unless a central Groupware solution was offered, it was very likely that departments and colleges requiring such services would provide their own solutions. With this happening across the University, it would result in localisation and a fragmented provision. The procurement of a groupware solution was integrated as part of the University's overall ICT strategy, and was seen as a key priority.

The starting point for the procurement exercise was defining the facilities and functions required by a groupware solution. This was led by representatives of the collegiate University and involved wide consultation with users. Users were also surveyed about their activities and needs in relation to groupware..

It was then possible to derive a list of functions that a groupware solution needed to provide the diverse range of potential users across the University.

OUCS is not a department which stands still or is inward looking. They had already looked at the potential of Google Calendar and Google Apps back in 2006 as part of their traditional role in keeping abreast of developments in IT and web services. As a result the possibility of outsourcing the service was given serious consideration.

However it became readily apparent as the project progressed that there were serious issues in relation to privacy and confidentiality which needed to be addressed if the University went down the road of outsourcing email provision for all users.

The issue of privacy and confidentiality became the biggest factor why Oxford did not outsource the provision of email. Without the guarantee that the hosting of data (specifically email) would be held in the UK, or at least the European Economic Area (EEA), it would be challenging if not politically impossible for the service to be 'sold' to the University.

Email services such as Google and others rely on using servers across the world for their service to ensure resilience and robustness. Spreading the load allows the services to provide email to millions of users.

However this very advantage was one of the key reasons why Oxford could not recommend outsourcing email as emails from the University would be held on servers under the jurisdiction of foreign countries. At that time Google could not guarantee that if they provided an email service to the University that the data would be held on servers only in the UK or even in the EEA. This meant that it was impossible to recommend the service to the University and it was decided that the provision of email for staff and the subsequent data would be held on University held servers.

The next question to be asked was, would it be possible to split email provision between staff and students and only outsource student email to a third party?

The University discovered that providing an email service for students as well as staff introduced only a marginal rise in costs, though the cost of provision was not a major factor or issue in the procurement process.

If student email was outsourced and staff email was kept in-house this started to raise more questions and issues.

Could the University integrate a dual system?

What about graduates attending the university (40% of the student body) who in many cases were in a grey area in relation to their status? Were they students or were they staff? Many graduates work across the University delivering seminars, supervising undergraduate projects and other activities. Would these graduates need to have two separate University email accounts?

Across the University there would be a lot of interaction between the calendars of students and staff and with a dual system with email split, calendar integration and scheduling would be challenging to build.

It soon became apparent that the only viable solution was going to be a single solution that provided a full groupware service for both staff and students.

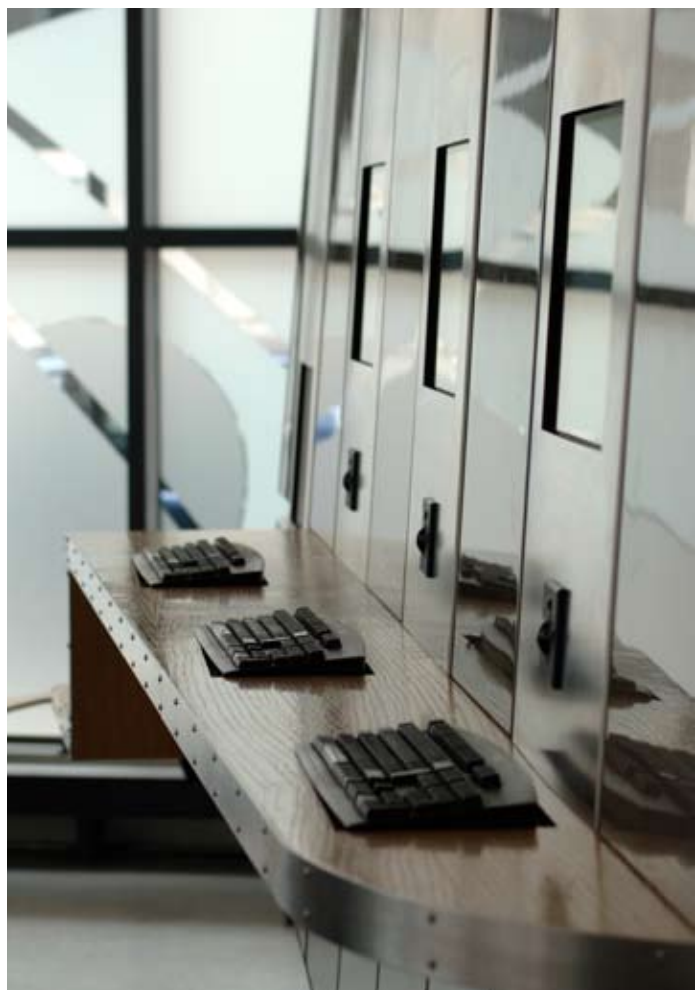
How long it took from start to full implementation

The formal groupware procurement process followed the traditional University planning cycle in the summer of 2007 and started officially in September 2007. The decision about which solution to go for was decided just under a year later.

It will be piloted over the 2008/09 academic year, with OUCS planning a full roll-out across the University in the summer of 2009.

Strategic aim

The strategic aim for Oxford was to provide a groupware solution that would meet the diverse needs of a range of stakeholders from the students, administration, departments, colleges and academic staff.





Business case

The key business case why Oxford decided not to outsource was due to privacy and confidentiality issues.

With the grey boundaries about who was a student and who was a member of staff for many users of email at Oxford it soon became apparent that outsourcing email was not going to be an option.

Issues

Apart from the privacy issues, there were few if any other issues that would preclude the use of outsourced email and calendar service. Oxford investigated the levels of integration possible with other institutional systems. The project investigated dataflows to see how data relating to groupware flowed through the University.

Most of the other Universities which had outsourced student email to a third party service such as Google, had decided for many reasons to retain and keep staff email in-house. These reasons are similar to the reasons why Oxford decided not to outsource.

Unlike many other universities, the student body at Oxford University has a high proportion of graduates undertaking postgraduate courses, nearly 40%. Many of these graduates, though students at the University, would often be employed by the University in supervisor roles, or be asked to lead undergraduate seminars. There were no hard boundaries over who was a student and who was a member of staff.

These grey boundaries meant that having two systems, one for students and one for staff, was not viable.

It was judged that a single joint system would satisfy the needs of the University and allow for the interaction between the calendars of students and staff.

What are the main advantages to the institution in not outsourcing this activity?

The main advantage to Oxford was in ensuring that the University email would remain private and confidential.

The University would be able to more easily audit and intervene on any issues or problems with student email compared to outsourcing the service.

What are the main challenges to the institution in not outsourcing this activity?

The main challenge was ensuring that the final solution proposed would satisfy the needs of the varied stakeholders and would be fit for purpose, therefore avoiding the potential problems of localisation and fragmentation that may have occurred if departments decided to implement their own solutions if no central solution was available.

Lessons learned

Who is a student and who is a member of staff? If you have a high proportion of graduates who undertake various jobs and duties for the University, will they need a staff or a student email account, or both?

What emails and data do you need to keep private and confidential?

Are you aware of the jurisdiction that any external third party servers are under?

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Outsourcing email and data storage case study

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