

Punching above your weight

by John Rogers

Illustration: Rachel Turner/iStockphoto

Howard Kennedy's IT director explains how smaller firms can use the latest technology to compete effectively with bigger players, boost efficiency and keep costs down

WHILST A FEW LARGE FIRMS DOMINATE THE LEGAL world, most law firms are considerably smaller in size. There are literally hundreds of firms in the UK which have had to select and implement IT solutions to support their business. Although they lack the diversity of IT skills and resources available to their larger competitors, they still require the ability to compete on an equal footing, or they will find themselves at a distinct disadvantage.

Background

Howard Kennedy has its roots in the property sector, but rapid growth in recent years has enabled the firm to emerge as a full-service law firm, offering its clients a broad range of property, litigation and corporate services. This brought the firm into closer competition with City-based firms many times its size.

The firm's IT systems had developed incrementally over a period of many years. As each new system was added, additional equipment and software had to be purchased. Over the long term this resulted in a large number of servers being required in the computer room and reliance on both Microsoft and Novell operating systems.

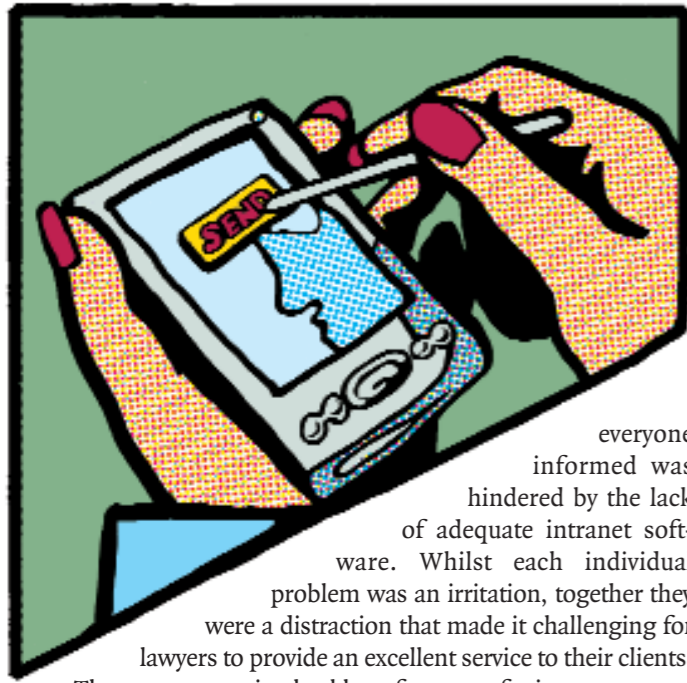
Increasing electricity costs and maintenance charges were also pushing up the costs of operation. The e-mail and

document management systems were under-performing due to the rapid increase in size of the firm, and it had become a priority to increase speed as well as ease of use. Whilst current systems were reliable, there was little resilience built into the existing technical architecture.

The firm's management set the IT department a challenge: to dramatically improve the performance and resilience of the firm's systems, whilst also providing a platform for future innovation. With a team of only nine individuals who were also responsible for day-to-day IT support it was clear that any changes would have to be highly efficient in the use of resources, and that new systems should not place any additional burden on the existing team.

Business requirements

The IT team had already been presented with an extensive shopping list of requirements. The Exchange system was overloaded, and lawyers were beginning to complain about delays in opening and sending messages. With an increasing number of home workers, the firm also required greatly improved remote access for its lawyers. Secretaries found it difficult to share dictation and to spread the workload within their teams. Circulating information within the firm and keeping



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The storage problem was solved through the implementation of two NetApp filers, one of which replaced the SAN and stores all of the firm's data. Data from the key production systems are replicated to a second standby filer in a separate building several times each day, providing resilience in the event of a systems failure. Attached to the second filer are six servers, four of them virtual, which together have the capacity to take over all of the firm's systems. In the event of a failure of the main datacentre, e-mail and document management systems could be restarted in the second location within two hours. Ultimately, the firm's intention is to move the main production systems to an external datacentre, thereby eliminating the possibility of a systems failure.

Working with suppliers

Very few of a law firm's requirements are unique, and software solutions exist to meet most routine requirements. The firm already had a policy of implementing standard software solutions wherever possible, with customisation seen as a last resort. However, there are occasions when no package solution is available, or where a gap exists between a supplier's standard offering and what a customer requires.

Instead of embarking on expensive software customisation the team is now working with suppliers to jointly develop solutions. An example of this is provided in the BigHand case study, where Howard Kennedy wished to make digital dictation available via the VDI remote desktop, and BigHand were willing to develop a solution that could then be sold to its other customers.

Extending this principle further, the team has worked closely with other suppliers to specify enhancements or to evaluate early releases of new software. Investing this time has led to significant product improvements without having to spend money and time on customisation.

Simplicity

It was important to ensure that the team did not increase in size, and that the existing team members were able to cope with all the technical challenges as well as continuing to provide day-to-day support. This led to a decision to minimise the number of technologies that would be employed, and to simplify the technical environment wherever possible. Only a small number

everyone informed was hindered by the lack of adequate intranet software. Whilst each individual problem was an irritation, together they were a distraction that made it challenging for lawyers to provide an excellent service to their clients.

There was a growing backlog of requests for improvements, and only limited time to make the necessary changes.

Overall strategy

The over-riding principle adopted by the team was simplicity. Wherever possible existing systems were to be consolidated or eliminated; the maximum possible benefit was to be squeezed from every new item of hardware or software. Getting rid of unnecessary or redundant systems was just as important as introducing new solutions, to ensure that added features did not result in any unnecessary complexity. In practical terms the strategy had four key aspects:

- infrastructure – implementation of a complete virtual server environment;
- suppliers – working cooperatively with our suppliers, to our mutual benefit;
- simplicity – eliminating any unnecessary complexity; and
- ease of use – avoiding complexity and the need for training wherever possible.

Infrastructure

The firm possessed 30 servers of differing ages and capabilities, together with a storage area network (SAN) that was close to its capacity. A detailed review of the server environment conducted by Teksys demonstrated that there was scope for dramatic consolidation through the use of virtual server technology.

Implementation of VMware has enabled Howard Kennedy to concentrate the bulk of these systems onto just four servers: a cluster of three ESX servers together with one Virtual Centre controller. As Microsoft do not yet fully support Exchange and SQL in a virtual environment, these were retained on separate physical servers, as were the three active domain controllers. Thirty servers had been reduced down to 12 identical and relatively inexpensive HP servers. This additional capacity has

of additional skills could be learned in the time available, so where possible the same technical solution was applied to a range of problems.

An early consequence of this decision was the elimination of Novell Netware, focusing all our energies on the Microsoft environment. Another was the acquisition of SharePoint, initially to provide the basis for our new intranet, but also to focus all our publishing and knowledge management requirements in a single technology. Collaboration with LexisNexis and other legal information suppliers has enabled the firm to create a knowledge management system which provides direct access to their research material from the user's desktop, eliminating the need for additional passwords.

A key requirement for the new systems was the ability to provide full remote access to our systems. Whilst Citrix is a tried-and-tested solution the team ultimately decided in favour of VMware's VDI, as this could be deployed using the existing hardware, software and expertise that already existed within the team. The consequence was the ability to provide the same facility as that offered by larger firms, but at a fraction of the cost. It also enabled the team to by-pass expensive laptops for all but a few lawyers, providing instead a combination of BlackBerrys for e-mail on the move and remote access for home working.

Ease of use

Taking time out of the schedule of busy lawyers was not a practical option, so any new systems were measured against the benchmark of simplicity and ease of use. This ruled out complicated or difficult-to-use solutions, and placed a premium on simple solutions that avoided the need for extensive training.

During development of the intranet, as an example, all departments of the firm were consulted about what information they wanted to see. Just as important, there was an extensive pilot of the new system to ensure that information was easy to locate. The final version was launched without training and with the minimum of instructions, and generated almost no calls to the helpdesk.

The same principle has been applied to the new templates. A working party of secretaries was established early in the process to provide input to the design process, and the same group is

now closely involved in user testing. The objective of this process is to make the templates sufficiently intuitive that the need for training will be eliminated, thus speeding their adoption and ensuring immediate productivity gains.

Progress update

A year has passed since the initial strategy was decided. Since that time there has been a complete installation of the new virtual computing infrastructure, together with the implementation of an entirely new Exchange 2007 cluster and SQL/Server 2005 database environment. A VDI virtual desktop pilot has been successfully concluded, and is now ready to roll out to the rest of the firm. In addition to the main production systems a backup set of systems is operational, greatly reducing the risks of failure.

The most obvious benefits for users of the system are an elimination of previous bottlenecks in performance, together with the ability to work remotely, anywhere in the world. One partner now works almost entirely from his home in Dublin, while another was able to close a deal whilst visiting the Cayman Islands. Yet another was able to register sales of new properties whilst at a marketing event in Singapore.

Just as important, the new infrastructure provides the flexibility to deliver new systems much faster, and at a lower cost. An illustration of this was a recent requirement to merge with another smaller firm. Given only two weeks notice, the IT department was able to make use of its virtual environment and increased capacity to absorb the other firm's systems. Shutting down the systems on a Friday, all of the data and services were ready to go the following Monday morning.

Conclusion

Providing a broad range of services is not easy for any small IT department. And transforming systems whilst maintaining a constant level of support is even harder. However, with a clear overall strategy and focus on a limited number of technologies, it is possible to match most – if not all – of the facilities offered by much larger firms. ¹⁷

John Rogers is IT director at Howard Kennedy.

BigHand: a case study

Early this year the firm took the decision to implement BigHand digital dictation. It was the first new system to be installed into the virtual environment, and was up and running by the end of the first day.

The firm was able to avoid a range of remote access solutions by standardising on BlackBerry remote dictation, enabling lawyers who frequently worked outside the office to create dictation – from wherever they were in the world. Howard Kennedy wished to provide full access to BigHand for home workers. It therefore collaborated with BigHand's developers to create a VDI version of their software, so that lawyers could work from home and send dictation to their secretary for typing and despatch.

Taking advantage of the collaborative features of BigHand, work can now be shared amongst all the secretaries in a team, ensuring a more rapid turnaround on client work. In addition, an outsourcing arrangement with Voicepath means that work created outside normal working hours will be typed by the start of business the next day.

This avoids the need for a night shift whilst ensuring a level of service equal to that offered by much larger firms.