

# Aedas

- Management Information System
- Studio



Ten years ago, a round of impending partner retirements at Abbey Hanson Rowe (as it was then) prompted a strategic review of the business. This crystallised a number of issues, including:

- the difficulty of managing a partnership in which all the owners also wanted to be managers
- a lack of professional management expertise
- partners having too little time to practise architecture
- the fact that, with 125 staff spread across 4 offices, the practice was neither truly regional nor truly national.

The outcome was two rounds of mergers involving a total of four practices. In 2003 these finally became Aedas, an integrated, international practice with the scale necessary to support a professional management team.

It was clear from the start that scale would only bring business benefits if the whole could be made more than the sum of the parts. Today, that would be seen as a classic case for knowledge management, but in 1995 that was an almost unknown concept. Abbey Hanson Rowe had just two librarians,

its only computerised information systems were payroll, job cost reporting and a homespun marketing information system known as the MKIS, and the practice's only significant knowledge asset was the experience of a number of long-serving staff.

The first merger made it imperative to develop better systems to help integrate the businesses and support more complex and rigorous management. The practice began to develop a new **Management Information System** based on MS Access, and this matured progressively over several years to replace the job cost reporting software and the MKIS. The MIS and its underlying IT infrastructure have continued to develop, and today (no longer based on MS Access) it comprises a range of business, quality and information management tools and runs on an intranet which links all 9 UK offices.

By 2004 Aedas had reached a stage in its development where size was no longer an issue, and the focus turned towards design quality. This created a new imperative to create and share design knowledge as effectively as the established systems share information. Aedas's solution is the '**Studio**', a new workspace in the London office designed to be the crucible for creativity and design skills throughout the practice.

“Knowledge management is fundamentally important to the future success of our business”

Peter Oborn, London office director

## Practice Profile

**Staff:** 600 UK (950 worldwide)

**Offices:** 9 UK (14 worldwide)

**Services:** Architecture, interior design, landscape and environmental design, building and land surveying, imaging, and workplace, access and CDM consultancy

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**Information system**

From its beginnings as a tool designed solely to support business management, Aedas's (increasingly misnamed) MIS has gradually evolved into a multi-function intranet with a variety of knowledge sharing roles, serving the needs of all the staff. The most recent development, 'Active Content Pages', adds much of the key functionality of a wiki and opens the way for creating a rich technical and design knowledge base.

The MIS has recently been re-written (by three full-time in-house development staff) with an n-tier system architecture and a browser based presentation layer. It runs on a central Microsoft SQL Server across a Wide Area Network and can be accessed by remote users using secure VPN connections.

The system continues to support most of the practice's key databases and management reporting functions, including:

- address book and contact database
- staff database
- project database
- timesheets, holidays and expenses
- job cost reports
- resource charts
- CV database
- image database
- press cuttings database.

In addition, it now also includes:

- Newsreel, a simple scrolling newsreel which allows news items to be rolled out as they arise
- Project Showcase, which dynamically concatenates paragraphs of text from the project database and images from the image database so that staff can see what is going on throughout the practice
- 'dashboard' components which provide a quick visual indicator of the health of the business in a

number of different ways. It can show, for example, staff without work, staff with future leave booked, and future submissions due. Additional dashboard components will be added later this year which users can configure to suit their own particular needs.

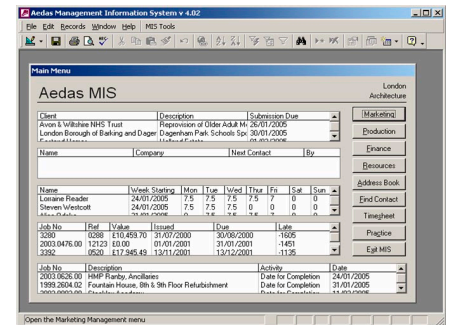
- links to other SQL databases such as the Sun Accounts software and the Conisio Document Management System
- access to external information resources such as the Barbour Technical Library and to a range of system services including web site usage statistics and systems monitoring utilities
- a comprehensive Help system
- a powerful Search function
- menus which are dynamically constructed to suit individual users' access rights

The latest addition, Active Content Pages, allows web pages to be created with no specialist training or HTML skills. Staff with the necessary security permissions can create new pages, insert links to other pages, attach files, include keywords to facilitate searching, and reposition existing pages within the intranet structure.

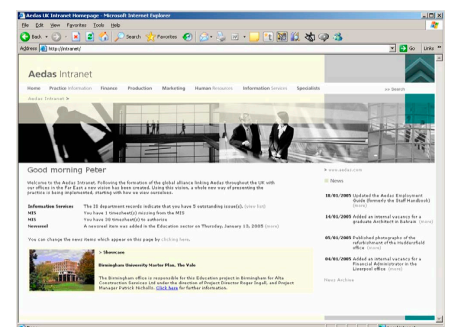
The metadata in files with information content — notably MS Word, Excel and Powerpoint files, and pdfs — is automatically analysed and indexed so that searches include attached files as well as text on the intranet pages themselves.

The next step will be to use the new functionality of the Active Content Pages to create a knowledge base — the final step in transforming the MIS into a highly capable knowledge management tool.

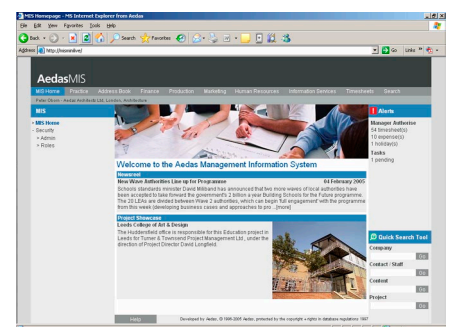
**Evolution of an information system**



1996 The MIS: an MS Access database with information on marketing, production, finance, resources, addresses and timesheets



2002 The Aedas intranet: news and personalised action prompts, and links to practice information, finance, production, marketing, HR, information services and specialists



2004 The intranet-based 'MIS', comprehensively re-written with an n-tier system architecture incorporating .Net and SQL technologies and a browser-based interface

## Studio

It is easy to decide to improve design quality, much harder to decide how. How do you:

- improve design quality in a company of over 600 staff across 9 offices?
- maintain the client base and the business while changing the philosophy of the company?
- create a high-profile architectural practice which can sit alongside the best, while continuing to maintain a high level of service to existing clients?

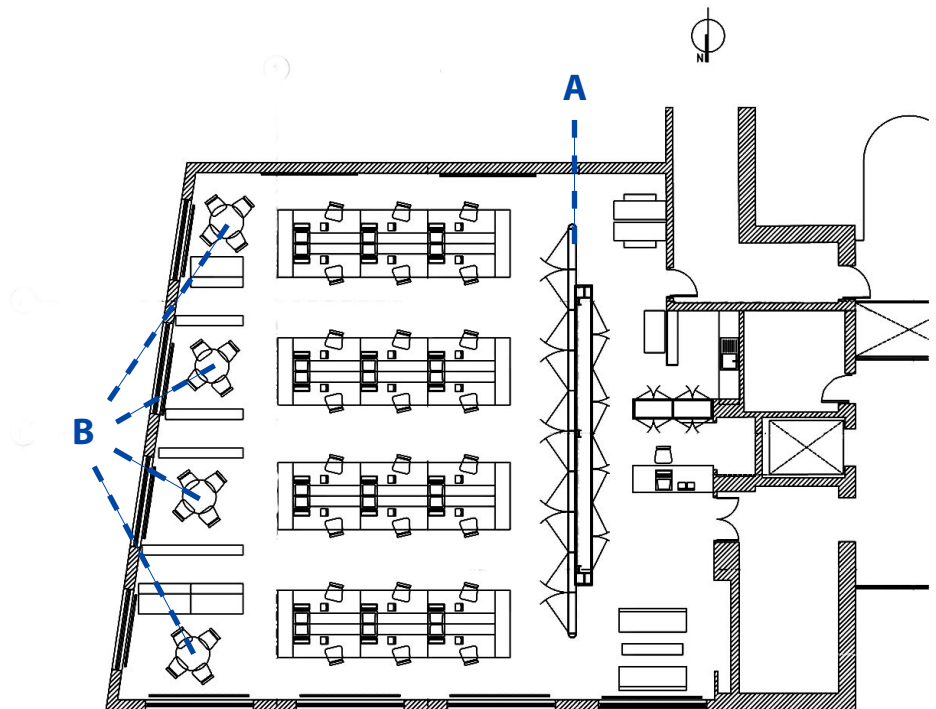
As a first step, Aedas decided to head-hunt an experienced Design Director, and they recruited Richard Hyams from Foster & Partners in November 2004. With his help, they developed two options: to spread the Design Director more or less equally across all 9 offices, or to create an 'ideal' design studio in one office to act as a nucleus and for other offices to use as appropriate.

The second option quickly emerged as the winner. Aedas judged that input from a Design Director would be too thin and insufficiently continuous if spread across nine offices, and existing clients might not all be supportive. With a single centre of excellence, on the other hand, it would be possible to develop new ways of working in an environment designed for the purpose and with a strong design focus, working selectively with supportive clients. Successful procedures could then be rolled out across the practice, and the studio facilities could be made available to other offices to use as much (or as little) as they wished.

The London office was enjoying a period of organic growth at the time and had recently taken on additional space, so it was an easy decision to fit out the new space as a bespoke Studio.

The main features of the Studio are:

- a prominent free-standing magnetic pin-up wall (A) for displaying work within the office. (The wall also doubles as a storage unit.)
- a series of break-out spaces (B) where informal meetings can be held. These are divided by metal filing cabinets whose backs provide pin-up space for the break-out spaces.
- directors moved out of cellular offices into the main open-plan space to maximise accessibility and involvement
- cordless phones for the directors so that they can go somewhere more private for calls if necessary
- a wireless network so that senior staff can move around the office with their laptops while remaining connected to the network.



The layout of the new Studio creates a non-hierarchical space in which:

- work is always prominent, and changing
- all staff have an opportunity to contribute to design
- everyone is aware of what others are doing, both through seeing the work and through hearing what is going on
- there is a sense of involvement, encouraging the exchange of ideas and the sharing of knowledge.

The Studio is equipped with a comprehensive range of tools to support greater use of 3D modelling throughout the design process, including a model-making area with hot-wire foam cutters, substantially increased computer modelling facilities ranging from Sketchup to Bentley Microstation (in an otherwise AutoCAD-based practice), and improved environmental modelling software.

But layout and equipment on their own achieve nothing: the success of the Studio depends on the creativity of the staff and the rigor of the analysis and review being applied in the design process. Aedas plan shortly to start capturing this process in 'storyboards' which can be used both as training aids and to communicate with clients and with the other offices.

In the future, they also plan to use Foresight and Hindsight reviews to trap the results of design reviews so that lessons can be learned and fed back into the design process throughout the practice.

And they plan to extend the benefits of the new working environment to administration as well by restructuring functions to give administrative staff a greater sense of involvement in projects, while freeing the architects to do what they do best, design buildings.

The Studio has produced a string of competition-winning designs in its first year. Not surprisingly, Aedas consider it to be an outstanding success. ■

