

KEEP ON MOVING

WHEN ITS MAINFRAME SYSTEM REACHED THE END OF ITS LIFE, THE HBOS INSURANCE AND INVESTMENT DIVISION (HBOS I&I) LOOKED LONG AND HARD FOR THE BEST SYSTEM TO TAKE IT INTO THE FUTURE. THE ANSWER CAME FROM ASYSKO, AS JACQUI GRIFFITHS FOUND OUT

In today's business environment, banks cannot afford to get stuck with outdated technology and processes. But as new channels and technologies bring increased competition and more sophisticated customer demands, there is also intensifying pressure to control costs. As one of the UK's largest mortgage, savings and investment product providers, HBOS I&I (now part of Lloyds Banking Group) knows well the value of an intelligent approach to IT – as illustrated by its migration from the mainframe to a Microsoft environment.

The project's origins go back to 2004, when HBOS I&I migrated all of its Unisys mainframe applications and data onto a Windows-based platform. "The original decision came at a time when we were running a major transformation project," says Paul Penney of HBOS I&I. "We had looked at the options of moving our books of business that sat on the Unisys A Series mainframe onto an IBM platform. However, that didn't prove viable from a business case perspective, and we found ourselves thinking about two main issues – the mainframes were due for renewal, but at the same time, we had concerns about the longer-term support and direction of Unisys Linc."

Those concerns prompted HBOS I&I to migrate all of its books of business running on Unisys to a Microsoft platform. The process, which entailed working with Asysco and its Asysco Migration Technology (AMT) Lion product, was something of a revelation. "Asysco was the only company that could migrate the Linc and all of the Cobol onto Microsoft," says Penney. "We did some early trials, and they worked really well. I'd come across Asysco about 18 months before we began discussions, and I just didn't believe that this sort of software would work. It was only when we came under pressure to do something that we looked at it more seriously and did some initial trials that proved successful. It wasn't a simple case of 'code goes in one end and a new solution comes out the other', but it did work, and once we'd resolved any initial performance problems, the applications ran smoothly."

Since then, HBOS I&I has turned to Asysco again to complete the second stage of the migration project.



"When we first migrated, we went to the Asysco Lion environment," explains Penney. "That has a number of Asysco-developed operating routines that sit in it to manage the servers, so while it was running on Microsoft servers, it wasn't strictly a Microsoft platform. At the start of 2007, we began discussions with Asysco about where it was taking the product in the future. We'd been through some business thinking that initially said we would treat the products the platform was supporting as legacy products. However, that thinking changed, and we decided to keep the products open. We were using a proprietary language, and we had increased our Microsoft skills base and were moving strongly into C# and .NET as a strategy. So we were looking to rationalise more on that skill set, and we were doing a lot more work on presentation layers and e-commerce, where we wanted a similar approach for everything."

In addition, projects were in the pipeline that would have required substantial work on AMT-Lion applications and procedures like batch processing were frequently over-running, causing hours of downtime. Asysco proposed migrating from the existing systems to Microsoft C# .NET, as well as a move from a 32-bit to a 64-bit architecture. The solution meant that the company would avoid the cost of upgrading the existing system to AMT-Lion 5.3, a move that would have cost £780,000. But it wasn't all about cost.

"The original decision to move from Unisys mainframe to Microsoft was a cost decision," says Penney. "But the later decision was more strategic, based on where the product was going longer-term. We'd moved from Unisys because we had concerns over long-term support, but we were still in the same

position with Asysco. We'd been operating on those platforms for about four years by then, and we were coming around to upgrade the platform boxes as well as facing quite a major software upgrade that would mean a lot of testing. So we looked at the incremental cost of switching out of Asysco completely and into a standard Microsoft C# development. We worked with Asysco, and by September 2007 we'd proved that the AMT Visual Studio (VS) product was viable. Then we ran a migration project from January 2008, which implemented in September."

HBOS I&I replaced all of the LION infrastructure as it moved to C# .NET, giving itself considerable space for future growth. "We now have the latest boxes," says Penney. "They are very powerful, and we could double the business on them if we needed to."

Considerable effort went into testing to ensure that the new system would deliver the benefits HBOS I&I expected. Here, working with Asysco proved invaluable. "Asysco developed a number of features to take in code at one end and deliver C# .NET code at the other," comments Penney. "Our project was about taking that code as delivered and testing it in terms of function, performance and stability. So we cycled round a number of times as faults and errors came to light, and each time Asysco would fix the filters and re-filter everything. That's the difference between Asysco and other companies – they do attempt to filter 100 per cent."

The approach certainly paid off. The old LION system continued to operate throughout the project, and once the new infrastructure and environment were built and tested, the system was switched over, and the old one decommissioned. "Because of our previous porting experience, we were prepared to deal

with a number of problems," says Penney. "But we had virtually none! It was a very smooth implementation, and while a few problems came to light, they were minor business ones or data problems that we quickly fixed. Our testing approach, and our focus on stability and performance, were key. We are getting better performance now than we had on the Asysco Lion environment, which in turn was significantly better than we had on the Unisys mainframe."

HBOS I&I has not experienced any problems with the system since its implementation, and that looks set to continue. "The system is future-proofed, we've got very good stability and performance, and we've managed to run one skill set across our legacy and new distributed applications," says Penney. "Clearly, the developers have gone through a bit of a journey, in that they were mainframe Cobol and Linc developers on Unisys, then they migrated to being Lion developers and working in a different language again. Although that's creating Microsoft code, it's not Visual Basic or C# because it's a Lion language. Now, they're completely C# .NET developers. This will be a real benefit to us when we need to develop new products and e-commerce applications in the future."

Batch processing times have also been reduced, and as a result, system unavailability in the morning is now unheard of. The I&I division has even been able to extend system availability for its users to 6am to 10pm every day.

"In terms of a strategy, it's put us in a very good position with a modern skill set that we can recruit into and train people in," concludes Penney. "It's given us a very stable platform with great performance and really good cost characteristics – and that's about all you could want." **F**