## Harnessing technology to housing finance

By Wyn Griffin

UILDING societies in the UK are now taking advantage of the opportunities presented by changes in legislation to provide a broader range of financial services for their customers.

In the new environment created by the Building Societies Act 1986, the Financial Services Act 1986 and a unified Europe in 1992, building societies are well placed to build on the services they have traditionally provided to an established customer base, harnessing the latest computer technology to help them make the transition.

Abbey National, the UK's second largest building society, is a good case in point. In the words of Abbey National group chief executive Peter Birch: "The 1986 Building Societies Act gave building societies the freedom to compete in the UK finance market. Abbey National has taken this opportunity to switch the role of its branches dramatically, from mortgage and investment administration centres to highly-motivated high street sales outlets.

"This has involved a move into current account banking through the society's membership of APACS, BACS and Cheque and Credit Clearing.

"The society has subsequently defined a number of areas for development which will complement its thriving mortgage and deposit business. It has reinforced its position in the money transmission area by strengthening its ATM networks and by introducing a common card which gives access to Current Accounts, 5 Star and Share Accounts. In addition it has moved into the unsecured loans market. New business areas include endowment and general

insurance, pensions and estate agency.

"This rapidly developing business is serviced by a newly-created network of 71 mortgage administration centres and by a new centralised clearing house. These services are being linked by a sophisticated open communications network, built on the principle of any terminal being able to access any service.

"A firm base has been laid which will help us to carry out our plan to provide these services competitively across Europe. This is in response to the major opportunities presented by 1992".

While not every building society necessarily envisages a move into current account banking, Abbey National's realignment of its operating structure, its recognition of the importance of 1992, and its active implementation of computer technology to support its business objectives is representative of the larger UK institutions of its type.

1992

Peter Birch's reference to a "sophisticated open communications network" and the ability of any terminal to access all services is crucial, not least in the context of the unified European market. The Department of Trade and Industry has clearly stated that "an open European market in information technology will be achieved by common standards through the development of Open Systems Interconnection (OSI) standards for computers and communication". (Ironically, telecommunications has been a problem area, but the situation is now improving with the emergence of agreed pan-European standards.)

Effective open systems based on computer manufacturers' adherence to agreed international standards (as opposed to a restrictive, proprietary systems approach) are vital in the context of pan-European financial services. With the removal of restrictions on financial services offered across national frontiers in 1992, increased competition in the financial sector will (says the DTI) "improve the choice available to business and individuals" — but it will also intensify the institutional battle in the housing finance market.

Protection of investment

The importance of open systems is not, however, dependent on the advent of a single European market-place. Olivetti and other manufacturers' declared commitment to open systems is designed to protect their customers' investment in information technology by providing them with a bridge (ie, common, compatible computing) between the past (existing systems), the present (the current addition of new systems) and the future (the planned and unforeseen future needs of their organisation).

In Olivetti's case this has meant the development of a specialised Personal Banking (or 'PB') computer hardware and software environment for housing finance and other financial institutions, in which all products are PC-based and run under one computer operating system throughout (MS-DOS). Based on open systems standards, the PB environment employs PC-based banking workstations and multi-function finance terminals incorporating specialised enhancements, which can also function as general purpose workstations.

## TECHNOLOGY

In the case of a bank or building society branch a number of work-stations can be connected together in a local area network, which again is based on compatible industry standards. One major advantage of this kind of branch system is its flexibility: as each workstation is self-standing (ie, capable of independent use), any workstation can act as the server, 'driving' the network to provide shared communications, database and printing facilities.

If access to software that runs under the UNIX (as opposed to MS-DOS) operating system is also required, a minicomputer server can also be included in the branch local area network — and thanks to open systems technology, the two operating systems will comfortably coexist.

This type of branch computer system is already being used by a number of UK building societies and other financial institutions worldwide for cashier/front counter, back office and general office automation functions. It also provides a very effective foundation for the 'counselling platform', where a building society branch is selling a wider range of products in addition to mortgage finance, such as cheque book facilities, different types of insurance cover and estate agency services. Using the kind of workstation described here, society personnel can display different areas of information 'on screen' when talking to their customers.

The branch solution can be extended further with the addition of interior and exterior (wall-based) self-service terminals, which again run under the same operating system. Thanks to recent advances in technology, automated branch systems can now be connected to each other using a wide area network, which allows access to all major computer manufacturers' equipment.

In addition, it is now also possible to install an 'integrated communications network' which links together all the branches and offices within an organisation. This is achieved using three major building blocks: an X.25 packet-switching based network system; a systems management centre to monitor and manage 'remote' equipment installed in branches and regional offices; and a fault-tolerant 'front-end' system which supports the management of on-line terminals.

Functional analysis — the starting point

The key to the success of the open systems solutions outlined above is that they are based on functional analysis — in other words they are built on the premise that however technology develops or organisations change, basic functional needs such as transaction processing, administration and communication remain the same.

There is now no excuse for the imposition of technology on an organisation: the open systems approach uses function, not technology, as its starting point, then applies technology to integrate many otherwise incompatible types of equipment into one network designed to adapt to future needs and technologies.

This strategy not only protects the organisation's investment — it also offers the system user freedom of choice to invest in a variety of technologies to meet his changing needs.

Mortgage processing

For example, a housing finance institution wanting to automate its mortgage/loan processing operation using Olivetti systems has two options. This can be achieved either via 'traditional' office automation/data processing systems using PC-based workstations, local area networking, PC or (Olivetti LSX) minicomputer-based servers and office automation software; or via the 'FileNet' document image processing system.

FileNet is a storage and retrieval system, which scans documents and stores them in an optical disk-based

'Image Management System' (IMS). It can scan and store many thousands of sheets a day, and has almost unlimited storage capacity. Documents can be retrieved from the system in seconds — an important feature when handling customer queries — and can be transferred from one person to another electronically via integrated 'Image Workstations' which are connected to the IMS and so each other using a local area network.

While a housing finance institution would not be expected to install FileNet in its decentralised branch operations, the benefits of paper-free, optical disk-based technology for the head office mortgage processing operation are considerable.

Financial FileNet users worldwide include seven of the top 10 US banks (by size of investment fund), plus Barclays New York.

In the UK housing finance market, Britannia is the first building society to install such a system which, when completed at the end of this year, is expected to be the largest operation of its kind in Europe. FileNet will release 6,000 square feet of valuable office space, will offer easier staff access to documents (3,000 files are accessed daily) and enable the society to respond quickly to enquiries from its 150,000-plus mortgage holders, an important factor in today's increasingly competitive, service-oriented marketplace.

Integration versus imposition

Few decision makers in housing finance would disagree that computer technology now plays an important role in the management and success of their business. In my view that role has developed not simply to support the exploitation of new opportunities in the marketplace, but also because a number of computer manufacturers now have the willingness—and the technology—to meet institutional needs by integrating rather than imposing solutions.

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