

Implementation

The key to survival

Andrew Aitkenhead looks at the electronic trading alternatives open to the wholesale financial markets and discusses the key factors for successful implementation

Not since the advent of the telephone has technology had such an impact on the structure of financial markets. The rapid growth of the Internet and the use of Web technology have allowed financial institutions to communicate and trade electronically more cost-effectively and with a wider audience. Financial and other traded markets have altered almost beyond recognition, and the pace of change continues unabated.

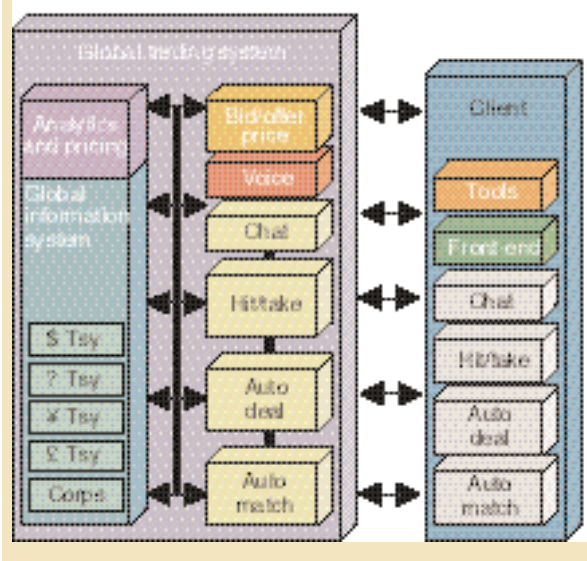
All major financial institutions have e-business initiatives in progress (see pages 22-24). Many are tackling them as a strategic issue, others on a tactical, market sector-based level. The market sector approach is easier to implement. But a project's success is likely to depend on the bank's strategic perspective, as e-commerce alters the future structure of financial markets and their leading players.

The bank's strategy must be addressed in the implementation of any electronic trading platform. But staff with a detailed business knowledge of each market must also be involved in the implementation process. It is critical to analyse what is and what is not likely to work. At least two costly e-commerce initiatives – one from a major European bank and another from a US electronic trading platform – have been shelved because of a lack of consultation with trading and sales staff.

The most visible e-trading initiatives so far have been in the equity markets, which have a larger proportion of retail involvement. But most of the effort in the wholesale market is focusing on fixed-income. The New York-based Bond Market Association has conducted annual surveys of electronic execution systems for fixed-income securities since 1997. In last year's survey it identified 39 systems either planned or in use, compared with 26 in 1998 and 11 in 1997¹.

Other markets, including the foreign

1. Single-dealer distribution system



exchange and money markets, commodities and energy – particularly with the deregulation of global electricity markets – are also attracting interest for e-trading initiatives. Each of these markets has different trading characteristics and there are various models of electronic execution system fulfilling different roles.

There are four broad categories of system, which apply to all wholesale markets in one form or another. By looking at these categories and their applicability to different markets, we can also consider current trends, and the advantages and disadvantages of the systems to different market participants. The first three are aimed at distribution, while the fourth is involved in crossing and inter-dealer systems, where participants may be buy- or sell-side, or both.

1. Single-dealer distribution

This is the most common way to develop

distribution channels using e-commerce. In North America and Europe, banks have developed and are developing electronic channels to distribute a wide range of traded products. These cover not only bond markets, but others including the foreign exchange and money markets.

There are a number of compelling reasons for introducing this capability into a business. Primarily, it should increase the productivity of the existing sales force. It allows straightforward business, normally in vanilla products, to be executed with minimal human intervention. Typically, this type of business is low margin, so an electronic system frees the sales force to concentrate on higher margin business and on marketing the electronic system to new clients. At the same time, the system should help widen the client base. The reduction in human intervention lowers transaction costs and reduces the chance of error, thereby cutting out one area of operational risk.

A drawback of this type of system is the need for the client to have either a number of windows open, or a number of screens (depending on the method of delivery) to compare prices (see figure 1).

Many banks, including Warburg Dillon Read, Merrill Lynch and Paribas, have developed their own versions of this type of system. Solutions such as GenIdeal from UK systems vendor AVT also provide this functionality.

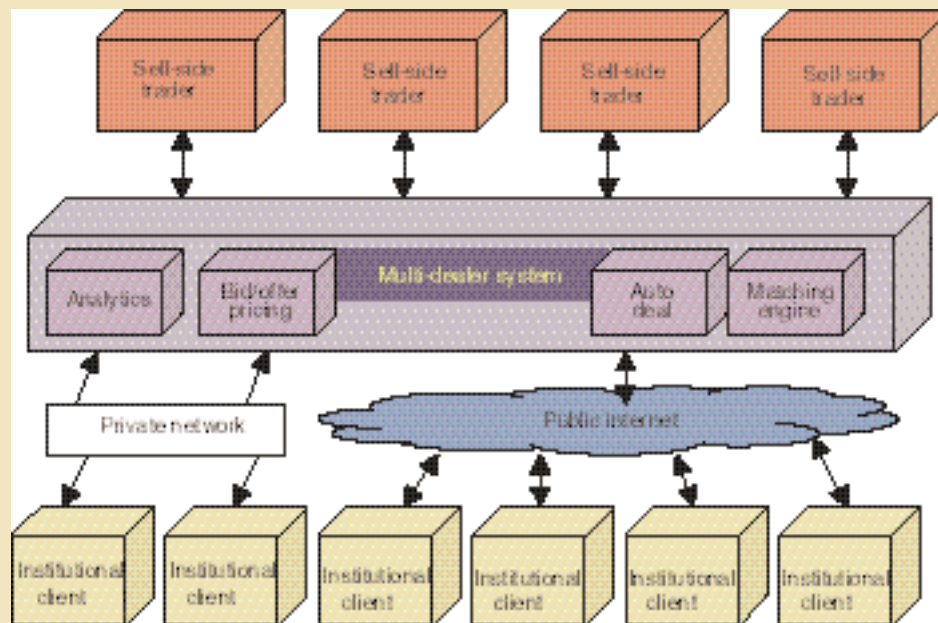
2. Multi-dealer distribution

These systems address the problem of multiple screens. They are typically systems that provide a distribution channel from several sell-side firms to their clients. The advantages for the sell-side institution are similar to those of single-dealer distribution systems. For the buy-side firm, the ability to compare prices from a number of counterparties is the main additional advantage. For

¹See "eCommerce in the US Fixed-Income Markets, The 1999 Review of Electronic Transaction Systems", The Bond Market Association, November 1999. Available on www.bondmarkets.com.

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2. Multi-dealer distribution system



example, Trade Web, an on-line trading system that enables institutional clients to trade US Treasuries with a number of primary dealers, allows the client to compare bids and offers for a specific issue.

The additional attraction of such a system is that liquidity is more visible – and available to clients – as the system is supported by a number of sell-side institutions (see figure 2).

3. Primary market syndication and distribution

The eurobond market has had electronic syndication capability for some time. Bondware from Capital Data, for example, can communicate new issue terms to the syndicate, and the syndicate members can, in turn, accept participation. However, only recently has the first new issue been syn-

dicated via the Internet. This entailed a bond deal for US mortgage securitisation firm Freddie Mac, syndicated by Warburg Dillon Read using its new system Debt Web. Debt Web is used mainly for primary markets, but it has some secondary market trading capability. Meanwhile, Merrill Lynch is intending to use its new system, iDeal, for both equity and debt issues, starting with the distribution of new equity issues over the Web. Other systems fulfill the role of auction and/or distribution vehicle for new issue paper in a number of markets, including bonds, commercial paper and medium-term notes.

4. Crossing systems

Crossing systems, often referred to as electronic communication networks, work in many ways, between several different types

of market participant. They can be buy-side to buy-side, like E-crossnet in the equity market, or sell-side to sell-side – like the electronic systems from the traditional voice brokers. They may even include both buy- and sell-side participants (see figure 3). All the major voice brokers have, or are developing, systems to meet the competition from new electronic entrants to their markets. BrokerTec, Euro MTS and Instinet are all targeting this space in the bond markets.

Success factors

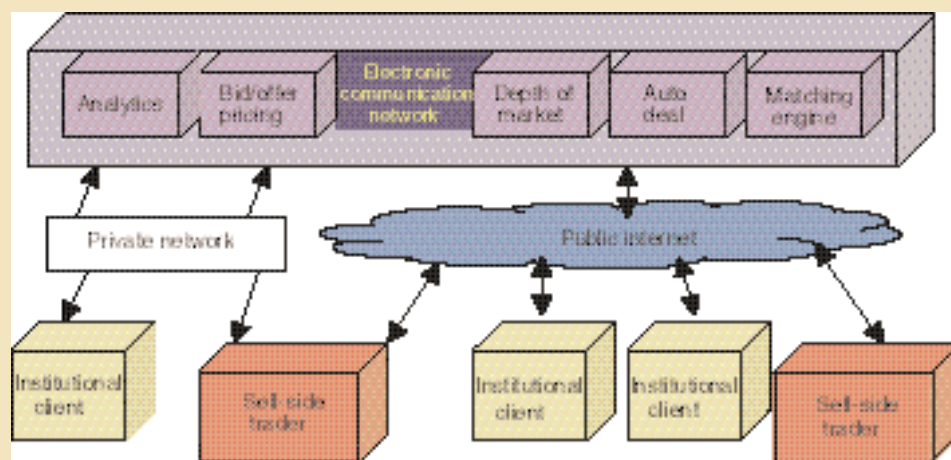
A key consideration in the move to electronic trading is whether the business model changes, and if so, how? An electronic crossing system, for example, is generally designed to offer the same advantages to all, while the traditional voice broking model is likely to favour bigger accounts. Although a level playing field may be considered a good thing, in many markets the major liquidity providers are the ones that risk losing out. When considering the implementation of an electronic trading system, it is critical to address this issue.

Another question that needs to be considered is the suitability of different models to different markets. For example, the crossing systems used in securities markets are unlikely to be suited to vanilla money market products, at least in the early stages of electronic trading. The main reason for this is credit limits. Many money market transactions are subject to limit checking, and rates will generally vary with the credit quality of the counterparty. The main crossing systems, on the other hand, are designed to provide equal access to all.

Traded products with a degree of homogeneity, particularly in terms of credit quality, are generally more suited to electronic trading. US government bonds have been the prime target for electronic trading in wholesale markets, as all treasury issues have the same credit quality. It also helps that they are issued and traded in large volumes. US corporate, European corporate and eurobond issues may vary significantly in their credit quality and size. The lack of liquidity in all but the largest corporate issues makes them unlikely candidates for electronic trading.

A lack of liquidity, both in the traded product and in the system, is one of the most likely reasons for a system to fail. To be compelling to the end-user, any system needs sufficient liquidity. One crossing system set up by a US electronic trading platform has already failed because of a lack of liquidity. The founder approached the major sell-side firms to try to ensure they would provide visible liquidity. They, of course, refused. The system's failure to

3. Crossing system



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provide good prices and the ability to trade in volume proved fatal.

Initiatives like BrokerTec, Euro MTS and Instinet's new fixed income initiative, which are effectively attacking the inter-dealer broker market, will need liquidity to succeed. Ownership may or may not be key. BrokerTec and Euro MTS are owned by groups of major financial institutions, which may give them the edge over Instinet, owned by Reuters. The systems need to offer compelling reasons for the providers of liquidity to participate. The main reason is likely to be cost, but there may be other factors, such as speed or availability of pricing.

Some traders (admittedly, a decreasing number) prefer direct communication. And the handful of large firms that provide most of the liquidity tend to favour the old system for the advantages it gives them. In the equity market, Instinet overcame this problem in the same way that many traditional voice brokers are dealing with it in other markets – by providing a two-tier service. The electronic execution system is the main focus, but Instinet also provided a voice service, either as back-up or for those who prefer to speak to a broker.

The model for dealing with less liquid markets may be electronic distribution rather than electronic trading. Crossing systems, like Bond Connect (established in both North America and Europe), may be appropriate. But they may need to offer a more timely or frequent execution facility than the current twice-weekly service offered in North America.

In Europe, some second-tier banks are frustrated that the major financial institutions have been unable to provide what is considered acceptable liquidity for older bond issues. But it is the bigger players that are unlikely to favour electronic execution in these markets, because electronic execution would lead to visibility and lower returns. As buy-side power increases, systems that cover these markets may gain in popularity.

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It is tempting to think of the implementation of an electronic trading system as a technology issue. But it is clear from the points raised so far that there are some business and organisational issues that are

more important. True, technology must be implemented, and the type of technology used will be determined largely by the business model. The new technology may be bought from an external software provider or developed either in-house, or with the

If implemented well, an electronic trading system allows the firm's natural strengths to shine through

co-operation of partners.

It may or may not be possible to integrate the new system with existing trading technology. A major re-engineering exercise may be necessary. This question is critical, as all large banks have an enormous – and expensive – technology infrastructure to maintain and diverse systems across different trading units. Where existing technology is maintained, it will be necessary to assess the extent to which the new technology will be integrated, and how the integration will be carried out.

At least two major investment banks are examining the work involved in a complete re-engineering of their technology. However, the internal politics involved in a complete overhaul prevents many institutions from taking this approach. Support for the initiative must come from the highest level. And clear communication of the strategy to all involved is essential to manage the changes both to the company itself and to its relationships with other institutions. Organisational structures are likely to change markedly, while individual roles will develop in line with the changing business model.

Successful implementation of an electronic system relies on identification of key issues. First, the range of instruments and locations to be traded on the system, and the target market, must be identified. The next step is to identify the business and technology expertise available and any additional skills that may be needed, for example, in managing the process or selecting the relevant technology.

As the roles of the institution's traders and, especially, its sales team will change, it is important that the changes in staff responsibility are understood and managed appropriately. And responsibilities must be allocated for monitoring e-business and dealing with exceptions.

As with any technology implementation, awareness of managing the risks associated with change is essential. Although electronic systems reduce the risk of human error, they introduce a host of operational risks caused by system failures.

The next step

We live in an age where we can do business without having to talk to anyone. And as more and more people who have spent their formative years communicating by e-mail enter the world of business, the nature of relationships is bound to change further. The virtual trading room may not be far away. After all, why pay for expensive city centre offices when the traders no longer communicate in the way they used to?

There are some markets where relationships still dominate, such as euro floating rate notes or US corporate bonds. In these markets, the traditional voice broker can still offer value to the client by providing additional information that the electronic systems cannot accommodate. But the cost differential between voice broking and an electronic alternative will increasingly call into question the broker's value.

Most electronic trading initiatives so far have targeted one asset class, mostly bonds, equities or foreign exchange. A decade ago, most wholesale financial business was conducted by asset class. But in recent years there has been a massive growth in trading structured products, effectively multi-market transactions. Can electronic systems mimic this type of trading?

So far there has been little development on this front. But some institutions, notably Warburg Dillon Read and Merrill Lynch, are investigating the possibilities and are aiming to provide clients with the ability to conduct multi-leg trades electronically later this year. So far they have concentrated on setting up initiatives in different markets, including commercial paper, debt and equity, which will subsequently be linked.

According to Stuart Clenaghan, executive director of fixed-income electronic commerce at Warburg Dillon Read in London, "the ability to synchronously price all relevant product types is critical to the successful integration of electronic trading across business lines. If implemented well, an electronic trading system not only provides a more cost-effective and democratic solution, but also allows the firm's natural strengths to shine through".

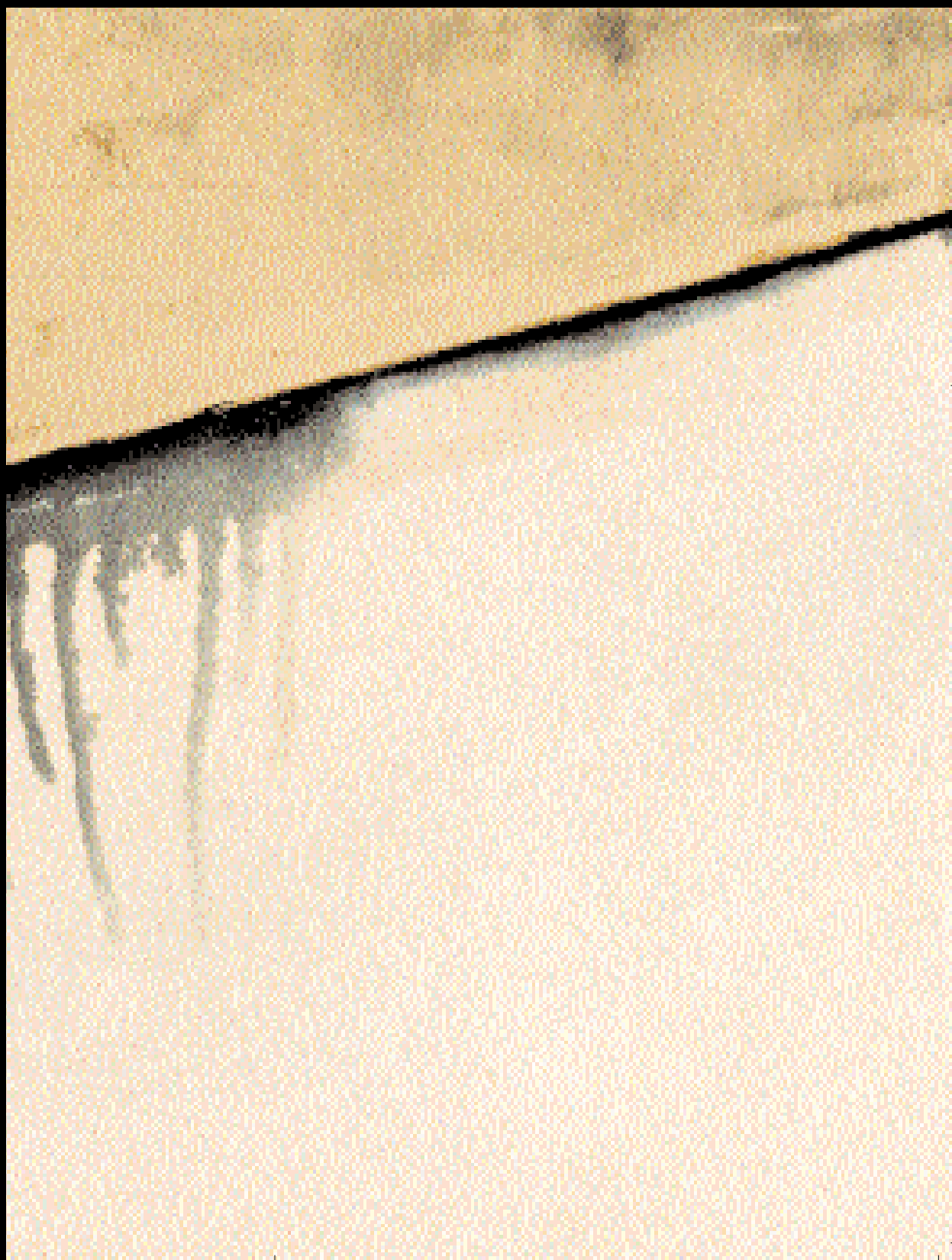
Such strategies can only be successfully implemented if driven from the highest level in the bank, rather than at the tactical level. Some banks will succeed and others will not. The question is, will this determine which banks survive the electronic trading age? ■

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Electronic Trading

A Risk Special Report



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