

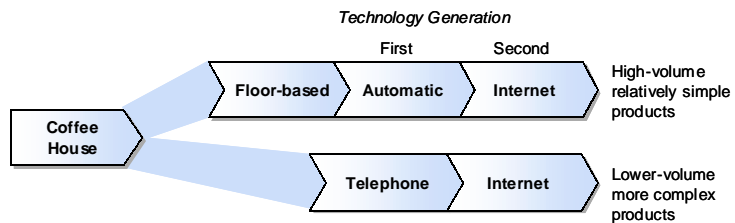
Does the evolution of Financial Exchanges point the way for B2B?

The analogy between the development of stock exchanges and B2B exchanges is not new and has been used to help describe the perceived role of B2B exchanges in facilitating trading between businesses. In a recent client study for a Financial Services client, marchFIRST moved thinking on this topic forward gaining some key insights that confirm our current hypotheses on the likely viable trading models in B2B E-Commerce, but also providing a valuable framework for thinking about trading engine functionality.

Financial Trading Exchange Evolution

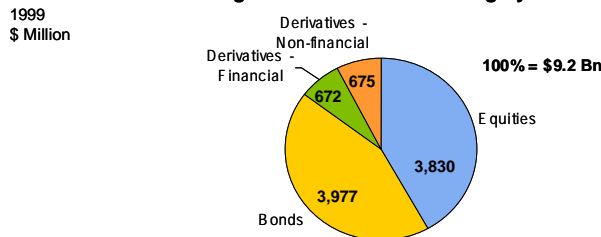
Modern trading exchanges developed out of historic market communities and gathering places (such as the London Coffee houses). As technology has become available so it has been adopted to support trading. The type of technology used depends on the nature of trading.

Evolution of Trading Exchange Technology



In the first generation of technology support, monolithic trading engines were created to automate the high volume trading of relatively simple instruments (e.g., equities) in existing open-outcry floor based exchanges. For lower volume and more complex instruments (e.g., bonds, securitised rock-star royalty portfolios, and so on), where finding the right product is the greater part of the task and there are no economies of scale, then the telephone is the main piece of technology used. The Internet is now creating a second generation of technological support. The global reach, common communication standards, lower cost and powerful search capabilities has allowed Internet solutions to both under-cut the monolithic price-matching engines and also supplant the telephone in 1:1 product search and negotiations.

Revenues from Exchanges and Alternative Trading Systems

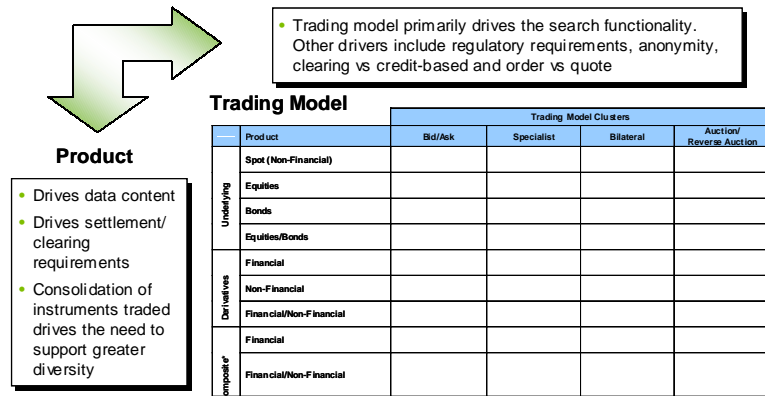


Despite their seeming importance due to their position as the hubs of world financial trading, the world's Exchanges and Alternative Trading Systems actually make very little money in comparison to their members (e.g., investment banks). In our recent study we estimated that the global revenue generated was a modest \$9.2bn, mostly from equity and bond trading.

Trading Engine Functionality and Exchange Revenue Generation

So that we could lay out the landscape for trading engine functionality, we created a framework of the key drivers of functionality of the major engine classes. In building the framework, we found that there are two key dimensions: trading model and product.

Key Dimensions of Trading Engine Functionality



* Trading derivatives and equities and/or bonds

- **Trading model.** The trading model drives the functionality required to find counter-parties with whom to trade. Secondary drivers include regulatory requirements (which vary by geography), anonymity, credit risk management method, and transaction type (i.e., order vs. quote). There are four main models used to trade financial instruments:
 - Bid/Ask – where bids and offers (usually anonymously) are matched automatically, electronic stock exchanges and ATSs¹ offering order crossing are typical examples. When automated, traditional open outcry exchanges convert to electronic bid/ask exchanges;
 - Specialist – where a specialist has an exclusive right to make a market in a particular instrument. This is a traditional model employed by very few exchanges which typically do not trade electronically (NYSE, the world’s largest stock exchange is the dominant example);
 - Bilateral negotiation – essentially a 1:1 model where the main component of work is finding your trading partner followed by negotiation and transacting. This model is most frequently used for trading low volume, complex instruments and the key online functionality is a powerful product search capability combined with support for the price negotiation (on various product parameters). Typical examples and the dealer and inter-dealer systems (which support a proportion of the OTC² trading);
 - Auction/Reverse Auction – these models are relatively familiar and offer trading between one seller and many buyers (auction) or one buyer and many sellers (reverse auctions) to negotiate on price, typically over a fixed period. The predominant electronic systems are ATS’ providing Bond auctions. Bilateral and auctions systems between them comprise 25% of ‘exchange’ revenues.

¹ ATS = Alternative Trading Systems, comprising the partially regulated or unregulated trading systems, such as ECNs and Order Crossing systems, Bond Auction systems, Dealer and Inter-dealer systems

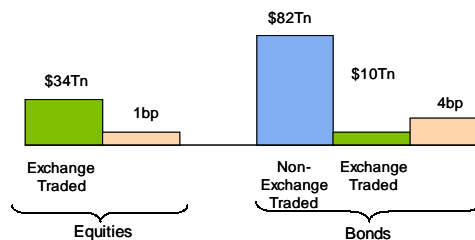
² OTC = Over the counter – i.e., instruments not traded on the formal stock exchanges

- Coordinated selling and demand aggregation (buying groups), the two remaining generic trading models, are not often seen.
- **Product.** The product/instrument traded drives the data content to be held in the trading engine, ranging in generally greater levels of complexity from Spot (for non-financial commodities), through the underlying instruments (Equities and Bonds) to derivative instruments (themselves ranging in complexity through Forwards, Futures, Options, and Flexible Options). The product dimension also typically drives the clearing/settlement model used. Over time, the trading venues are moving to support trading of a greater variety of instruments (across the underlying instruments and derivatives). This composite nature means that to meet customer needs the trading engines must be able to support a diverse set of product data content.

We observed that the Bid/Ask model comprised 56% of 'exchange' revenues, with the bilateral and auction systems together comprising a further 25%. Also, nearly 50% of revenue is generated by trading venues that are owned privately or in a mutual structure benefiting their members, with a further 32% being subsidiaries of other organisations (e.g., investments banks or other institutions). Only 17% of 'exchange' revenues are generated by public listed trading venues.

The proportion of the total 'exchange' revenue in relation to the value of instruments traded is between one and four basis points³ of the trading volumes, depending on the type of instrument. Bonds, typically more complex instruments than equities, provide the higher rate of return, generating similar 'exchange' revenues for substantially lower trading volumes. However, a further \$82Tn of bonds are traded in the OTC markets, usually by telephone. The complexity of the products and the relatively low volumes do not make them amenable to trading on the big Exchanges, but they are now beginning to trade on smaller scale systems (which often provide a bulletin board facility to satisfy search needs)

Trading volumes and Revenues Proportions for Exchange Traded Equities & Bonds
\$ Trillion; Basis Points



What does this mean for B2B e-Commerce?

The financial exchanges can provide a useful analogy for evolution of B2B exchanges.

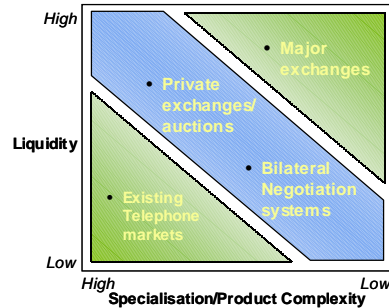
Global sales transactions are estimated to be \$105Tn⁴, according to Gartner Group with \$7.3Tn forecast to be on-line by 2004. To understand how B2B exchanges might generate revenues using the financial exchanges as a model we need to make some initial assumptions, say, that 1/3 of the online business is very liquid, high volume trading and so can be supported by major exchanges, with the

³ One basis point is 0.01%

⁴ Approx. 2.3 times GDP which represents value added (Gartner)

remaining 2/3 being supported by other arrangements (e.g., 1:1 bilateral negotiation systems).

B2B Exchange Business Models



In the limit, the high liquidity markets supported by B2B exchanges may produce similar 'exchange' revenue proportions (say, 1-2bp), between \$260m and \$520bn. The remaining trading could produce revenues at ratios of 4bp, or \$2bn. In total B2B trading 'exchange' revenues would represent between \$2.3bn and \$2.5bn, three orders of magnitude less than the value of sale transaction forecast by Gartner to be captured by net market makers in 2004 (\$2.7Tn). There are a number of possible reasons for this discrepancy, one being timing, another being that Gartner simply wildly over-estimated the potential value.

If the analogy between financial and non-financial trading holds true, then the implication for B2B E-Commerce in the long term is that B2B exchanges will not be key revenue generators in non-financial trading but mere venues, where the real players, suppliers and buyers, will create and retain the value for themselves.

Andy Gueritz, March 2001

Sources: FIBV, TradeDATA, Gartner, The Bond Market Association