



Wholesale Finance, A Model for Electronic Commerce

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This article is an abstract version of a detailed paper published at: <http://www.discretearb.com/paper.html> which outlines a wholesale financial protocol and how it will impact global banking and financial automation.

The research was done by a trading software company based on the principle that financial automation is taking too long because of the lack of standards for interfacing financial systems. Although the described protocol could be used on the internet, the base concept is for use within large Intranets to cut costs estimated to be 10-250 million dollars depending on the size of the institution. On the web site is a cost feasibility appendix to better estimate this cost benefit for a particular organization.

A common financial transaction protocol would increase the speed with which financial systems and corporations could interconnect to do business. The proposed protocol would allow for trading and settlement of all exchange traded financial instruments including assessment of value and market maintenance. With a common format, not only would system interconnection be rapid allowing off-the-shelf vendors to integrate their products easily in a world market, but, the increased interconnection would cause a massive increase in trading volume purely because of the availability of the high speed medium.

As is well understood in less arcane markets such as real estate or automobiles, the network medium eliminates the broker or at least decreases the critical importance of their services as even a remote customer can participate in a marketplace with the same advantages as a firm across the street from the exchange. Not only this, but membership in an exchange has here-to-for been restricted by locality to the exchange. (i.e. Banks in Singapore are the most likely institutions to be members of the Singapore stock exchange.) This changes so that any institutions using protocol compliant computer software may participate as member firms provided they meet regulatory qualifications for membership. Extend this model to a global level and it is apparent that the next 20 years will completely re-define global finance in terms of exchanges, clearing companies, buyers, sellers, regulatory institutions and automation companies.

The hidden effect is that software services will no longer be required to be local on the networks which run an institution's Information Technology. A series of companies like EDS, IBM and Reuters will be able to provide trading services to institutions without being resident at their company similar to how telephone services are provided today (i.e. toll free telephone service is a network database service transparently available to customers and telephone switches)

The protocol itself is a series of messages making a transaction such as entering a marketplace to buy grain futures. The marketplace is available, accepts the order, executes the order and clears the transaction as part of the protocol. Thus any financial market will simply provide network execution services, including clearing and value assessment, to

its client institutions via a network medium. It may even develop that any institution will be able to register and open its own exchange on a provider as a web site is set up today as the financial protocol will make this facility open and available to all potential clients.

This projection is not unfounded. Simply reviewing history with the advent of the telegraph and then subsequently the telephone one can observe a similar evolution as a higher speed transaction media affects finance. More buyers, more sellers and a faster world makes it rare for physical stock certificates to ever be seen by the owner. Extrapolate this condition to the new medium and the owner may not know what country the certificates are held in or what world exchange the deal was executed on.

Speed is a critical factor also in this impact. A truly global market will re-define financial computing by removing the overnight batch cycle. No first-world institution will be able to afford this historic luxury. All transactions will be executed in real-time. Based on historical trends with Telegraphs and Telephones, the projected increase in global financial transaction volume is 10 to 100 times that of today.

Along with this comes a very large business opportunity similar to that exploited by AT&T 100 years ago which built the firm. Organizations which strategically assess the future properly will become the new dominant players. The losers in this new automation of wholesale finance will be the brokers and proprietary automation companies who will not be able to compete with network financial services giants offering direct access to financial services without the middleman. For this forecast, one need only review the case of Western Union, once the most powerful business communications company in the world. All institutions used their telegraphs to conduct business. With the advent of the telephone, Western Union bet on the antiquated technology and lost. The choices institutions make in their strategy for wholesale financial electronic commerce will have a serious impact on their future survival.