



## Technology

Major Changes Forecast

# Institutional Trading Technology Changing Canada's Equity Market

By: Jackie Chung & Marie Konstance

*Surprisingly, the telephone is still used for two-thirds of Canada's institutional equity orders. However, this is changing and Jackie Chung, of Competitive Metrics Inc., and Marie Konstance, of Plexus Group Inc., explain what is happening and why.*

**T**he last two years have witnessed a fundamental change in the way money managers buy and sell stocks for their client portfolios. In the face of mounting pressures from regulators and clients to prove best execution, control costs, and reduce errors, money managers have turned to technology to enhance efficiency and performance. As a result, technology has taken the Canadian investment industry by storm just as it did in the U.S. and globally. Major changes are forecast in the way the Canadian equity market operates.

Today, the telephone is still used for two-thirds of Canada's institutional equity order flow.

Less than one in five buy-side trading desks are actively using electronic trading systems for 20 per cent or more of their equity trading. These statistics come from a survey of 30 Canadian money managers with \$1 trillion in aggregate assets conducted by Jackie Chung and sponsored by Bloomberg Tradebook, Plexus Group, and TSX Datalinx. The 'Buy-side Electronic Trading and Best Execution in Canada' study indicates that 2006 will be a turning point.

Change is already afoot. The study found that buy-side adoption of advanced

order management systems has increased by 240 per cent since 2003. Six out of 10 money managers in Canada are now using advanced order management systems while 87 per cent of the buy-side trading desks are connected to electronic trading systems. A significant number of firms have started to use electronic trading systems to access the exchange directly for part of their equity trading.

The pace of change will accelerate in 2006. Based on the study, buy-side traders plan to direct an average of nearly 20 per cent of their institutional equity business to electronic trading systems next year. The majority of them plan to access the exchange directly more often to trade securities. An increasing number of buy-side traders also plan to test and learn how algorithms, those sophisticated black-box quantitative trading strategies, work.

The telephone will be replaced by electronic order routing as the dominant method of trade communications. More and more firms plan to use the Financial Information eXchange (FIX) protocol to send orders to the brokers and receive fills. As a result, discussions between money managers and brokers will be increasingly conducted between computers.

The rapid adoption of technology by Canadian money managers in institutional equity trading is driven by the structure of their trading desks. With just a few equity traders managing numerous broker relationships, buy-side trading desks need to turn to technology to increase efficiency and reduce costly manual errors.

### Buy-side Empowered

Money managers have depended on the brokers for trading and market information. Now electronic trading technology can give buy-side firms virtually the same access to the markets as the brokers currently have. This enables the buy-side to take more direct control of their order flow and to access information that was previously impossible to capture. As buy-side firms become less dependent on the brokers, the relationship between the buy-side and the brokers also changes.

Money managers now have choices in their trade execution venues. They can choose between the service of traditional broker equity desks – which come with value-added services such as research and market colour – and that of electronic trading systems which offer lower trading commissions and direct access to the exchange.

Buy-side firms can execute the easier trades on the low-cost, low-touch electronic trading channels and use the traditional broker service to work the order or commit capital for the difficult trades that involve less liquid stocks or require more immediate execution.

The trading function has also become more complex and precise as buy-side firms increasingly turn to derivatives, long-short, and other sophisticated portfolio strategies to boost returns. Access to advanced electronic trading technology makes it possible for buy-side firms to assimilate and analyze thousands of stocks in milli-seconds to identify trading opportunities. This further fuels the use of complex trading strategies. As a result, the battle to create alpha (or manager value-added) is increasingly being fought at the trading desk, not just in the investment selection process.

In this environment, buy-side firms need to develop a comprehensive process to analyze and manage their order flow throughout the entire investment process, from the generation of an investment idea through to the execution of the trade. This enables them to regularly evaluate their brokers, enhance the firm's investment performance, and to prove that they have met their fiduciary duty of achieving best execution.

Traders' desire to add more value and enhance investment performance is driving interest in transaction cost analysis (TCA). Nearly 90 per cent of the Canadian buy-side trading desks interviewed in the study plan to use transaction cost analysis tools before and after the trade to assist them in measuring and creating value.

In addition, a significant number of buy-side firms now have electronic time-stamps as the use of order management systems and the FIX electronic trading language soars. Electronic time-stamps capture when an order originates and when it arrives at the broker's desk, thereby increasing the level of precision in transaction cost analysis. With time stamps, money managers can get a much stronger analysis of where costs originate in the investment cycle and, ultimately, derive insight in controlling those costs.

### Traders' Role And Skill Sets Changing

As the world of electronic trading unfolds, significant changes are happening in the role of the traders and the skill-sets they command at both money managers and broker-dealers. Technology is freeing up traders from manual tasks and placing a premium on analytical skills. These trends are likely to persist and traders will need to continually respond to these developments.

Buy-side traders are transforming into experts in trading, technology, and infor-

mation gathering. They will also see their role becoming more analytical as they increasingly use pre- and post-trade transaction cost analysis to help them understand, create, and measure value in the investment process.

### Brokers Need To Re-invent Themselves

Buy-side adoption of the low-cost, low-touch electronic trading systems is eroding the profits of equity desks at the traditional brokerage houses. In the U.S. where electronic trading is at a more advanced stage of development than in Canada, commission rates for low-touch electronic trades could be one cent a share or lower.

With the decline in average commission rates, brokers are forced to examine which clients are actually profitable for them and make hard decisions on which services they will provide to whom. The buy-side is often forced to streamline their broker list, so that they can supply enough commissions to their brokers to receive the value-added services they require.

As their buy-side clients react to changes in the marketplace, the sell-side needs to respond as well. Technology is here to stay and sell-side firms need to have a strongly reasoned response. Firms must either compete aggressively in the technology game or carve a clear avenue of value-added high touch services. The strongest sell-side firms will do both.

Brokers do have an opportunity to make a difference in this time of rapid change by supplying their clients with the right solutions to integrate the plethora of new tools and systems that they recently amassed. Currently, all these order management and electronic trading systems and transaction cost analysis tools may not be linked to each other, making it more difficult for the traders to manage their work flow. The buy-side needs to have an integrated platform that combines portfolio and order management, electronic trade execution, transaction cost analysis, and post-trade processing. Strong analytics are needed to help the buy-side determine the best trading strategies to use and to manage their costs and risks. Those brokers who can provide the right solution ahead of the pack will enjoy a distinct competitive advantage and reap significant trade flow from the buy-side.

In order to survive and thrive, the traditional sales traders at the brokerage houses have no choice but to transform themselves into 'execution consultants' who are computer savvy and capable of advising buy-side traders on the use of appropriate trading methodologies and transaction cost measurement tools.

So far the electronic trading evolution has not caused the same magnitude of

impact on the Canadian equity market as it has on the U.S. marketplace. The Canadian equity market has long been more institutional-oriented than the U.S. market. Unlike the NYSE, where the average order size has dropped to 335 shares<sup>1</sup> today, the TSX still enjoys an average order size three times that of the NYSE.

However, this will likely change in the near future. As buy-side trading desks become more familiar with the advanced electronic trading technologies and their order management systems, they will be using these handy tools more often to break their trades into bite-sized orders as a way to maintain their anonymity in the highly transparent Canadian equity market.

There are signs that this is already happening. The average order size at the TSX has now dropped below 1,000 shares, to 998 shares<sup>2</sup> a trade for an average trade for the month of October 2005, compared to 1,453 shares a year ago.

The exchange may have less control if the brokers and their buy-side clients, or the buy-side firms themselves, are trading away from the exchange on the electronic crossing networks. Not only will the exchange's information advantage further dwindle, it will also diminish the liquidity of the public market through the creation of an electronic form of the traditional 'upstairs' market. To avoid this, the exchange must offer trading and data products that are attractive to money managers and brokers to ensure that its electronic order book continues to stay as the 'mainstream' electronic marketplace.

The Canadian equity market is changing and the successful participants will change with it. Buy-side trading is becoming more complex, but with that comes an increasing recognition of the value traders can add. Sell-side firms will need to be strategic and nimble to adapt to this evolving world. Both the exchange and the sell-side will need to partner effectively with their clients in the complex processes of searching for liquidity and best execution. In this shifting landscape where change is the only constant, the only way for capital market participants to stay in the game over the long haul is to continually meet their clients' needs. ■

Jackie Chung is president of Competitive Metrics Inc. ([jchung@competitivemetrics.com](mailto:jchung@competitivemetrics.com)) and Marie Konstance is director of sales and product management at Plexus Group Inc. ([marie.s.konstance@jpmorgan.com](mailto:marie.s.konstance@jpmorgan.com))



1. October 2005 statistics published by the NYSE.

2. October 2005 statistics published by the TSX.