

Introduction

Appetite for European alpha is back. €2.5 trillion worth of equities were traded in the first quarter of 2014, the largest volume since 2011. However the Great Rotation back into Europe is flying straight into dual economic and regulatory headwinds which challenge traditional methods of trading.

As depleted resources force global investment banks to restrict high-touch trading services to the most profitable clients, buy side and sell side dealing desks are re-adjusting trading behaviours. This is altering demand for products and services as well as redefining the market participant landscape.

The industry has long been focused on operational efficiencies and cost-cutting measures, but this is no longer enough. Greater ownership of order flow and the fiduciary responsibility for investor protection is wresting control from the hands of the global investment banks back into the wider asset management community. As the buy side takes more direct control of order flow, the traditional brokerage services will morph into more bespoke offerings around research, IPO activity, the provision of capital and enhanced collateral management.

As participant roles shift, opportunities emerge, opening the door to more disruptive innovation and wider collaboration. As the cost of best of breed technology across multiple geographies and asset classes becomes unsustainable on a stand-alone basis, new and innovative partnerships will emerge to convert data into better business intelligence.

Game-changing analytical processes are now translating information overload into actionable insight. Decreasing cost of entry and greater visualisation tools will bring big data to a wider audience. Faster, more in-depth and accurate data leverage will reshape workloads and redefine financial services in the process. To date, the technology focus has been on execution algorithms. Now the ability to create algorithmic processes across a whole range of business areas (such as position management, hedging strategies, capital allocation, collateral management and even basic account management) will reshape Capital Markets turning big data into smart data.

Through utilising agile and complex data correlations, firms can harness technology to deliver transformational change to traditional high touch services. Through better understanding of individual risk exposure, expensive and inefficient uses of capital can be avoided; improving individual decision-making processes and the underlying customer experience as a result. From negotiating blocks to more efficient use of collateral, data mining is now discovery without limitations. Dynamic versus static, the ability to conduct real-time correlations will enable firms to switch from reactive to predictive and proactive analysis, freeing up capital and mitigating risk in the process.

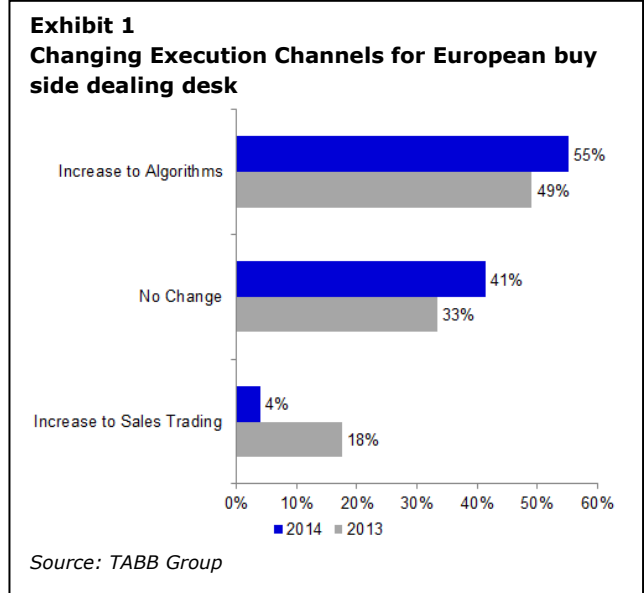
The only way to consistently outperform is through enhanced information and greater collaboration. By making technology work harder, information can become contextual. Harnessing data into actionable insight will enable traditional brokerage services to re-emerge in a new and more cost efficient manner. Providing valuable market intelligence in an integrated network will facilitate high touch services in a low touch environment and deliver the next generation in trading.

Table of Contents

INTRODUCTION	1
TABLE OF CONTENTS	2
WHY CHANGE NOW	3
BLINK AND MISS THE BLOCK	4
BUY SIDE DEALING DESK DEVELOPMENT.....	5
THE COLLATERAL CHALLENGE	6
THE TECHNOLOGY SOLUTION.....	8
WHAT LIES BENEATH	8
DATA MINING.....	9
COLLABORATION, CONVENIENCE AND COMMUNITY	10
CAPITAL MARKETS FOR THE 22 ND CENTURY	12
ABOUT.....	13
TABB GROUP	13
THE AUTHOR	13

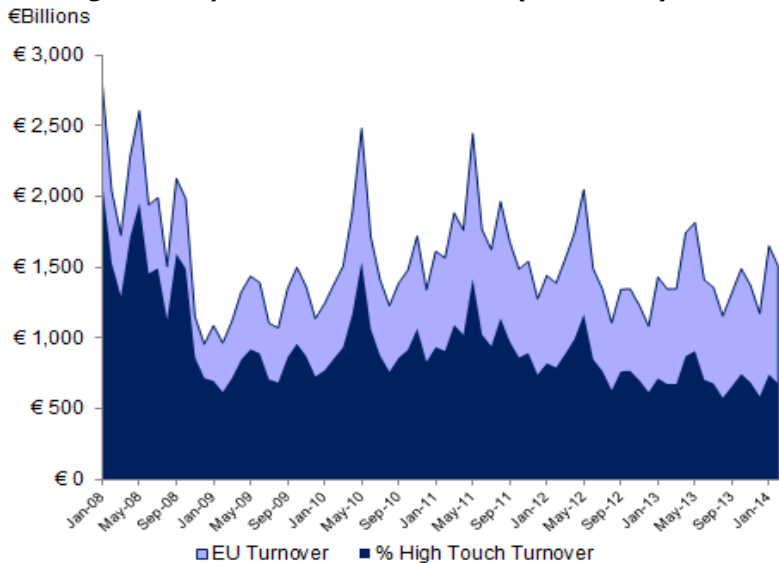
Why Change Now

Despite the recent increase in turnover in 2014, European equity brokerages remain locked between a persistent squeeze on commissions and increasing regulation hampering their ability to facilitate client order flow. The buy side continues to value access to quality sales trading but the 'juniorisation' of the sales trading service – the loss of the experienced sales trader who understands the client and their investment profile, exchanged for a junior – combined with a reduction in the amount of service the sell side is willing to provide, is causing the buy side to automate more of their trading process. 59% of average daily turnover in 2013 was routed to low touch channels¹ with 55% of participants planning to increase the proportion routed to algorithms in 2014 (see exhibit 1).



The concentration in the asset management industry is resulting in fewer, but larger firms executing bulkier and more challenging trades in an environment of overall decline turnover and reduced traditional OTC activity. The proportion traded OTC hit a peak of 61% of European turnover in May 2008 and now trades around 30% of volume – declining to just 26% of activity in January 2014 (see exhibit 2).

Exhibit 2
Percentage of European Volume traded OTC (2008-2014)



Source: TABB Group

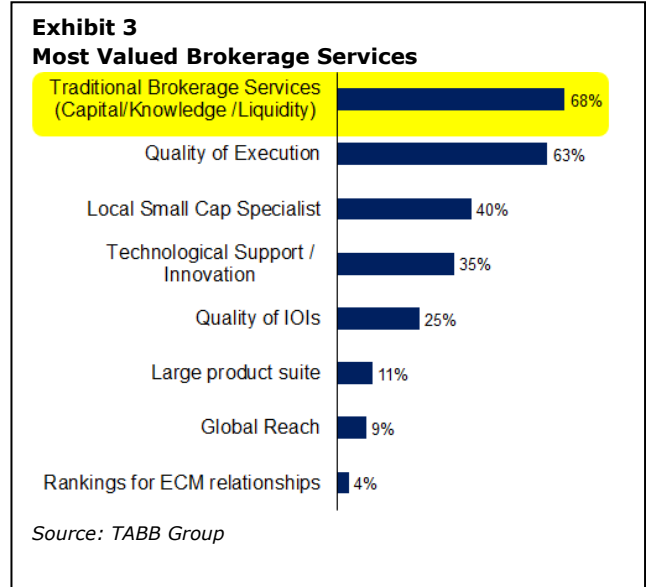
“We have just 5% now going High Touch as its small and mid-cap names – the other 95% - that’s all now low touch.”

(Medium sized Continental Asset Manager)

¹ TABB Group – European Equity Trading 2014: Part 2 – Low Touch Domination Takes Off

Buy-side concentration reduces the degree of diverse views on stock prices and the likelihood of finding a “natural” match between a long-term buyer and seller. Thus the need for alternative measures to protect institutional order flow from limiting trading intentions to the market has never been more acute.

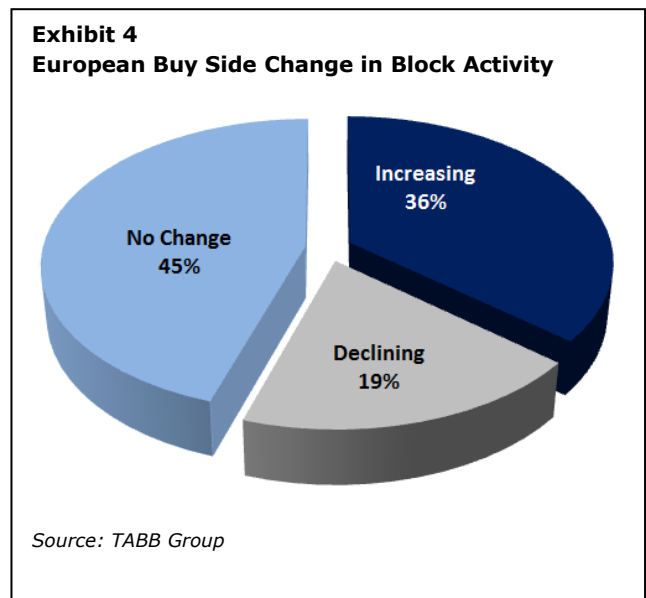
As automation has increased, efforts to limit information leakage have focused on routing smaller trade sizes via algorithms to selected venues. Lack of uniform disclosure on order information dissemination fuels the buy side’s distrust of brokers, leading to greater use of self-directed flow. Indications of Interests (IOIs) are now perceived as mere fishing expeditions to detect market movement. But by reining in their exposure to liquidity, a self-perpetuating cycle is created, reducing available liquidity in the wider market which reinforces the need to limit information leakage still further.



This execution challenge escalates when moving down the liquidity curve. While vanilla algorithms might be appropriate for large cap passive funds, the industrialised trading model can be ineffectual for the stock picker in small and mid-cap names. As such traditional brokerage services remain highly valued, with 68% of participants rating access to liquidity and in-depth knowledge as critical brokerage services (see exhibit 3). But the economics are no longer there for the sell side to sustain the current sales trading operation model for all.

Blink and Miss the Block

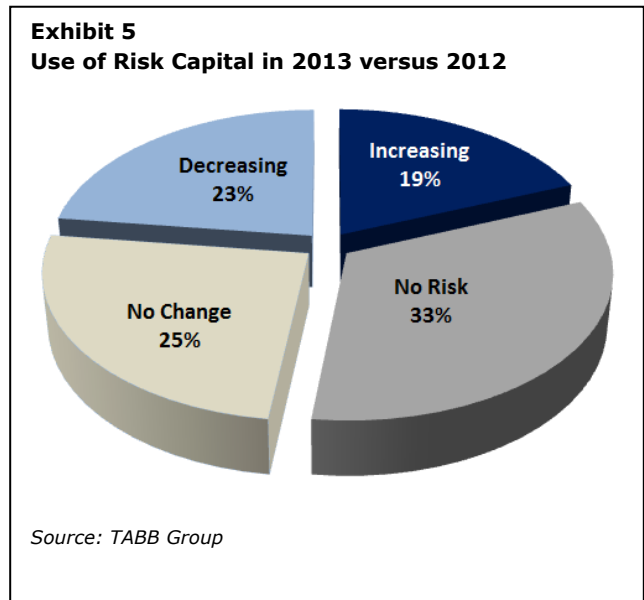
The gap between the amount the buy side wants to trade in blocks and what actually executes continues to frustrate market participants. For every order there will be a critical trade-off between certainty of execution versus enhanced performance. If a dealer is prepared to wait passively, paying the spread can be avoided. For institutional investors looking to execute larger-than-average order sizes, this difference can have a substantial impact on fund performance. However portfolio managers are increasingly unlikely to let the dealing desk wait if an order needs to be completed by a specific time to meet a benchmark. Implementation shortfall and arrival price are two major benchmarks where slippage and price reversion can be costly.



The loss of broker facilitation of client order flow has also contributed to the decline of the traditional “upstairs” block. While block trading

returned to Europe in 2013 it was only for 36% of participants (71% of whom were major commission payers) 43% saw no change & 19% reduced activity in blocks (see exhibit 4). Six percent of participants order flow is now routed by crossing networks rather than traditional OTC blocks².

At a time of depleted budgets, the value of block trading products and the cost to the buy side to access this liquidity remains under the spotlight. There may be size available but the buy side has to pay up for it and even then not for the full size; a partial fill on a risk trade creates competition for the remainder of the trade. A third of the market now chooses not to trade on risk and just under a quarter are decreasing their use of risk (see exhibit 5).

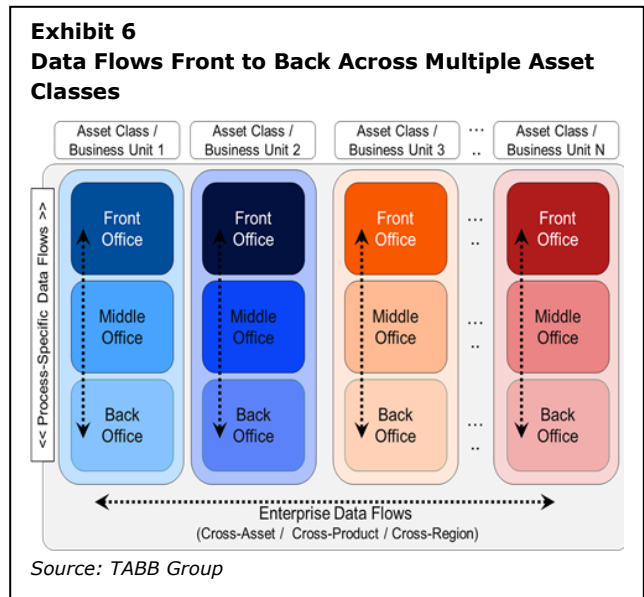


As sourcing natural blocks over the telephone is neither scalable nor cost effective, new solutions to recreate the high touch service within a low touch automated environment will need to be found. Mechanisms to aggregate both internally and externally, in both lit and dark markets will require a change in approach by market participants. From pure high touch, to broker-assisted hybrid through to low touch algorithms, buy side participants are now looking to take advantage of all of the liquidity a broker may have available.

Buy Side Dealing Desk Development

It is this environment of overall declining turnover (see previous exhibit 2) which will ensure fund performance becomes ever more reliant on alpha retention, cost controls and data flows. As the spectrum of alpha opportunities continue to shrink and turnover in funds slows, the desire to develop streamlined businesses that reduce costs, control risk and deliver performance to underlying investors will increase the level of automation required throughout the investment cycle and across all asset classes.

The ability to aggregate position data in order to gain a complete view of cash and securities balances will maximise investment decisions and trading strategies. Obtaining a complete view of positions across multiple systems – and seamlessly switching from asset class, and from idea inception through to back-office reporting – will enable firms to efficiently manage



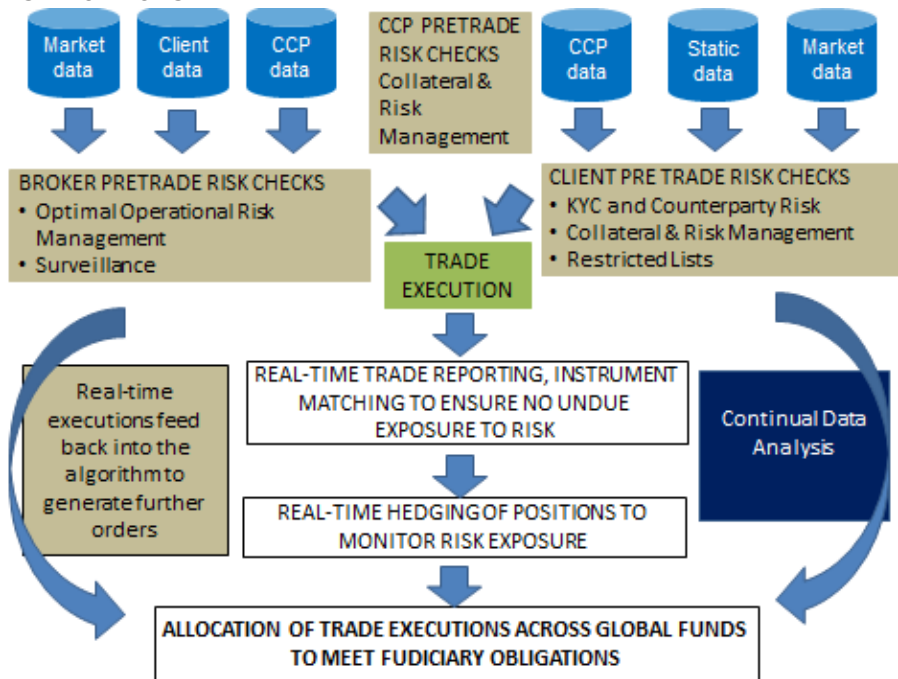
² TABB Group, *European Equity Trading 2014: Part 2 – Low Touch Domination Takes Off*

investment portfolios, provide greater visibility and reduce unnecessary risk (see exhibit 6).

Greater tactical positioning around core portfolios and the ability to react to shifting market dynamics will force the buy side dealing desk to transform. Complex strategies require a unified approach to both data and liquidity. The rise in multi asset strategies offer the ability to trade the convertible bond one day, a credit default swap another or a single stock future the next. The Swiss fund manager trading a Swedish second-tier name may now need to trade the FX component of the trade directly on the back of the position rather than automatically take the 4pm fix from the custodian. The ability to coordinate between and among products will require not only increased buy side knowledge and competence in trading multiple asset classes, but synchronicity between trading platforms front to back, across asset classes and geographic regions.

As regulators increasingly require firms to provide greater transparency into their investment processes, those that cannot accurately describe, monitor and assess their risk profile will find their firm under greater scrutiny. Intelligent systems interacting with a virtually-centralised pool of data will become vital to survival and the ability to trade (see exhibit 7).

Exhibit 7
Pre Trade Risk Workflows



Source: TABB Group

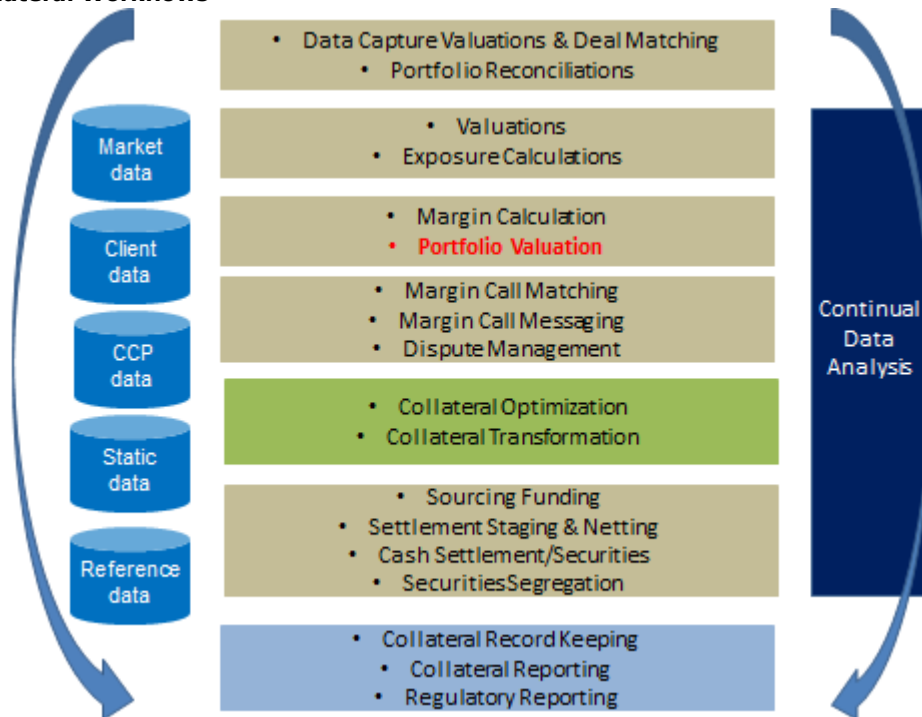
As the need to monitor risk effectively shifts from the traditional – such as growth, leverage or yield – to more complex arrangements based on volatility, credit exposure and even social media feeds – the labyrinth of data and analytics will continue to grow. The evolution towards more (thoughtfully-designed) and data-centric systems architecture will provide better output at lower costs than can be achieved by addressing these challenges in independent silos.

The Collateral Challenge

Breaking down silos to overcome inefficient usage of collateral is already a priority for firms obligated to hold more collateral for OTC transactions cleared and/or uncleared. Without a more automated workflow process, efficient management of collateral will be cost prohibitive and impossible for many to manage. Without access to the appropriate data, participants will be unable to manage existing collateral effectively and therefore mitigate any unnecessary risk. Any inability to identify collateral needs may impact the ability to effectively execute the best hedge; without the most appropriate hedge, portfolio risk exposures are sub-optimal (see exhibit 8).

Exhibit 8

New Collateral Workflows



Source: TABB Group

To meet new buy-side requirements, sell-side firms will need to readdress their offerings to ensure they can deliver a robust risk mitigation framework. The ability to provide efficient trade management across all asset classes including independent portfolio valuation and margin and dispute management will ensure efficient allocation of collateral is a worthy goal. For instance, the need to segregate client collateral while maintaining the ability to reallocate efficient as markets change in order to meet regulatory requirements will become a significant differentiator for the well side in an increasingly competitive landscape.

As OTC trading continues to shift from a predominantly voice-brokered industry to an electronic STP model, all asset classes will become increasingly dependent on this combination of low-latency trading, analysis and data fluency in order to succeed.

The Technology Solution

As the industry continues to shift to greater automation, both buy and sell side now need to leverage their use of technology to optimise liquidity, relationships and resources.

The deluge of information today requires the ability to efficiently visualize, analyse and respond. Delivering portable access to content in real-time across organisations will enable firms to quickly and accurately react to both their underlying client base and the wider market. However technology will need to be highly intuitive and interactive to connect different participants with the requisite information when it is required; across silo's, departments and different trading methods. Thus it will not be one technological solution but the amalgamation of many. Only a symbiotic collaboration will enable participants to leverage all available resources and maximise the opportunity for alpha.

What lies beneath

Lack of liquidity in European equities, increased fragmentation, the demise of the sales trader and loss of the block point mean liquidity can too easily slip out of reach. The ability to harness this liquidity is the greatest challenge facing dealing desks today.

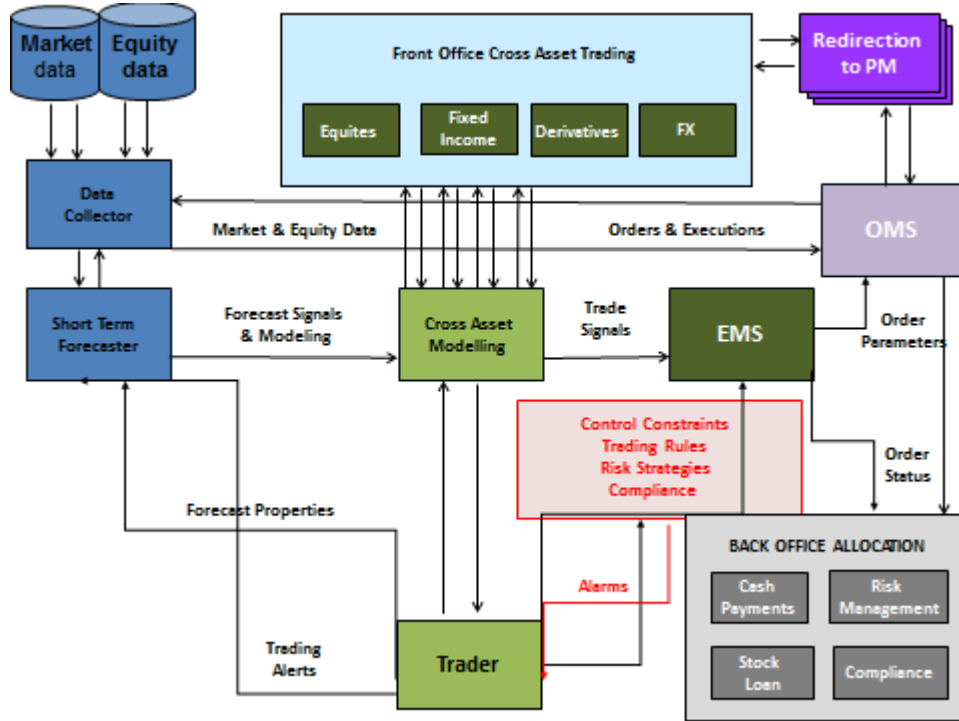
As buy-side sell-side collaboration becomes electronic, vital intelligence that may be buried within a client's portfolio can emerge, such a revised reweighting based on a research update or market activity, or a trading or stock borrow opportunity created from a separate client's activity. A sales trader answering a telephone can now have instantaneous access to an individual client's full history - underlying portfolio, recent recommendations, success ratios and historic transactions. This can then be mapped against multiple clients across the dealing room floor - all in a visualised format offering actionable insight and therefore the ability to deliver enhanced service to the end client. A combination of voice recognition and real-time translation into text will facilitate access to hidden liquidity and alpha opportunities, while the firm's risk exposure can be minimised through a simple process of clicks on a screen. Harnessing the right technology will facilitate the resurrection of the most important aspect of investing, the trusted relationship.

As the buy side continues to diversify portfolios globally and across asset classes, the ability to deliver effective risk management and meet multiple regulatory obligations will continue to redefine internal workflows. As OTC derivatives and fixed income trading gradually become more automated, buy-side desks are becoming more multi-asset in nature. This will only be successful if the machines do the heavy lifting, leaving the humans to refine and adapt the overall trading process to circumstances and the variations of different geographies and asset classes.

Multi-asset investments require extensive modelling strategies with real-time data to analyse complex "what-if" scenarios. Investment profiling can now go beyond predicting when, where and how to execute an investment decision, but can be updated throughout the day to incorporate the latest news or trends on Twitter, for example. Effective research must also now include real-time social media, establishing what is noise and what adds real value, requiring constant analysis and reassessment across multiple product lines and geographies. Trader and Portfolio Manager (PM) profiling can monitor who is best positioned to act on relevant data. Market profiling can highlight unforeseen risks to the portfolio, escalating concerns to relevant individuals to accurately manage risk in a

timely manner. Real-time knowledge of the net exposure is now vital, whether that is an individual desk, fund or a holistic view of the overall firm and this is constantly refined (see exhibit 9).

Exhibit 9
Future Flow from Front to Back



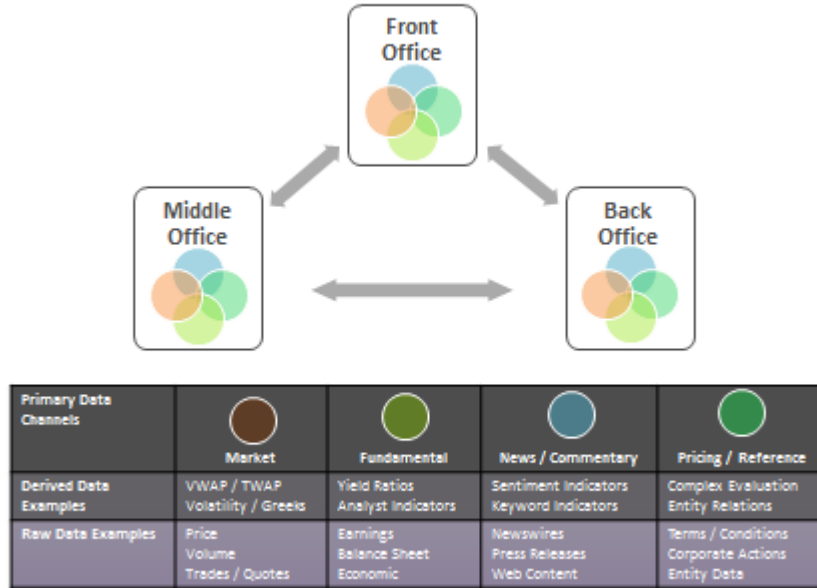
Source: TABB Group

Data Mining

While the mining of data real-time will require market data, trades, quotes and social media streams and complex event processing (CEP) to deliver ultra-low-latency solutions, it will be the integration of historical data which will redefine data analysis.

Bigger workloads, processed faster comparing real-time with historic data will become a material source of competitive advantage. Trading firms will need to become more intelligent about the cost of crunching. Experience with transaction cost analysis (TCA) will be used to fuel the development of computational cost analysis (CCA) across the matrix of infrastructure combinations – onsite, offsite/cloud, and their various tiers. And, like execution algorithms, new vendor solutions will emerge to help identify optimal storage/compute combinations to deliver mission-critical pattern recognition (see exhibit 10).

Exhibit 10
The Creation of a Unified Data Strategy



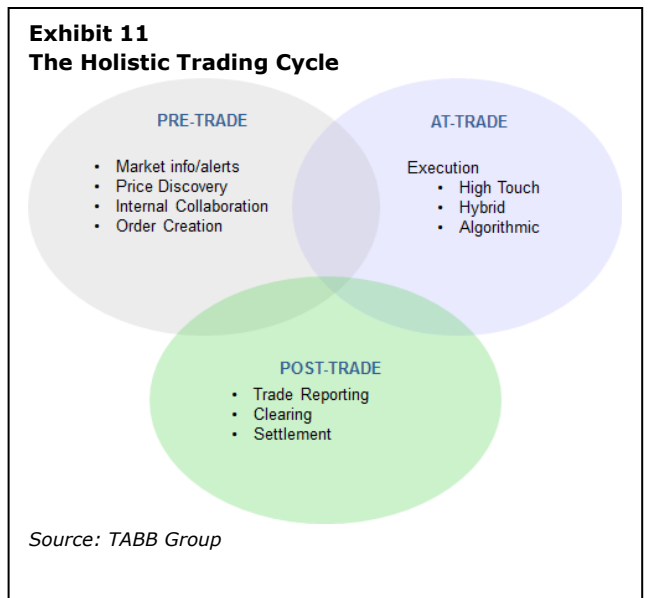
Source: TABB Group

Collaboration, Convenience and Community

Only a global infrastructure network will enable buy and sell side participants to transact effectively across multiple asset classes throughout the entire trading cycle – pre-trade, trade and post-trade (see exhibit 11). Successful high touch trading strategies require the ability for firms to quickly assemble the collective expertise of their organization to match their clients need for knowledge, advice and execution. This requires highly integrated systems operating real-time, collaborating across organisations and communicating through multiple channels and devices.

No one firm can facilitate all solutions but rather a framework could be created to provide access to specialist knowledge which will enable multiple firms to innovate within a robust infrastructure. Scalability will enable individual firms to better retain and grow clients by offering more differentiated services through collaboration.

The requirement for real-time, multi-asset solutions available globally 24/7 will deliver a new era of capital markets trading. The pletho-



ra of possible strategies across asset classes and geographies will generate an even greater deluge of information and data overload, necessitating the ability to drill down at a local level and scale up to a firm-wide view. Lean and flexible investment models will define future capital markets; those that enable any inefficiencies to be crushed, as well as providing scale and adaptability through any stage of the investment cycle – pre, at and post trade.

The only way to consistently outperform is through better or enhanced information through collaboration. By making technology work smarter, information can become contextual. Only by providing this valuable market intelligence within an integrated network will facilitate optimal execution capabilities and deliver the next generation in trading.

Capital Markets for the 22nd Century

The traditional search for increasingly elusive alpha remains hampered by burgeoning regulation and crippling economics. Technological innovation has the ability to radically redefine access to the control of product and the ability to execute. Leveraging these new opportunities will require holistic and interactive networks to seamlessly link content and community across multiple asset classes throughout the entire trading cycle – pre-, at-, and post-trade.

Technology to date has focused on execution performance. But the ability to create algorithmic processes across multiple business areas – front to back office - will reshape Capital Markets. Today's high touch trading strategies often remain expensive and inefficient processes. By harnessing technology bespoke relationships can be provided through highly integrated systems operating real-time, collaborating across organisations and communicating through multiple channels and devices.

However this deluge of information will require new technology in order to be able to visualize, analyse and react efficiently. Technology needs to be highly intuitive and interactive to connect different participants with the requisite information when and where it is required. Thus it will not be one technological solution but the amalgamation of many, a symbiotic collaboration which will enable participants to leverage all available resources to maximise the opportunity for alpha.

Algorithmic trading industrialised execution of capital equity markets and this is set to be replicated across other asset classes. The subsequent increased transparency will continue to relentlessly compress commissions and spreads in more complex businesses. As investment strategies continue to evolve from the single asset view to complex portfolios – requiring country, industry and currency analysis, as well as insight of credit and option market trends – only adept and complex risk strategies will ensure profitability can be maintained. More efficient risk management and regulatory compliance will require better access to and analysis of data - current positions, historic patterns and a holistic oversight, facilitating the need for a standardised approach to pricing, routing and execution.

As technology becomes embedded in the full investment cycle, the traditional e-commerce model becomes an interactive service model. Disruptive new business models, products and services will challenge incumbent firms forcing behavioural change across the industry and redefining market structure and individual participant roles in the process.

Enhanced information in an accessible format is the key to consistent outperformance. By making technology work harder, valuable market intelligence can be harnessed to deliver actionable insight. As the industry continues to shift to greater automation, diminishing returns to the bare minimum, both buy and sell side now need to collaborate through leverage their use of technology to optimise liquidity, relationships and resources. Only the combined interaction between man and machine will enable traditional brokerage services to re-emerge in a new and more cost efficient manner, delivering the next generation in trading.

About

TABB Group

TABB Group is a financial markets research and strategic advisory firm focused exclusively on capital markets. Founded in 2003 and based on the methodology of *first-person knowledge*, TABB Group analyses and quantifies the investing value chain from the fiduciary, investment manager, broker, exchange and custodian. Our goal is to help senior business leaders gain a truer understanding of financial market issues and trends so they can grow their business. TABB Group members are regularly cited in the press and speak at industry conferences. For more information about TABB Group, visit www.tabbgroup.com.

The Author

Rebecca Healey

Rebecca joined TABB Group in March 2011, bringing more than 15 years' experience in e-trading and financial services. Rebecca has held various sales and trading positions with Bankers Trust, Goldman Sachs, and most recently Credit Suisse, where as Vice President she was instrumental in launching the successful AES (Advanced Execution Services) product to hedge funds from its inception in 2002 until 2008. Prior to this, she was the first electronic trader at Credit Suisse to be registered for all electronic European cash equity markets and covered sales trading into Asia and then Europe between 1997 and 2000. More recently, Rebecca was based in the Middle East from 2008 to 2010. There she was employed by the British Embassy in Bahrain, where she successfully launched the UK Government's financial services strategy and set up the Bahrain Financial Services Roundtable, which remains a key source of information for the UK Government today, especially in relation to Islamic finance. Rebecca holds a Bachelor of Arts degree in Spanish & Latin American History & Politics from the University of London. At TABB Group, Rebecca has authored a number of research papers including *European Equity Trading 2013/14: Low Touch Domination Takes Off*; *Dark Matters*; *A Question of Clarity*; *OTC Equity Trading 2013: Harnessing the Liquidity*; *European Equity Trends 2012/13*; *European Equity Trading 2012/13: Changing the Rules of Engagement*; *FX in Transition: Taking The Quantum Leap*; *MiFID II and Fixed-Income Price Transparency: Panacea or Problem?*; *Market Surveillance in Europe: Under Starter's Orders*; *European Equity Trading 2011/12: Looking for Allies in the Face of Adversity*; *European Algorithms: The Evolution*; and *Trading in the Middle East: the Road to Mecca*.

