MEMORANDUM

July 29, 2010

To: File No. S7-03-10
File No. S7-11-10

From: Leigh Duffy
Division of Trading and Markets

Re: Staff Meeting with FTEN, Inc.

On July 29, 2010, representatives from FTEN, Inc. (Gary LaFever, General Counsel and Doug Kittelsen, Chief Technology Officer), met with staff from the Division of Trading and Markets (James Brigagliano, Deputy Director; David Shillman, Associate Director; Michael Gaw, Assistant Director; John Roeser, Assistant Director; Jennifer Colihan, Special Counsel; Marc McKayle, Special Counsel; Theodore Venuti, Special Counsel; Daniel Gien, Attorney; and Leigh Duffy, Attorney), staff from the Office of Compliance Inspections and Examinations (Mark Donohue, Assistant Director and John Polise, Assistant Director), and staff from the Division of Risk, Strategy, and Financial Innovation (Stewart Mayhew, Deputy Chief Economist; Jennifer Marietta-Westberg, Assistant Director; and Charles Dale, Financial Economist). The participants discussed the Commission's proposed rule-makings concerning risk management controls for brokers or dealers with market access and a consolidated audit trail. FTEN, Inc. provided the attached documents, titled "FTEN: Centralized Risk Management: Presentation to the U.S. Securities & Exchange Commission" and "Intraday RiskXposure: Real-Time Intraday Enterprise-Wide Risk Management for the Financial Securities Industry: Strategic White Paper."

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Centralized Risk Management

Presentation to the U.S. Securities & Exchange Commission

November 18, 2009

Why We Are Here

We are here to discuss:

- Leveraging our existing risk management platform to supply normalized data to support the SEC's centralized audit trail initiative *immediately*; and

- SEC's perspective on broad-based industry support to expand the scope of FTEN's *broker-focused*, permission-based risk management platform to facilitate real-time, centralized, cross market risk management

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Why listen to FTEN?

- **Industry support**
  - Industry leaders, trade associations, SROs have asked that we speak with you
- **Credibility**
  - Real-time risk management platform that already processes over 6 billion shares per trading day
- **Self-funding initiative(s)**
  - This project can be paid for by industry participants underwritten by direct cost savings

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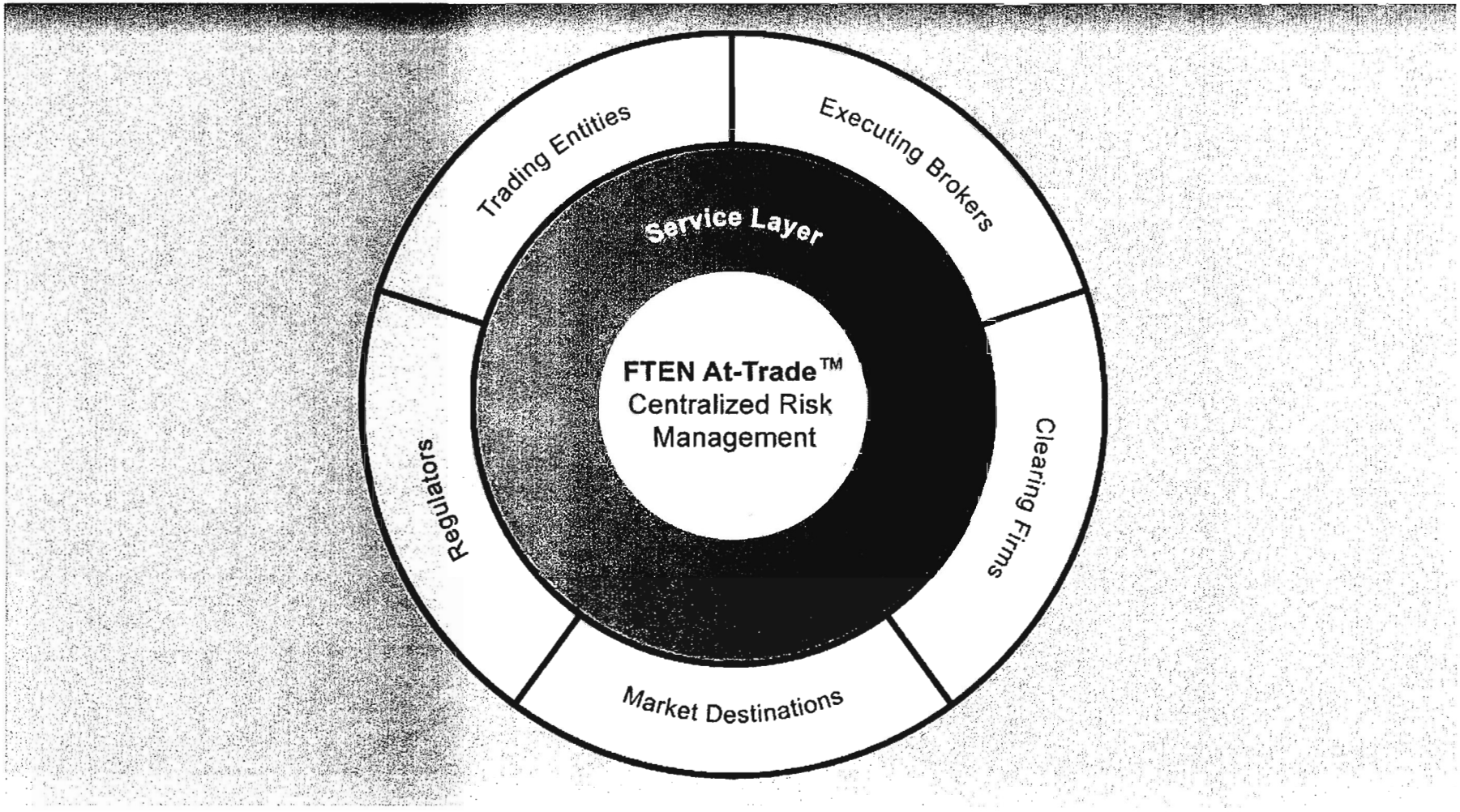
How FTEN fits in the Market Structure



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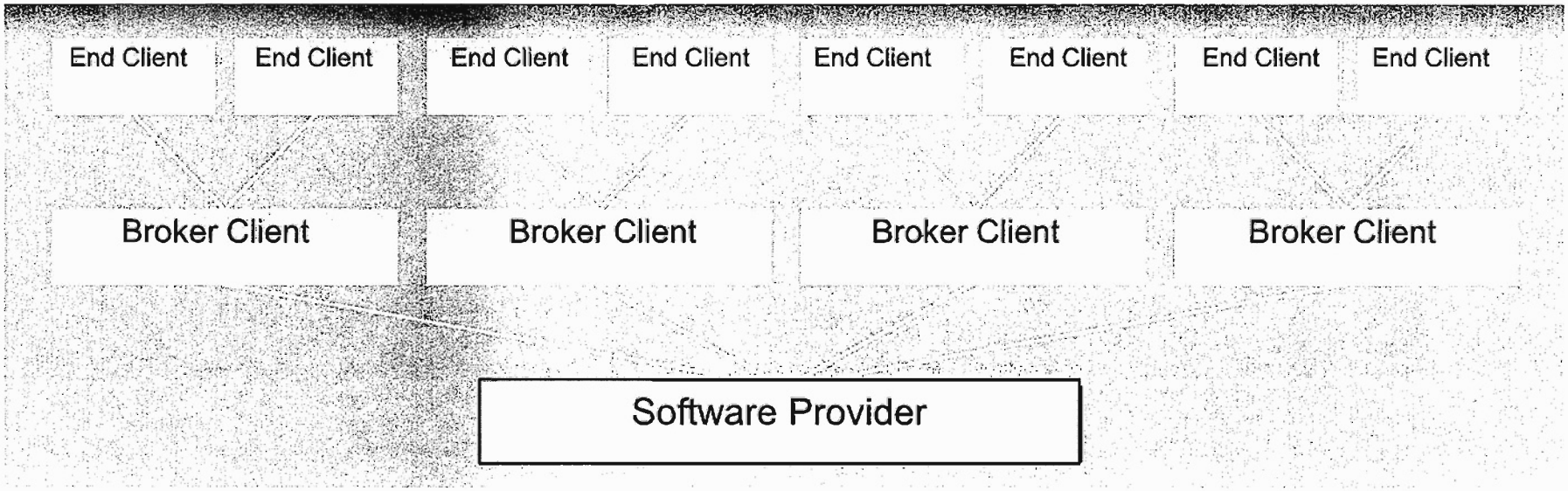
Traditional Software Solutions

Do not foster *consistent* application of rules and sharing of data



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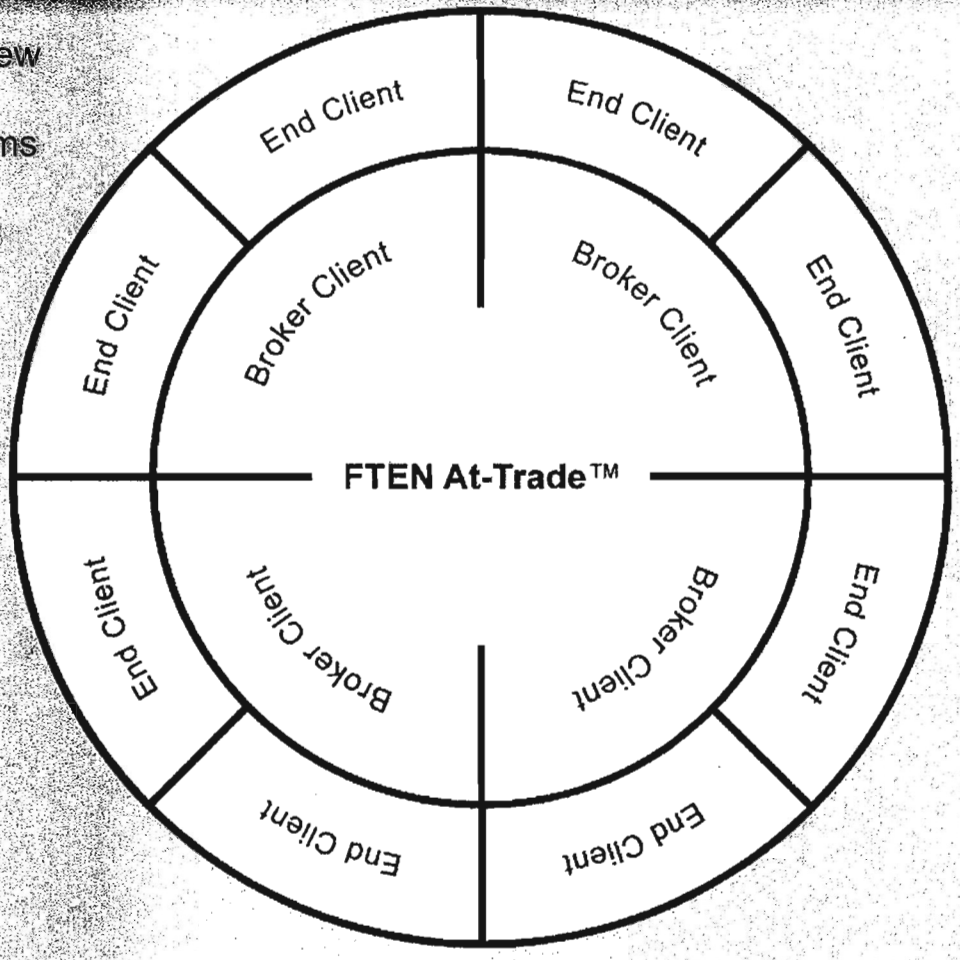
Risk Management, Compliance & Surveillance Platform

Integrated dashboard view across:

- Different trading systems
- Different venues
- Different asset classes
- Different geographic markets



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Why real-time awareness?

- You can interrogate what is happening as it happens
- You can see trading in the context of the trading entity – not just as an individual trade
- End of day summary data hides the peaks and valleys
- Random sampling also becomes less effective as total trading activity grows
  - Wire tap vs. Interrogatory
- You can deploy audit/enforcement teams to the most likely targets and review historical behaviors of the target

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Why centralize?

- All trading activity evaluated with the consistent tools and risk management
- All data normalized into a common format to facilitate data mining for future review
- Directly correlate transactions with market data, activity across asset classes and exchanges

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SEC Specific Benefits

- Protects the average investor
  - How?
    - Immediate intervention of unfair market practices
    - Guards against systemic risk
    - Transparency of markets for regulator oversight
- Simultaneously reduces the costs for the industry with better market control
- Provides market transparency brought about by real-time centralized risk management to leverage the efficacy and effectiveness of regulation

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Broader Market Benefits

- Centralized real-time risk management across the market
- Current practices do *not* need to be changed
  - Time to market – *can be in place in months*
- Data normalization
- Commonly formatted data can be enriched with complimentary sources of information (e.g. MD)
- Reduce participants' expenses
- Increase efficiencies

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Next Steps

- Would benefit numerous industry segments
  - Trading entities
  - Executing brokers
  - Clearing Firms
  - Market Destinations
  - Regulators
- Would require SEC support and alignment with market neutral SRO to provide on an industry-wide basis
  - FINRA
  - DTCC
- Thoughts / Suggestions?

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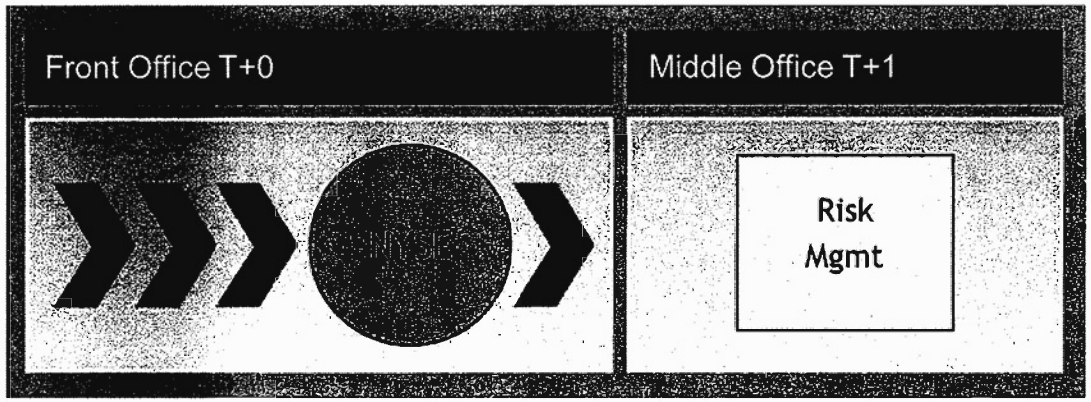
Appendix

How we got where we are today



- Front office / trading groups take in multiple T+0 inputs prior to submitting trades. For example :
  - Market data
  - Account balances
  - Credit / margin arrangements
  - Desired transaction(s)

- Providing resulting trade data for risk management on T+1 was OK when:
  - Single liquidity venue
  - Manual trading
  - Low trading volumes – "manual" risk management worked

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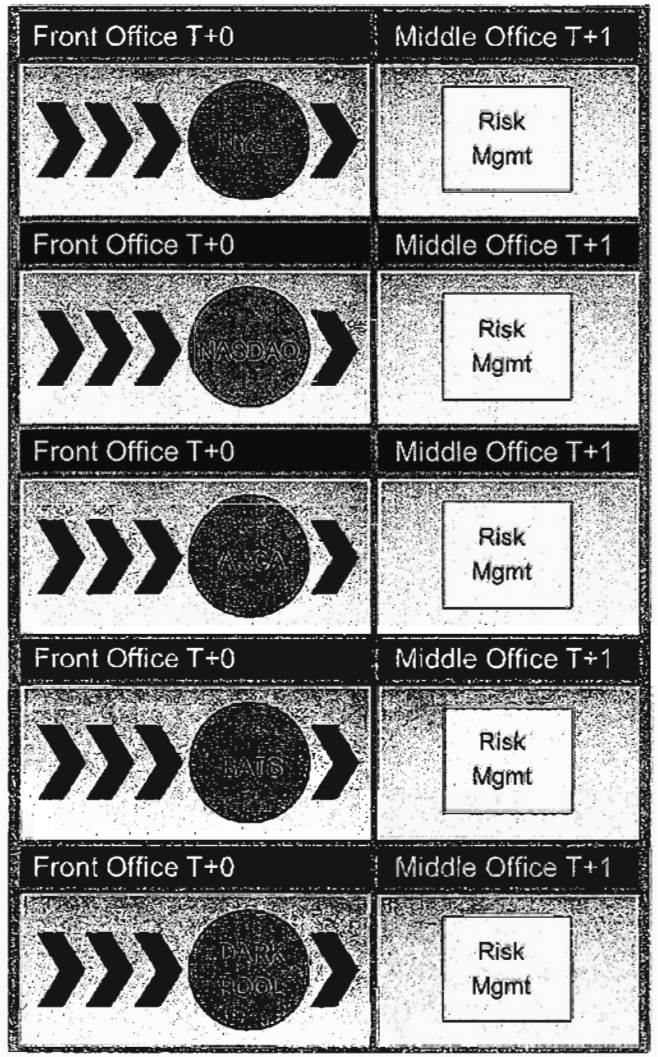
Issues with T+1 Risk Management

Shortcomings of T+1 risk management exacerbated by:

- Multiple venue trading strategies which nullify effectiveness of venue-based risk management
- Use of numerous trading systems which nullify effectiveness of system-based risk management
- Growing trading volumes / speed / frequency which increase intraday systemic risk
  - 120,000 trade-related messages per minute in 2005
  - 907,000 trade-related messages per minute in 2008
  - Projected 130 Billion trade-related messages per day by 2010



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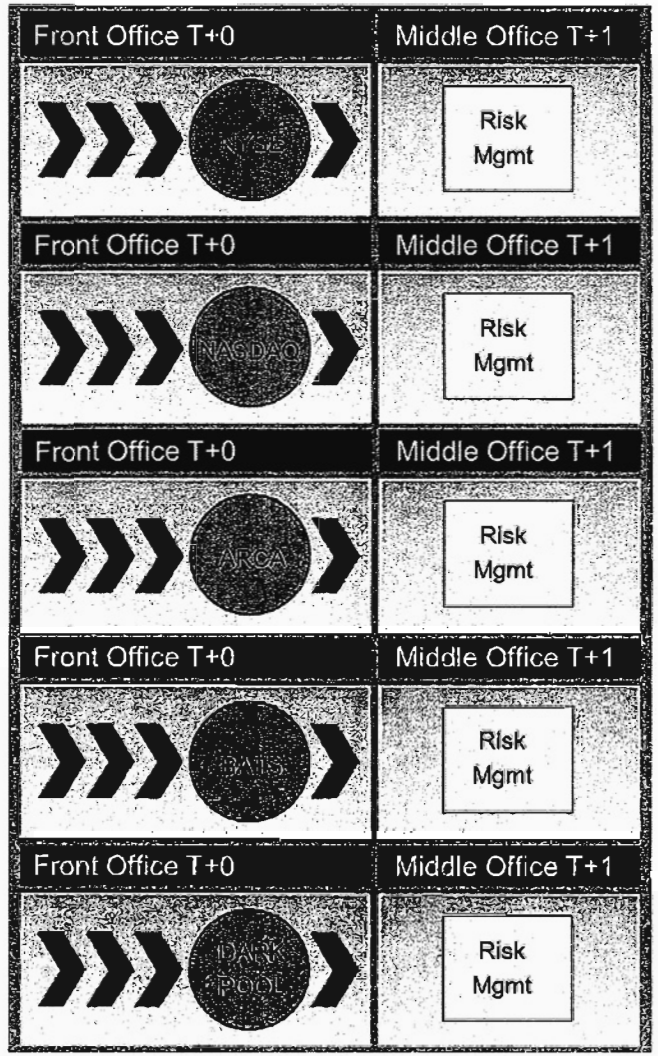
More Issues with T+1 Risk Management

- T+1 risk management requires summarization of disparate information which results in permanent loss of detail / loss of context underlying transactions
- T+1 summarization requires self-reporting by market participants
    - Market participants inclined toward wrongdoing are likely to conceal incriminating data
- T+1 summarization requires 'sampling' by regulators in order to detect wrongful acts / market manipulation
    - Sampling is like looking for a 'needle in the haystack'
    - Increasing speed and volumes of trades by multiple parties using disparate systems on different venues exponentially increases the number of 'haystacks' to search



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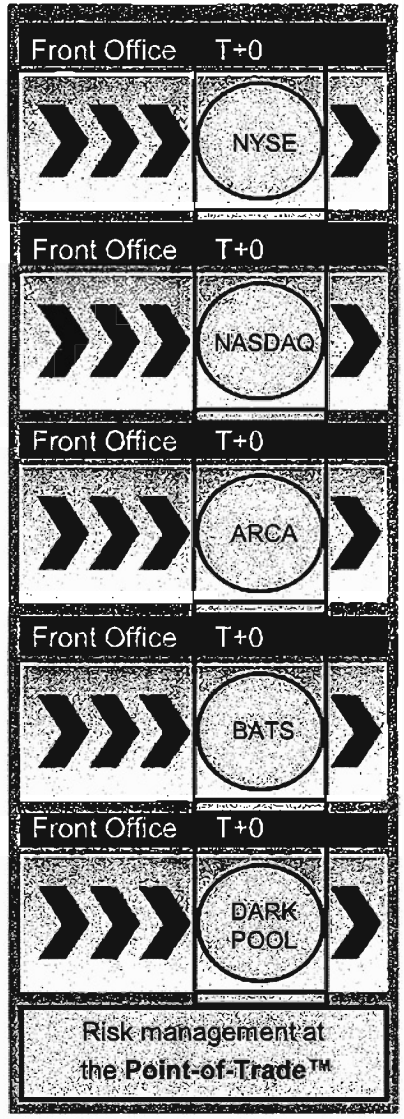
FTEN At-Trade™ Risk Management

FTEN's **At-Trade™** risk management platform provides low latency, real-time risk management at the **Point-of-Trade™**.

- **Real-time data collection** from disparate venues
  - Data collected within milliseconds of execution
  - 6+ Billion shares currently processed per day
- **Real-time normalization** of disparate data provides integrated dashboard view across:
  - Different trading systems
  - Different venues
  - Different asset classes
  - Different geographic markets
- **Prompt detection / action** – further wrongdoing can be prevented / remedial action can be taken before intraday market conditions exacerbate the situation
- **Full transaction context retained** – all relevant data is captured and retained; no details are lost by summarization; relevant events preceding, contemporaneous with and subsequent to transactions can be 'replayed' at any time eliminating reliance on data supplied by market participants



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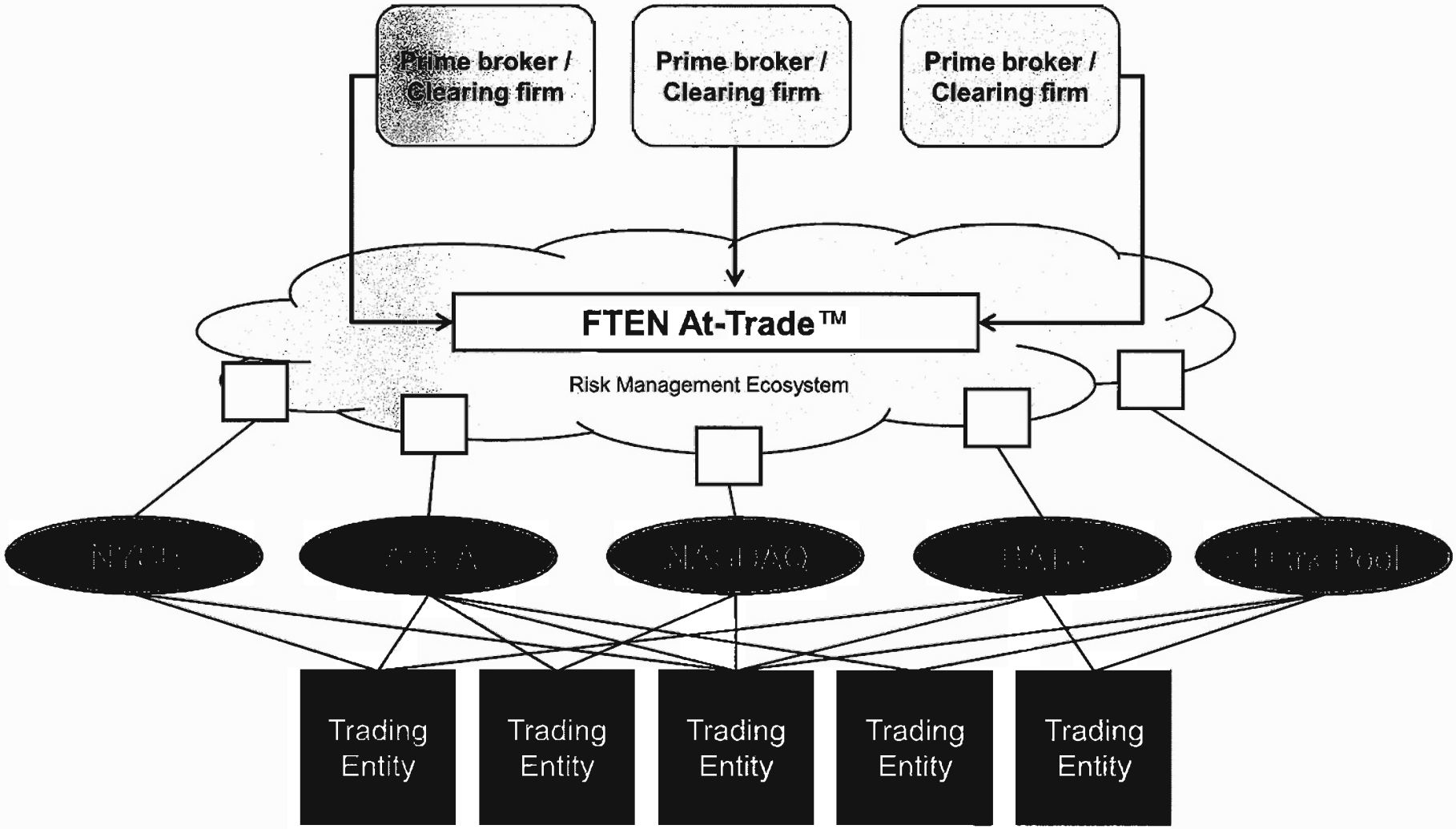
FTEN At-Trade™ at work



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Thank You.

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FTEN

Intraday RiskXposure™

Real-Time Intraday Enterprise-Wide Risk Management for the Financial Securities Industry

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"Time Equals Risk"

Strategic White Paper

Table of Contents

1. Executive Summary

Clearing Firms, Prime Brokers, Broker Dealers and Hedge Funds all have a common problem - understanding their true intraday risk. Most firms have risk management capabilities as part of their order management system(s) but are unable to track trade activity that occurs outside of their particular system(s). FTEN's Intraday RiskXposure™ offering gathers equity execution data from all sources, analyzes it, presents it in a single integrated view and provides real-time alerts.

By collecting and mapping all relevant trade information from all destinations and trading paths into a single view, clients can finally understand their true intraday risk profile at the account level. Intraday RiskXposure™ was designed to deliver three primary benefits to clients:

- **Enhance revenues**
  - Reduce capital requirements for less risky customers and therefore better utilize available capital.
  - Accept riskier customers because Intraday RiskXposure™ provides tools to monitor their trading activity intraday so clients can intervene if a problem arises.
- **Ensure intraday risk compliance**
  - Prove to regulators that clients are truly monitoring the real risk of all accounts in real-time no matter if their customers are trading with or away from them.
  - Review the historical trends of traders or accounts to help with regulatory compliance issues.
- **Save money by verifying fees**
  - With Intraday RiskXposure™ historical reports, clients can easily audit their SEC, ECN, NASD, and NSCC fees.

Intraday RiskXposure™ gathers equity execution data from all possible sources, analyzes it, presents it in a single integrated view and provides real-time alerts.

Intraday RiskXposure™ does not introduce any latency into trade execution and does not require any systems changes or any other assistance from client IT departments. It works by collecting actual execution data and mapping that information into an account hierarchy so clients can manage their true intraday risk firm wide.

2. Time Equals Risk

It is a generally accepted principal that "Time Equals Risk."

The generally accepted principal that "time equals risk" was the driving force behind the move in 1994 to shorten the settlement cycle for U.S. corporate securities from T+5, or trade date plus five days, to T+3[1]. More recent international initiatives have highlighted the risk created by the passage of time during the trading day – as prices of securities move away from contracted prices the risk increases that non-defaulting parties will incur losses when forced to replace unsettled contracts.[2] The U.S. Securities and Exchange Commission ("SEC" or "Commission") recently issued a "Concept Release"[3] in which it solicited comments on the pros and cons of implementing a settlement cycle shorter than T+3. In the Concept Release, the SEC noted dramatic examples of intraday price movements, such as when the Dow Jones Industrial Average fell by more than 554 points on Monday, October 27, 1997 and fell by more than 512 points on August 31, 1998.[4]

In its comments to the Concept Release, the Securities Industry Association ("SIA") noted that "[t]he incremental risk reduction of moving the settlement cycle from T+3 to T+1…[appears] to be relatively modest in light of the high costs of implementing such a move. While a shorter settlement cycle would be expected to decrease the gross amount of unsettled trades subject to credit or market risk, it could increase operational risk by reducing the time available to correct errors prior to settlement."[5] The SIA went on to note that "[r]isk management procedures should not be driven by the settlement cycle."[6]

A recent TowerGroup report stated that "[h]ardly a day goes by without people in the securities industry lamenting how 'volumes are way down.' Although by some measures they may be correct, by the measures that matter most, they are not: Trade volumes are actually at their highest historical levels. NYSE trade volumes have doubled in the just the last year. This trend spells trouble for many firms – and opportunities for the ones that are prepared."[7] Representatives of the SEC, the NYSE and the NASD have noted that "…risk management is a dynamic

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[1] The Bachman Task Force on Clearance and Settlement in the U.S. Securities Markets, Report submitted to the Chairman of the U.S. Securities and Exchange Commission (May 1992) ("Bachman Report").

[2] "Recommendations for Securities Settlement Systems." CPSS/IOSCO Task Force (November 2002).

[3] Securities and Exchange Commission Release Nos. 33-8398; 34-49405; IC-26384 (March 11, 2004), 69 FR 12922.

[4] SEC Concept Release at 11.

[5] SIA Comments to Concept Release: Securities Transactions Settlement (June 16, 2004) at 3and 4.

[6] SIA Comments to Concept Release: Securities Transactions Settlement (June 16, 2004) at 18.

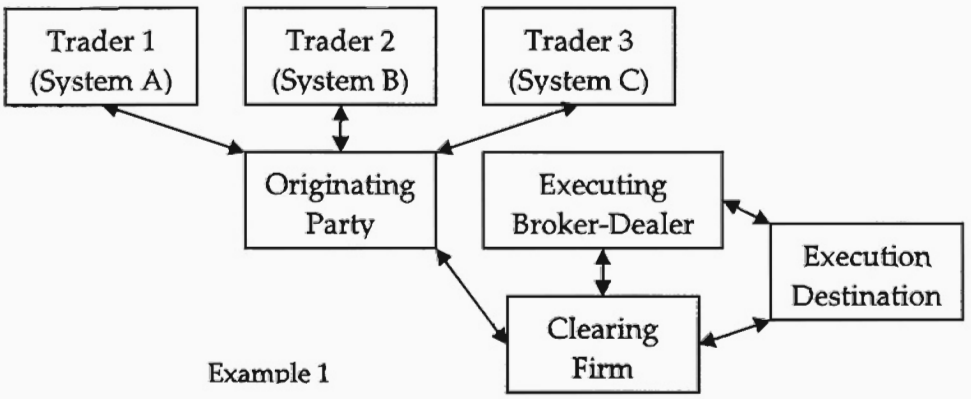
[7] TowerGroup, "Don't Look Now, but Trading Volumes Are Actually Up: Counting Shares vs. Trades," (June 16, 2003).

function that must be modified and improved as a [firm's] business changes and improved processes and procedures become available...."[8] Given the combination of increasing trade volumes and delayed implementation of a shorter settlement cycle, new means of managing risk are necessary. Since little can be done to control overnight risks, *securities firms must take action to control what they can control as soon as they can control it – that is, intraday risk*.

3. Limitations of Current Systems / Benefits of Intraday RiskXposure™

3.1. Dynamic Interrelationships

Current systems fail to address the fact that the identity of parties involved in financial securities transactions (each, a "Party-in-Interest") can vary greatly between one transaction and another and that the specific interrelationships necessary to complete a transaction may not be known at the start of the transaction. In every transaction, there is always a party who is on record as the originator of the desired transaction (the "Originating Party"). However, in certain circumstances, a number of different traders may operate under the umbrella of the same Originator (see Example 1 below).



Example 1

[8] Task Force, "Broker-Dealer Risk Management Practices Joint Statement," July 29, 1999.

Conventional systems only work for subsets of interested parties and relevant transactions.

If the Originator is not a broker/dealer, the Originating Party must first communicate the order to a Broker/Dealer[9] who can either fill the order or some part of it from its own inventory of securities, submit it to one or more appropriate markets for execution, or route it to another broker for execution (the options available to the Broker/Dealer may be controlled by the Originating Party) (see Example 2 below). If the Broker/Dealer is not a member of one or more of the desired market(s), the Broker/Dealer must enlist the services of an Executing Broker/Dealer[10], who is authorized to execute transactions on the desired market(s) (see Example 2 below). Moreover, if the Executing Broker/Dealer is not authorized to clear and settle securities transactions with the Depository Trust Clearing Corporation[11], the Executing Broker/Dealer must submit the trade to an authorized Clearing Firm[12] for clearance or settlement on behalf of the Originating Party (see Example 2 below). In another scenario, several Broker/Dealers may agree that certain mutual clients may use assets, on account with one Broker/Dealer, to affect transactions with another Broker/Dealer as the Executing Broker/Dealer, even though all or a number of these Broker/Dealers qualify as Executing Broker/Dealers (see Example 4 below)[13]. It is possible in a given transaction that one party may perform all the

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[9] "Broker/Dealer" - Any individual or firm in the business of buying and selling securities for itself and others. Broker/dealers must register with the SEC. When acting as a broker, a broker/dealer executes orders on behalf of his/her client. When acting as a dealer, a broker/dealer executes trades for his/her firm's own account. Securities bought for the firm's own account may be sold to clients or other firms, or become a part of the firm's holdings. Copyright©1999-2004 ADVFN PLC. www.advfn.com.

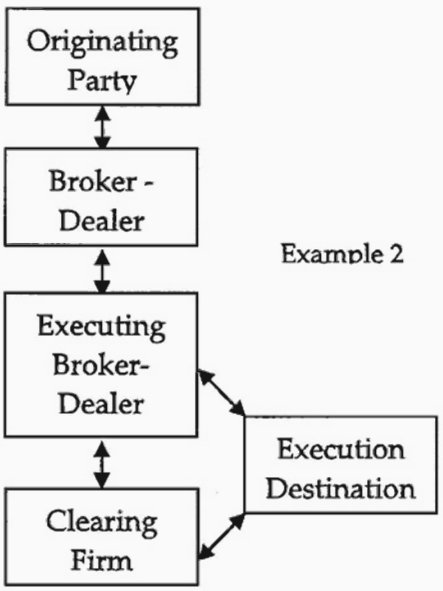
[10] "Executing Broker/Dealer" - A Broker/Dealer that is a member of a desired exchange / liquidity destination.

[11] "Depository Trust and Clearing Corporation" (DTCC) - through its subsidiaries, provides post-trade clearance, settlement, custody and information services for equities, corporate and municipal debt, money market instruments, depositary receipts, exchange-traded funds, unit investment trusts, mutual funds, insurance products and other securities. The National Securities Clearing Corporation (NSCC) subsidiary, which acts as a central counterparty (CCP), provides trade guarantee, netting and risk management services for equity and debt transactions from all U.S. stock exchanges and markets. The Depository Trust Company (DTC) subsidiary has custody of and provides asset servicing for millions of securities issues of issuers from the U.S. and over 60 other countries. DTC serves as a major clearinghouse for institutional post-trade settlement. The Depository Trust and Clearing Corporation (DTCC), which is owned primarily by most of the major banks, broker-dealers, and exchanges on Wall Street. Copyright © 2003. Datamuse. www.MoneyGlossary.com.

[12] "Clearing Firm" - An organization which works with the exchanges to handle confirmation, delivery and settlement of transactions. Such corporations play a key role in ensuring that executed trades are settled within a specified period of time and in an efficient manner; also called clearing corporation or clearing house. Copyright©1999-2004 ADVFN PLC. www.advfn.com. Each Clearing member must also be a member of the exchange. Not all members of the exchange, however, are members of the clearing organization. All trades of a non-clearing member must be registered with, and eventually settled through, a clearing member. Copyright © 1997-2004 Highlight Investments Group. http://www.trading-glossary.com.

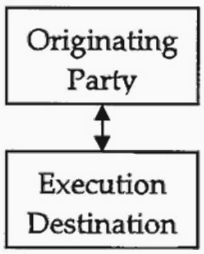
[13] Institutional clients often use brokers to execute transactions involving U.S. equities that are physically held and cleared by another broker or custodial bank, via Delivery vs. Payment (DVP) or Receipt vs. Payment (RVP) transactions. Risk management systems used by executing brokers

various roles identified above, that of the Originating Party, the Executing Broker/Dealer and the Clearing Firm (see Example 3 below). More often than not, however, different parties perform various roles and the number of participants and the interrelationships between these participants can vary greatly between one transaction and another.

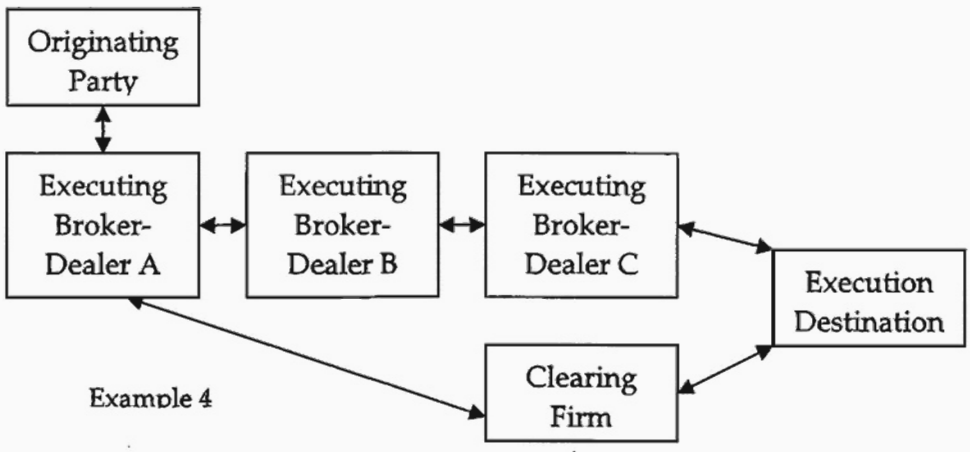


Example 2

Originating Party is also an Executing Broker and Self-Clearing Firm



Example 3



Example 4

When various parties perform different roles, each party has independent financial risk associated with the transaction. Therefore, each Party-in-Interest associated with a transaction has their own separate and independent desire to

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are generally unable to manage risks associated with these transactions, because they are not integrated with the risk management systems of other potentially involved executing brokers and/or with the risk management system(s) of the relevant custodian(s). As a result, risks associated with such transactions may only be evident after close of the trading day.

monitor, capture, mitigate and reduce risks associated with that specific transaction and possibly monitor, capture, mitigate and reduce risks associated with similar transactions across numerous clients[14]. For example, whereas the Originating Party always bears the ultimate financial risk for any transaction, each subsequent party in the execution chain may be liable for making up any deficiency associated with the Originating Party's lack of adequate assets on account to cover the risk of the transaction.

Current securities trading computer applications and stand-alone risk management systems fail to address the reality that Parties-in-Interest can vary greatly between one transaction and another. Such systems require that all Parties-in-Interest use the same, or use one of several prescribed, securities trading computer applications/risk management systems in order for the Parties-in-Interest to receive effective intraday risk management. Given the dynamic nature of relationships between Parties-in-Interest, this requirement makes these systems impracticable for real-time intraday risk management by Parties-in-Interest. Current systems fail to capture and monitor intraday trading activity as necessary for Parties-in-Interest to accurately analyze and manage risk to avoid potential catastrophic losses, statutory and regulatory infractions, fines and regulatory intervention. Conversely, FTEN's Intraday RiskXposure™ is a flexible, non-restrictive solution that provides real-time intraday risk management for all Parties-in-Interest.

Current securities trading computer applications and stand-alone risk management systems fail to address the reality that Parties-in-Interest can vary greatly between one transaction and another.

Securities trading computer applications that assist in executing transactions (e.g., direct access platforms, order management systems, quote management systems, etc.) can provide pre-trade risk management by comparing each proposed transaction processed through the system against established rules and parameters. If one or more of these rules or parameters is violated, the securities trading computer application should not permit the trade to be processed so as to eliminate risk that might arise if the trade was completed. However, for such pre-trade risk management to be effective for all Parties-in-Interest, every step of the proposed transaction must be compared against rules and parameters specific to each Party-in-Interest. If a transaction can occur without a Party-in-Interest having the opportunity to review and stop the trade if it violates its established rules and parameters, pre-trade risk management is ineffective for that Party-in-Interest.

In those situations where not all Parties-in-Interest use the same securities trading computer application, Parties-in-Interest must depend on end-of-day risk management using records submitted after close of the trading day to analyze and identify risk violations. However, by the time such violations are identified

[14] For example, a clearing firm may wish to understand their overall concentration in a particular stock symbol across all accounts to see if they are short in a stock that just made a significant announcement that is expected to effect demand for, and availability of, the stock.

and incorporated into systems, the market has closed and remedial measures must wait until the following trading day by which time volatile market conditions may cause losses to be exacerbated. In addition, risk management processes that rely on end-of-day files are not able to catch violations of risk parameters that occur intraday but are corrected by the end of the day. Without the ability to monitor risk parameters in real-time intraday, a Party-in-Interest may take on more risk intraday than approved by other Parties-in-Interest. Although this may go undetected so long as the violating Party-in-Interest brings itself back into compliance by the end of the day, such unilateral action skews the economic terms that the parties agreed to and can subject Parties-in-Interest to losses and regulatory fines.[15]

Current systems do not provide alerts at a transaction-based level in real-time.

Numerous sophisticated stand-alone risk management systems have also been developed for the financial securities industry. However, these systems deal with aggregate level (i.e., not transaction specific) data and the impact of overall market conditions. Their primary focus is on portfolio risk concerns versus transaction specific information in the context of real-time intraday risk. The modeling systems (e.g., Monte Carlo, Value-At-Risk, etc.) that are used in this category of systems are frequently used to establish buying power / risk appetite on a client by client basis (i.e., credit risk) in broad terms. They are then used to reevaluate portfolios on a daily basis for both credit and market risk. They are not used to manage risk for individual transactions on a real-time intraday basis.

Affiliates of DTCC provide risk management at the Clearing Firm and "Correspondent"[16] level using data independently submitted to such organizations by market participants in connection with the execution and clearance of securities transactions in the U.S. securities market. However, these services do not offer effective real-time intraday risk management for Parties-in-Interest. This deficiency is due to the Clearing Firm/Correspondent level nature

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[15] For example, Party-in-Interest A, a clearing firm, may agree that Party-in-Interest B, an institutional investor, can trade during the trading day in securities valued at up to four times the balance in Party-in-Interest B's trading account. In effect, Party-in-Interest A has extended "margin" credit to Party-in-Interest B in an amount equal to three times the amount in Party-in-Interest B's account. Without access to real-time intraday risk information, Party-in-Interest B could trade in securities valued in amounts significantly greater than the agreed upon four-to-one arrangement. This situation is analogous to someone trying to charge in excess on their credit limit on a credit card, something credit card issuers have sophisticated systems to prevent. However, if Party-in-Interest A only has access to end-of-day information Party-in-Interest A may not know about these infractions until it is too late – if the market moves so far away from Party-in-Interest B's position that Party-in-Interest B cannot correct the situation by the end of the trading day then Party-in-Interest A will suffer a loss equal to any difference between the value of assets in Party-in-Interest B's account and the amount necessary to "make good" on the value of the trades. In addition, Party-in-Interest A and Party-in-Interest B would be in violation of intraday margin requirements subjecting them both to potential fines and regulatory sanctions.

[16] "Correspondent" - A financial organization that performs services (acts as an intermediary) in a market for another organization that does not have access to that market. Copyright © 2003. Datamuse. www.MoneyGlossary.com.

of the provided information, not necessarily at the Party-in-Interest level, and the practice of some Clearing Firms of postponing submission of certain trade data, in summarized or compressed form, until the end of the day to save on associated fees charged by DTCC affiliates.

Separately, NASDAQ[17] ACT Risk Management does not address trades routed to some liquidity destinations, "printed" on exchanges other than NASDAQ, such as the National Stock Exchange a/k/a the Cincinnati Exchange, or handled via Qualified Service Representative ("QSR") arrangements, and therefore also fails to provide effective real-time intraday risk management for Parties-in-Interest.

3.2. System Independence

Existing securities trading computer applications/risk management systems fail to address the reality that Parties-in-Interest may have business and technical reasons for not using the same systems. A recent Carbon Consulting survey revealed that hedge fund managers are no longer relying exclusively on systems provided by their prime brokers to satisfy their technology needs; they are also looking to boutiques at the forefront of product development to help address some of their system needs.[18]

"Black box" systems do not lend themselves to integration / sharing with other Parties-in-Interest since this might lead to disclosure of proprietary algorithms and/or slower processing speeds.

A recent Tabb Group report noted that "...black box models are dramatically changing the way that sophisticated traders and market participants are addressing the markets as lower costs and higher compute and networking speeds are enabling the creation of automated model-based trading. These models are analyzing the market on a microsecond basis, trying to gauge liquidity and seek opportunity. As the models become more accepted, their use increases the velocity of the market and forces other participants to leverage them, as the pace of trading becomes too fast to manage by hand."[19] These "black box" systems do not lend themselves to integration/sharing with other Parties-in-Interest since this might lead to disclosure of proprietary algorithms and/or slower processing speeds.

Intraday RiskXposure™ provides stand-alone real-time, online enterprise-wide equity risk management[20] for Parties-in-Interest without requiring integration with existing portfolio systems, order management systems, order entry systems or program trading systems or implementation assistance from clients' IT departments. Intraday RiskXposure™ is a secure, web-based online service that works with all order management systems and all front-end trading applications

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[17] "NASD" - National Association of Securities Dealers Automated Quotations. Copyright © 2003. Datamuse. www.MoneyGlossary.com.

[18] Hedge Fund Alert, April 28, 2004.

[19] The Tabb Group, "Pushing the Envelope: Redefining Real-time Transaction Processing in Financial Markets" (April 2004).

[20] Initial deployments of Intraday RiskXposure™ support US equities; subsequent releases will support additional securities products.

without introducing any latency or delay into the trade or transaction processing functions.

3.3. Data Neutrality and Objectivity

Intraday RiskXposure™ facilitates compliance with statutory and regulatory requirements – reducing the risk of regulatory intervention and fines.

FTEN's patent-pending Intraday RiskXposure™ technology collects transaction specific data in real-time directly from all electronic liquidity providers thereby ensuring full coverage of relevant information without relying on potentially biased data provided by traders or data provided by third party technology vendors which may be compromised or limited in scope due to systems issues or performance characteristics.

In addition to enhanced risk management capabilities, the time sensitive, account-level information available via FTEN's Intraday RiskXposure™ service facilitates compliance with statutory and regulatory requirements significantly reducing the risk of regulatory intervention[21] and fines that might result from inadequate controls. In addition, the information supplied by Intraday RiskXposure™ enables clients to verify the accuracy of fees charged by liquidity destinations based on transaction volumes (e.g., ECN, SEC, NASD and NSCC fees) and can save hundreds of thousands of dollars in miscalculated fees.

4. Intraday RiskXposure™

4.1. Benefit Overview

- Clients can define account hierarchy, risk profiles at different levels of customer hierarchies and can define desired alerts (e.g., via email, online pop-up screen, message sent to pager, voice alert, etc.). Intraday RiskXposure™ provides real-time risk evaluation within specified client account hierarchies to address:
    - Credit risk – Buying Power, Concentration;
    - Market risk – Intraday P&L[22], Concentration; and

[21] For example, a NYSE memorandum stipulates that "The Exchange would like to remind members and member organizations that it views comprehensive risk management systems as fundamental to ensuring sound business practices. Accordingly, Exchange examiners will be placing increased emphasis on the effectiveness of these systems during the course of their field examinations."

[22] Robert Hegarty, director of investment management technology research for TowerGroup, notes that many funds, including those employing risk arbitrage and other complex investment strategies, do not use technology to ensure that they effectively manage their exceptionally high trading volumes in and out of positions quickly as required by such strategies. Instead, they rely on error-prone processes built around non-integrated applications and manual processes, such as inputting trades into Excel spreadsheets or disparate management and accounting programs. Intraday RiskXposure™ provides hedge funds the ability to view intraday P&L in real-time thereby enabling managers to implement more accurate, efficient reporting and flexible trading and order management. In addition, Intraday RiskXposure™ can track unrealized intraday P&L

- Operational risk – Selling without Inventory, Restricted Stocks, Hard to Borrow Stocks, Single Order Value, and Single Order Quantity.

- Intraday RiskXposure™ tabulates and evaluates each and every trade on a real time intra-day basis within the context of client defined account hierarchies.

- Positions are updated and displayed on a real time intra-day basis.

- Alerts are immediately sent to identified parties upon account violations.

- Clients can take immediate remedial actions within the same trading day.

- Clients can view historical reports to evaluate infraction information to assist with regulatory compliance initiatives and verify fees charged by liquidity destinations based on transaction volumes (e.g., ECN, SEC, NASD and NSCC fees).

- IT support is not required to implement Intraday RiskXposure™ - Clients do *not* need to make system changes.

- Intraday RiskXposure™ helps clients:
  - Bring on new clients;
  - Reduce capital requirements for "less risky" clients;
  - Provide more accurate pricing for "risky" clients; and
  - Expand the reach of overall available credit.

- FTEN is neutral third party and not a broker dealer – all data is maintained in strict confidence.

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thereby highlighting the impact of price movement on the risk profile of an account, particularly a margin account.

4.2. Available For the First Time

Intraday RiskXposure™ Makes the following benefits available to Parties-in-Interest for the first time:

- Collection of electronic copies of execution messages directly from relevant disparate liquidity destinations (e.g., Exchanges[23], ECNs[24] and other ATSs[25]) and from information related to such transactions provided by third party processors (e.g., confirmations from the DTCC[26] or feeds from third party transaction processing systems) immediately upon availability from such destinations/processors (e.g., real-time/intraday throughout the day or at prescribed time(s) during the day) *without requiring the use of any prescribed securities trading application software in connection with collection of the data*. The objectivity and credibility of this data is beyond reproach since it is received directly from liquidity sources and third party processors and is therefore more acceptable to regulators for client oversight purposes than information collected from clients themselves.

- "Mapping" of information contained in electronic copies received from disparate liquidity destinations and related third party processors, enabling a "normalized" presentation and comparison of relevant detailed and netted data[27] regardless of the source(s) of the data, *without requiring the use of any prescribed securities trading application software to manage the data*.

- *Real-time intraday analysis of "normalized" information to identify infractions for each Party-in-Interest at all levels of detail supported by available information based upon rules and parameters defined by such Party-in-Interest.* Each

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[23] "Exchange" - An organization, association or group which provides or maintains a marketplace where securities, options, futures, or commodities can be traded; or the marketplace itself (e.g., NYSE, NASDAQ, etc.). Copyright©1999-2004 ADVFN PLC. www.advfn.com.

[24] "ECN" - An electronic system that brings buyers and sellers together for the electronic execution of trades. It disseminates information to interested parties about the orders entered into the network and allows these orders to be executed. Electronic Communications Networks (ECNs) represent orders in NASDAQ stocks; they internally match buy and sell orders or represent the highest bid prices and lowest ask prices on the open market. The benefits an investor gets from trading with an ECN include after-hours trading, avoiding market makers (and their spreads), and anonymity (which is often important for large trades). Copyright ©1999-2004 ADVFN PLC. www.advfn.com.

[25] ATS – Alternative Trading System.

[26] See footnote 11.

[27] For example, a Party-in-Interest can see a "buy" done on one liquidity destination using one securities trading platform, the "sell" done on another liquidity destination using another platform as well as the fact that they are "flat" overall and have a zero position.

"party-in-interest" can personalize and customize rules and parameters important to them by using confidential and detailed client/account specific information, known only to them, without any other Party-in-Interest having access to or knowledge regarding such information, unless such Party-in-Interest specifically authorizes others to know all or some part of the information. It should be noted that the effectiveness and benefit of Intraday RiskXposure™ risk management for each Party-in-Interest may be enhanced by the reciprocal sharing of information with other Parties-in-Interest in connection with particular transactions. Intraday RiskXposure™ facilitates such sharing in a controlled environment consistent with applicable rules and regulations.

- Generation of real-time immediate post-trade alerts by comparing "normalized" data from different sources against rules and parameters defined by each Party-in-Interest. The substance of the alerts will vary for each Party-in-Interest depending on their role(s) and associated risk(s) in the context of each transaction. *Each Party-in-Interest can define exactly what risks they want to monitor, the threshold for when alerts will be sent, who will receive what alerts and how each alert with be sent.* The delivery mechanism(s) for alerts (e.g., via email, online pop-up screen, message sent to pager, voice alert, etc.) can be customized by each Party-in-Interest.

- Analysis of aggregated "normalized" data, received from different sources, and real-time alerting of infractions is made available to all Parties-in-Interest, compared to the current alternative of only "silo" information being available to the Party-in-Interest officially on record as the Originating Party with regard to each transaction. *Prior to the invention of Intraday RiskXposure™, the timing and scope of the information available to each Party-in-Interest was insufficient to enable such party, on its own, to collect, analyze and act on such information, within the broader scope and more immediate intraday time frame necessary to provide the proper context and background to enable prompt remedial action.*

- Availability of aggregated historical "normalized" information in a data warehouse together with analytical tools that enable *evaluation of compliance by each Party-in-Interest and also by each identifiable client or client group of such Party-in-Interest with applicable intraday rules, regulations and procedures*.

- Availability of aggregated historical "normalized" information in a data warehouse together with analytical tools that enable *evaluation of the accuracy of fees charged by third parties* with regard to each Party-in-Interest and to each identifiable client or client group of such Party-in-Interest, by

comparing volumes and nature of transactions at disparate liquidity destinations against data received directly from such destinations.

- Availability of aggregated historical "normalized" information in a data warehouse together with analytical tools that *enable evaluation of historical trading practices* of each Party-in-Interest and each identifiable client or client group of such Party-in-Interest.

- Availability of aggregated historical "normalized" information in a data warehouse together with analytical tools that enable *evaluation of effectiveness of getting "best price" for desired securities at any given time* for each Party-in-Interest and each identifiable client or client group of such Party-in-Interest.

- A *more accurate, more representative, and more time sensitive presentation of the intraday risks* undertaken by each Party-in-Interest, relating to their daily transactions, thereby *facilitating prompt remedial action to reduce costs from risk infractions and associated sanctions for regulatory violations*.

4.3. Easy to Sign-up For and Use

Clients can sign up for, and begin receiving the benefits of, Intraday RiskXposure™ as follows:

- Intraday RiskXposure™ is a stand-alone ASP service requiring no integration with existing systems.

- Clients authorize Intraday RiskXposure™ to receive electronic copies of transactions from liquidity destinations on which they and their customers trade and, if desired, designate Intraday RiskXposure™ as an "Interested Party" to receive copies of DTCC "confirm" messages.

- Clients deliver sample beginning-of-day files which are "mapped" into Intraday RiskXposure™.

- ASP-based web tools enable clients to define risk profiles for each account or account group and to identify who receives what alerts, when and how.

- Beginning-of-day files can be used to populate client account hierarchies each morning, regulatory violations.

4.4. Cooperation with Other Risk Management Systems

FTEN will work with NASDAQ and providers of other risk management systems to combine the unique benefits of Intraday RiskXposure™ with the strengths of such other offerings. Clients paying for NASDAQ ACT Risk Management have the option to save fees otherwise charged by NASDAQ ($0.035 per trade plus $17.25 per correspondent not to exceed $10,000 per month per correspondent) by notifying NASDAQ in writing pursuant to Rule SR-NASD-2002-57 of their desire to use Intraday RiskXposure™ in lieu of ACT Risk Management. In many instances, resulting savings will exceed Intraday RiskXposure™ fees thereby enhancing risk management capabilities while at the same time improving profitability for Intraday RiskXposure™ clients.