

# RISK & SURVEILLANCE TREND SERIES: CROSS-MARKET RISK & SURVEILLANCE: TRENDS & CHALLENGES IN A FRAGMENTED MARKETPLACE

23<sup>rd</sup> June, 2011

## Dial-in Details:

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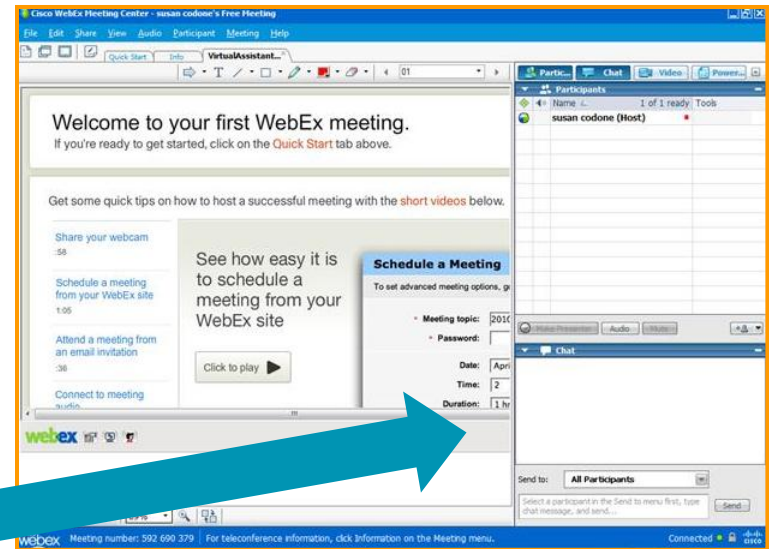
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# HOUSEKEEPING: ASKING A QUESTION

Submit questions to our panelists by using the chat interface in the lower right corner of the WebEx interface. Select send to 'Host and Presenters' to your question.



Please submit questions at any time throughout today's presentation.

## MEET THE SPEAKERS:



**Aite**

Adam Honoré  
Research Director  
Aite Group, LLC



**FTEN**  
A NASDAQ OMX COMPANY



Gary LaFever  
Chief Corporate Development Officer  
FTEN, a NASDAQ OMX Company



**SMARTS**  
A NASDAQ OMX COMPANY

Michael O'Brien  
Head of Global Product Management, SMARTS Broker  
SMARTS, a NASDAQ OMX Company

# DRIVERS: GLOBAL REGULATION

- MiFID II
- Consolidated Audit Trail
- SEC Rule 15c3-5 – July 14
- Canadian National Instrument 23-103
- ???

# MARKET SURVEILLANCE TECHNOLOGY: GLOBAL SPEND

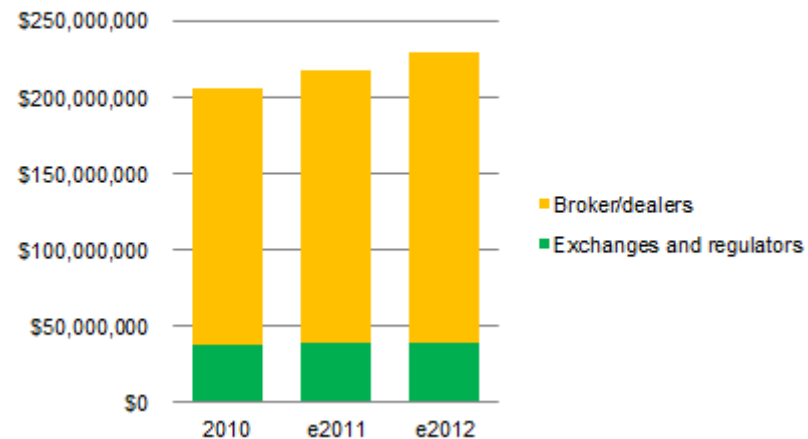
200 major global exchanges with regulatory oversight requiring market surveillance technology; however, spending is expected to remain flat.

Broker/dealer spend on the vendor component expected to grow 6% annually, in addition to another US\$70M spent on implementation.

## Why?

- Increasing levels of internal liquidity.
- Continuing expansion into additional asset classes as well as geographic regions.
- Desire for stronger regulatory protection and strategies to mitigate risk of fines.

Global Spending on Market Surveillance Technology, 2010-e2012



## Vendor Landscape:

- Actimize
- b-next
- FTEN, a NASDAQ OMX Company
- Redkite
- SMARTS, a NASDAQ OMX Company
- CEP Providers

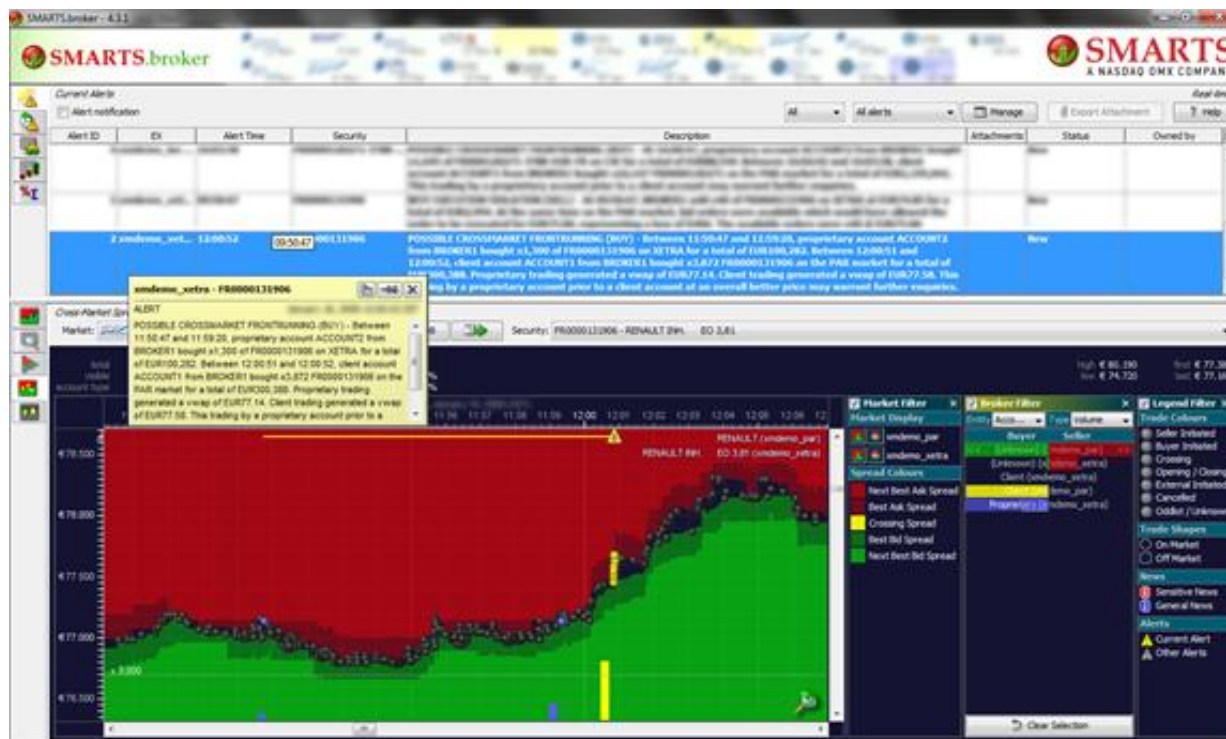
# MARKET SURVEILLANCE TECHNOLOGY: CHALLENGES

Market Fragmentation

Regulatory He Said, She Said

Too Much Transparency?

*A customer bought Renault on ChiX and an internal proprietary account bought the same instrument on the LSE*



# MARKET SURVEILLANCE TECHNOLOGY: OPTIMAL SCENARIO

## Canada gets it

- A market data governor in place to synchronize time.
- Daily message capacity above current need.
- Ability to analyze unstructured data.

## Best ideas

- Move from a request/response architecture to something more proactive.
- Stand up a significant in-memory data store backed by a substantial hard media data repository.
- The data warehouse should perform robust analytical queries to find patterns and implement new algorithms, which in this case seek abuse patterns in lieu of liquidity.
- Plan for workflow.
- Go commercial: Regulators should be regulators and take advantage of the expertise of technology companies.
- Plan for unstructured data.

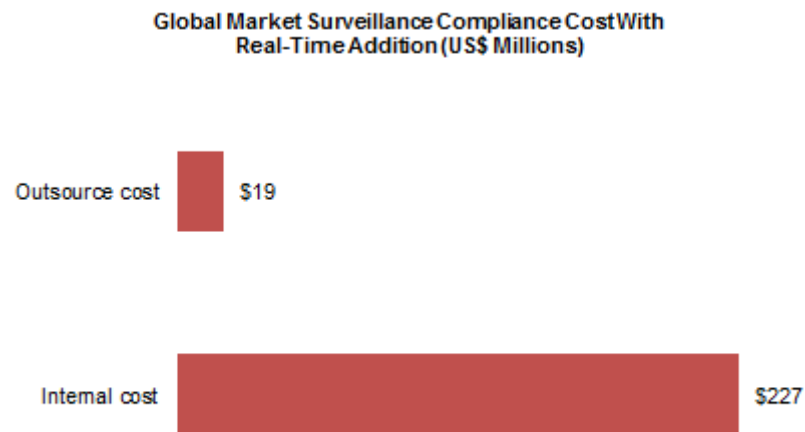
# MARKET SURVEILLANCE TECHNOLOGY: THE 'REAL' REAL-TIME COST

The SEC estimates the annual burden of a CATS implementation to be US\$4B and 3.4M man hour. Other obstacles in the path to implementation include:

- Lack of belief by FINRA, the CBOE and others in the value of real-time information.
- No cross-asset class support (multiple asset classes were involved in the May 2010 flash crash).
- Controlling the scope of proposed reforms.
- No consistent market data changes.

Moving to real-time surveillance will nearly double staffing requirements; therefore, much of the work is likely to be outsourced.

Any plan for real-time market surveillance must include a roadmap for unstructured data.



# KEY TAKEAWAYS

## Regulators should:

Be willing to **share data across multiple agencies** and even across multiple geographies.

Back initiatives to **standardize a unique identifier associated with registered entities in order to create consistency** on beneficial owner and client Mnemonics.

Help one country and/or agency **complete an optimal scenario so they have a repeatable model to duplicate.**

Require broker/dealers to **maintain their own internal surveillance system** across every product that they and their clients trade in every geography in which they do so.

Seriously examine the **potential to outsource some of the real-time investigation.**

Market data feeds need to change to **include both beneficial owner and client data.**

**Industry standards need to be adopted globally for reporting formats.**

## Trading firms should anticipate:

Pricing pressure.

Vendor turmoil

Trading in Asia becoming more accessible.

Routine updates from the vendor community

## Vendors should:

New market opportunities for trading customers in the emerging markets looking to trade in the United States and Europe

Other vendors should be looking at partnering

Look for internal costs to decline

OBSERVATIONS FROM THE FIELD  
CROSS-MARKET PRE-TRADE  
RISK MANAGEMENT

## TIME ISSUES RELATED TO RISK MANAGEMENT / SURVEILLANCE



**Traditional risk management / surveillance systems rely on outdated concepts of time**

- **Today's trading practices are more intraday focused than in the past**

- Overnight positions are no longer indicative of risk / potential wrongdoing that may exist only during the day and which may no longer be visible at the end of the trading day

- **A portion of traditional risk system / surveillance investments must be reallocated to address more real-time elements of risk / surveillance**

- **Disconnect between investments in intraday 'real-time' systems vs. overnight 'batch' systems / manual processes**

- Tremendous investments made in front office / trading / revenue producing systems without corresponding investments in back office / risk management / surveillance systems

## CROSS MARKET CROSS SYSTEM AGGREGATED RISK MANAGEMENT / SURVEILLANCE IS REQUIRED



**Cross market, cross system risk management and surveillance is required due to:**

- **Increasing Fragmentation**
  - Multiple liquidity destinations
  - Multiple brokers
  - Multiple asset classes (electronification of asset classes)
  - Multiple trading platforms
- **Increasing High Frequency / Speed of Trading**
- **Confluence of real-time issues among legacy system types - all are severely challenged**
  - Risk Management Systems
  - Back Office Systems
  - Execution Databases
  - Surveillance Systems

**No Need to replicate functionality of each system type**

- Interconnectedness of system shortcomings can be addressed via real-time drop copy aggregation

# OBSERVATIONS FROM THE FIELD

## CROSS-MARKET SURVEILLANCE

# CROSS-MARKET CHALLENGES ON SURVEILLANCE



## Where the Front -Office and Traders go, Compliance must follow

- Detection of market abuse requires multi-venue, multi-asset view of all available pools of liquidity (lit and dark)

## We're not in Kansas anymore

- There's comfort close to home: known venues carry known regulatory risks
- What about the unknown venues?
  - Low liquidity
  - High volatility
  - Low transparency
  - Higher regulatory risk

**CROSS-MARKET  
CHALLENGES ON  
SURVEILLANCE:  
RECOMMENDATIONS MARKED  
BY EXPERIENCE**



### **Seamless data integration**

- Add new venues quickly
- Aggregated drop-copy simplifies cross-market capabilities

### **Data visualization**

- Consolidation across venues
- Derivative versus underlying
- Dark and OTC versus primary market

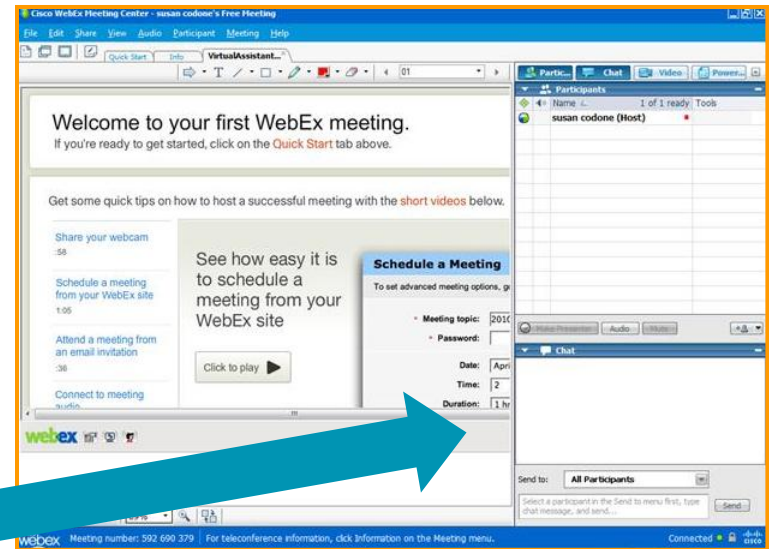
### **Intelligent alert engine**

- Measure market abuse behaviors across **multiple venues simultaneously**
  - Marking the Close, Ramping, Churning, Double Printing, Layering of Order Book, Spoofing, Insider Trading, Front-running

# PRACTICAL IMPLEMENTATION OF CROSS-MARKET SURVEILLANCE BEST PRACTICES

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or contact us at:

[GTSmessaging@nasdaqomx.com](mailto:GTSmessaging@nasdaqomx.com)



## Details:

**Dates:** September 13th – 16th, 2011

**Venue:** NASDAQ OMX MarketSite, Times Square, NYC

## Featured Speakers:

- Phillip Scanlan, Australian Consul-General, New York
- Bob Greifeld, Chief Executive Officer, NASDAQ OMX
- Maureen Jensen, Executive Director and Chief Administrative Officer, Ontario Securities Commission
- Professor Mike Aitken, Chief Scientist, Capital Markets CRC
- Mark Fabian, Vice President Market Regulation, ICE Futures

## Who Should Attend: Surveillance Professionals from:

- Exchanges
- Regulators
- Broker-Dealers

**LEARN MORE ABOUT  
TODAY'S TOPIC:  
CONTACT US**

For general questions regarding today's presentation or distribution of the webinar recording, contact us at:

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