

## Setup Korea FIX Community for Advancement of Korea Finance IT

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## A Changing Finance Market Environment in Global and Korea

## Global Capital Market Trend

### A Changing Finance Market Environment in Global and Korea

- **Relaxation of Regulations**
  - Undermined Regular exchange's monopoly position
  - Multiplication of c Trading Exchange
  - Alternative trading system to compete with floor-based exchanges
  - Competition among exchange at lower costs
- **Liquidity Competition**
  - Exchange merger, alliance and coalition between exchanges
  - Enhance the market dominating power in Global market
- **Innovation of Finance Information Technology**
  - Algorithmic Trading, HFT, DMA, SOR
  - Low latency competition, Fast exchange trading system
  - Advance the Electronic Trading Technologies

## Low latency in Korea Market

### A Changing Finance Market Environment in Global and Korea

**An active discussion about low latency is in progress, developing the exchange and broker trading system for latency improvement**

- **ELW latency Issue on the broker side**
  - Some brokers provides Leased line and special service to VIP ELW Scalper.
- **Need high performance (High volume , Low latency)**
  - KRX Market System : start “KRX Exture plus”
  - Broker Front Trading System (+ Algo, + High speed Market Data Managing) : “Koscom K-Front”
- **Co-location service**
  - Broker’s Derivatives FEP moves into Busan
  - Increase Broker’s co-location and trading center into Busan
- **Electronic Trader have largely displaced traditional trader**

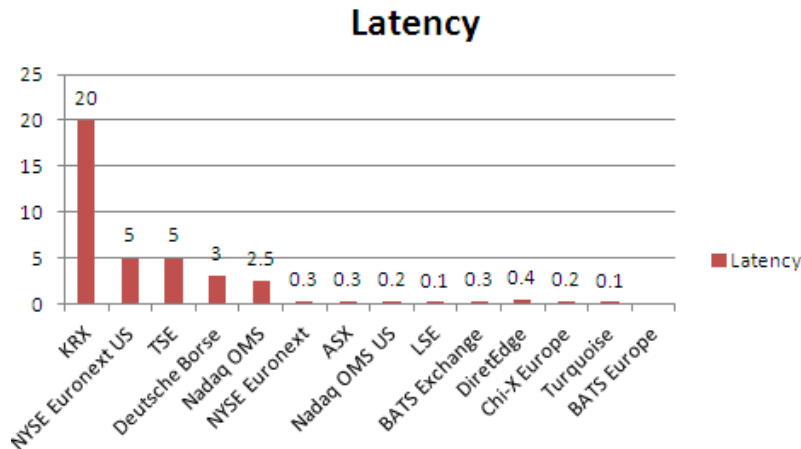
## KRX Exture+ (1/2)

Source : The briefing session to local brokers from KRX and KOSCOM (2011.07 )

### A Changing Finance Market Environment in Global and Korea

## KRX and KOSCOM announced the “Exture+” development of plan

- **Exture+ purpose: World-class premier exchange**
  - Goal open date : 2013.09
  - Provide World-class Low latency : Low latency Trading System
  - Efficient IT service and Infrastructure for market participant
  - Regulation improvement
- **Exture+ Throughput and performance**



	Exture	Exture+	Comments
<b>Throughput</b>	250 TPS	20,000 TPS	Improve 80 times
<b>Latency Time</b>	20,000 Microsecond	70 Microsecond	Improve 285 times
<b>Total Volume</b>	400,000,000	2,000,000,000	Improve 5 times

Source : Korea Capital Market Institute (2011)

## KRX Exture+ (2/2)

Source : The briefing session to local brokers from KRX and KOSCOM (2011.07 )

### A Changing Finance Market Environment in Global and Korea

- **Expected functions (need a more discussion with local brokers)**

	Exture	Exture plus
<b>FIX Protocol</b>	Only legacy API between broker and KRX	Adopt FIX and FIX/FAST Protocol - Trading/Market Data - Equity, Derivatives, Fixed income
<b>Asynchronous way</b>	Synchronous way for accepting the order	Asynchronous way without order ack
<b>DR(Disaster Recovery) center</b>	Order Data Sync between Main and DR center	Changing Asynchronous way for order data

- **IT System Competitiveness is Business competitiveness, create the IT innovation and powerful system**
- **Low latency competitiveness**

## ATS in Korea market

### A Changing Finance Market Environment in Global and Korea

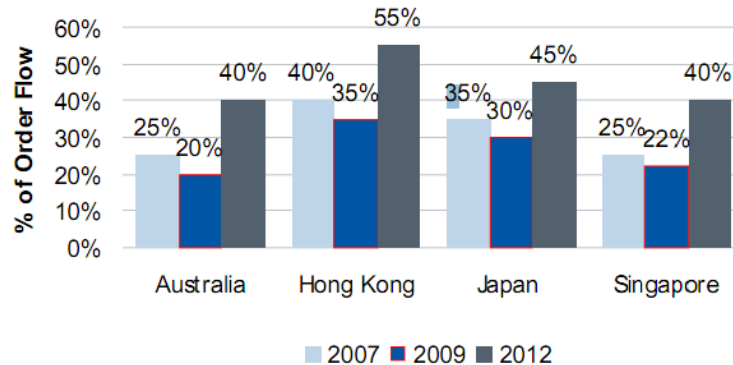
- **Introduction of an Alternative trading system(ATS) , the second half of 2012 or later**
  - Effect on Competition
    - Compete with the system run by KRX
    - Lower transaction costs
    - Provide better services at lower costs for market participant
    - Low latency trading environment to process more orders and execution
  - Local securities industry will adopt to FIX, Best Execution, SOR, Algo and etc for multi-exchange
  - Market surveillance
    - Keep an eye on unfair trade
- **Changing IT Infra and Technology**
  - FIX
  - Smart Order Routing (SOR)
  - Best Execution
  - Integration Market Data service
  - Integration Network

## Buysides E-Trading (1/2)

### A Changing Finance Market Environment in Global and Korea

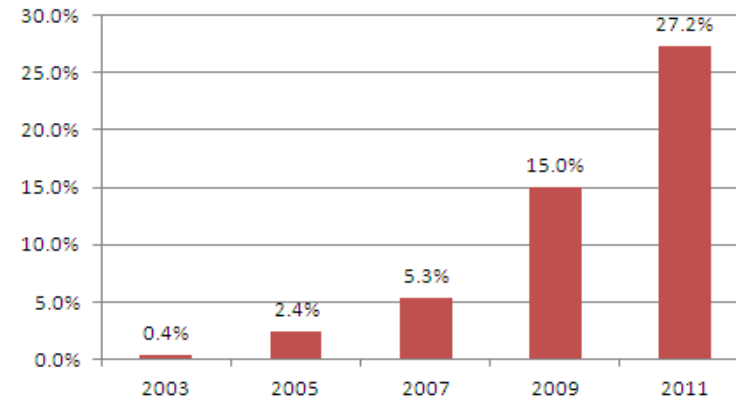
- **Buyside electronic trading levels and FIX adoption has steadily grown up from 2003**
  - Firstly Samsung Asset Management adopted FIX OMS in 2003 with KOSCOM STPHUB and Samsung Securities
  - Now 70 buysides use FIX OMS or EMS for their order execution
  - Most of Korea Sellsides have FIX OMS function on their trading system

Evolving Buy side E-Trading Levels



Source : Global Trends of Trading , Celent

Korea Buy sides E-Trading Level & FIX Adoption



Source : Koscom, 2011.11



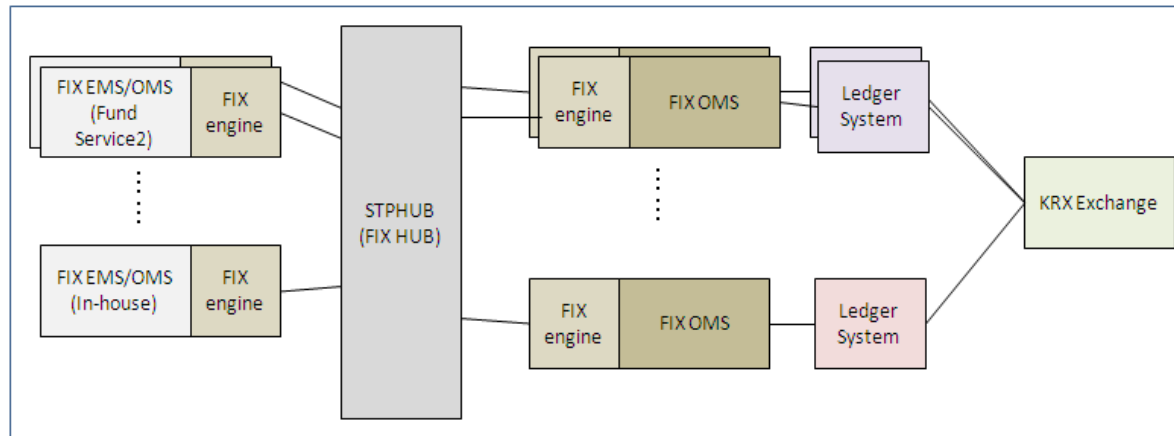
## Buysides E-Trading (2/2)

### A Changing Finance Market Environment in Global and Korea

- **Domestic Buysides Order execution Flow**

- Specialization and vendor list

- Buyside OMS/EMS : AITAS, KSD, KEB Fund Service, HSBC Fund Service, SC Fund Service and In-house system
    - FIX Order Net : KOSOM STPHUB
    - Sellside OMS/Trading System : KOSCOM MTS & KOSMOS and In-house system



- **Buysides Algorithmic trading level : initial stage**

- Most of order type : CD (95%), DMA(5%)
  - By and by Buy-Algo demand will be increased

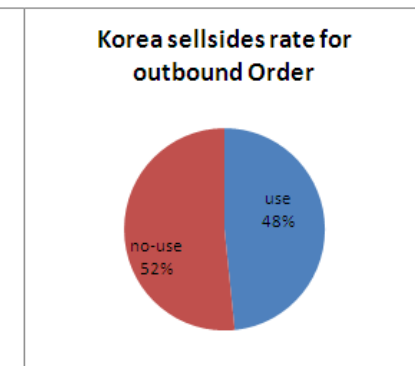
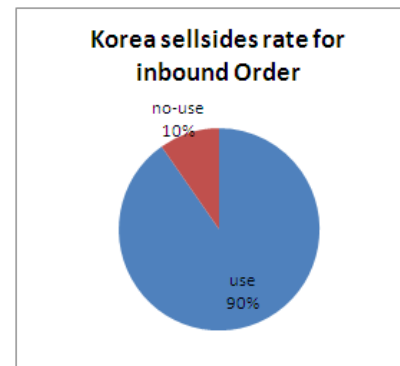
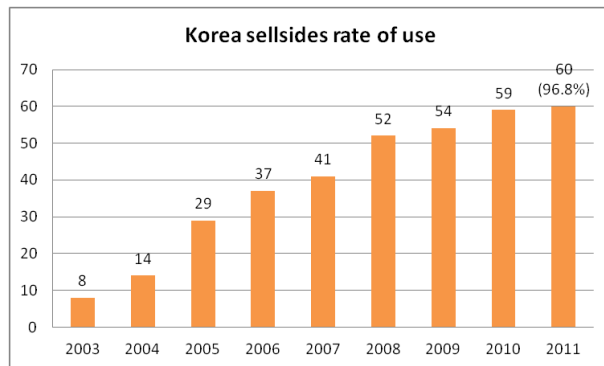
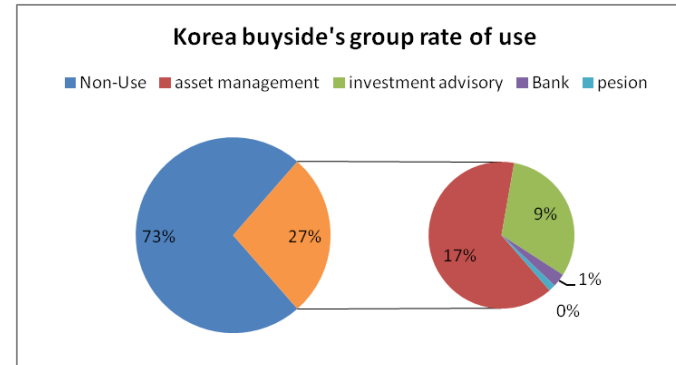
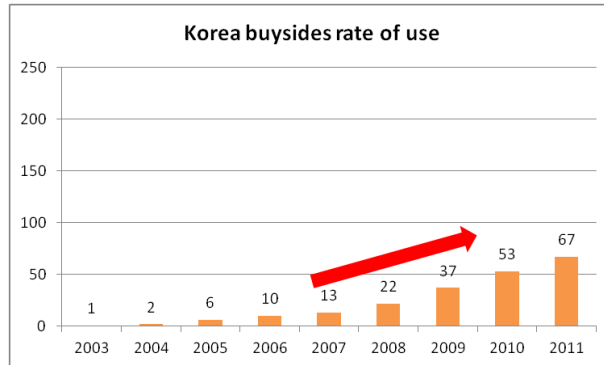
## Proposal: Setup Korea FIX Community

## FIX status report in Korea

### Proposal: Setup Korea FIX Community

FIX had been introduced in the first 2000s and has steadily increased until now

- Introduction, Present and future



Source : Koscom, 2011

## Necessity and Todo

### Proposal: Setup Korea FIX Community

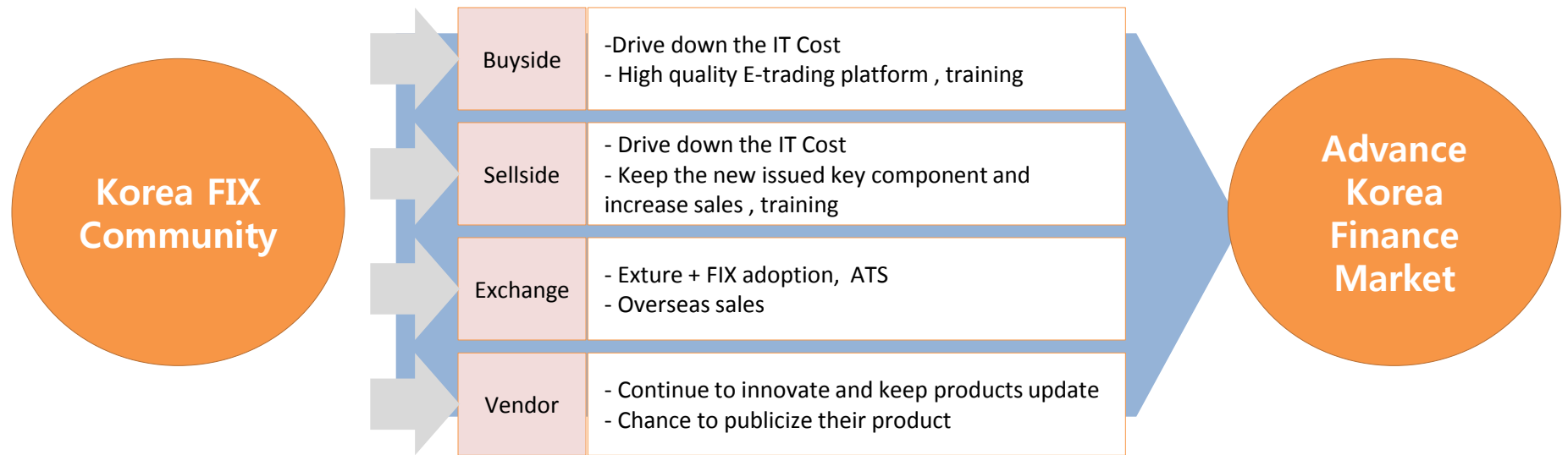
- **FIX protocol isn't the option but mandatory in Korea**



## Community Member and Benefit

Proposal: Setup Korea FIX Community

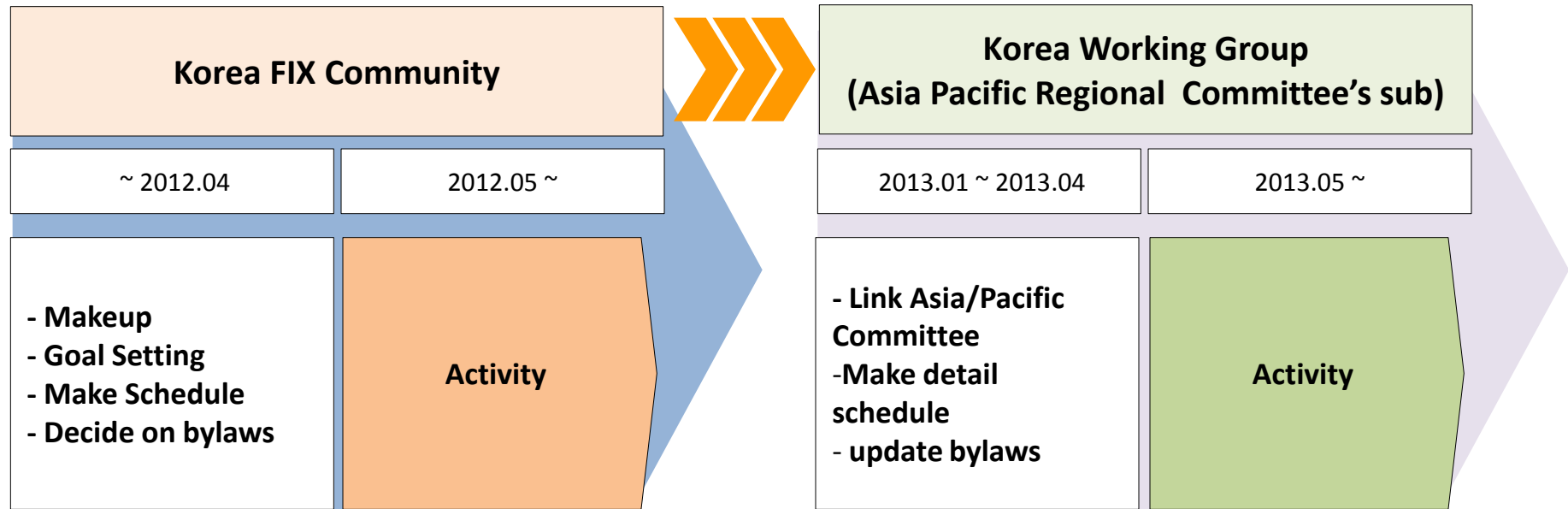
- **Community member**
  - Buyside : Pension, Asset Management, Investment advisory, Bank, Hedge fund
  - Sellside : All of Korea brokers
  - Exchange, ATS , Finance IT Vendor and company concerning FIX
  
- **Benefit**



## Roadmap

### Proposal: Setup Korea FIX Community

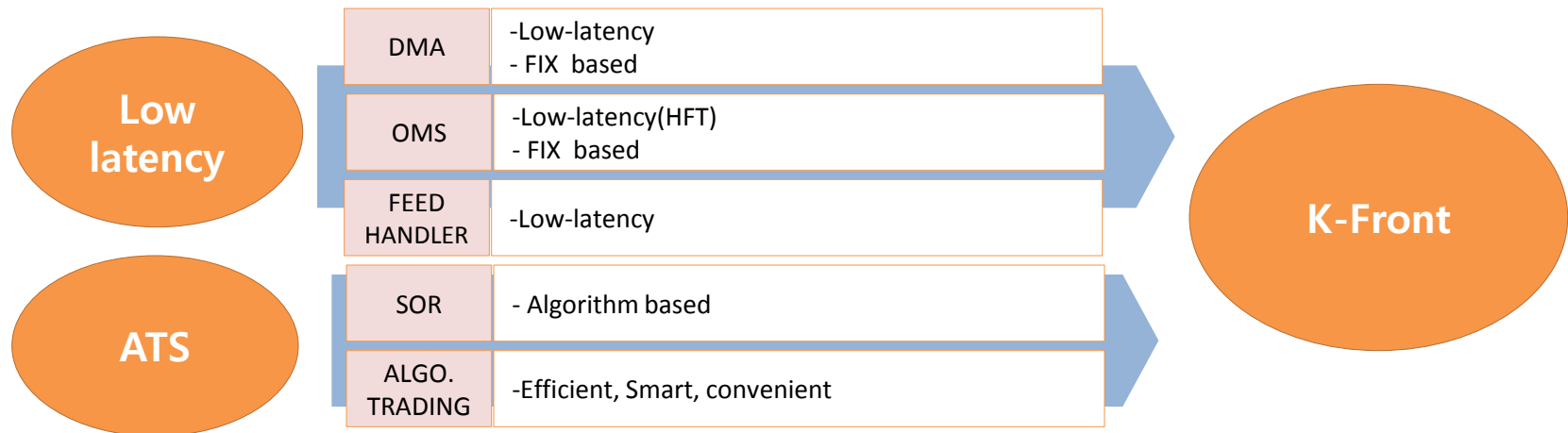
Setup Korea FIX community make steady “Korea FIX community” & activity,  
 Continue as “Korea Working Group” in the Asia/Pacific Regional Committee’s subcommittee



## Promise for Korea Finance IT advance

Proposal: Setup Korea FIX Community

- **Continuous support Korea Finance IT through FIX**
  - **Korea One Gateway** - STPHUB : provide the safe infrastructure through continuous improvement
  - Support buysides/sellsides E-trading
- **New attempt to upgrade the Korea FIX industry**
  - KOREA FIX Community
- **Upgrade solutions**
  - **Low-latency Aspect..** : Low-latency Based Feed handler, FIX-OMS & FIX-DMA
  - **ATS ISSUE ..** : SOR & Algo.Trading for sellside on Korea market







Thank you

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