



FISD 2010 – Thomson Reuters

SOR today and tomorrow

April 19, 2010

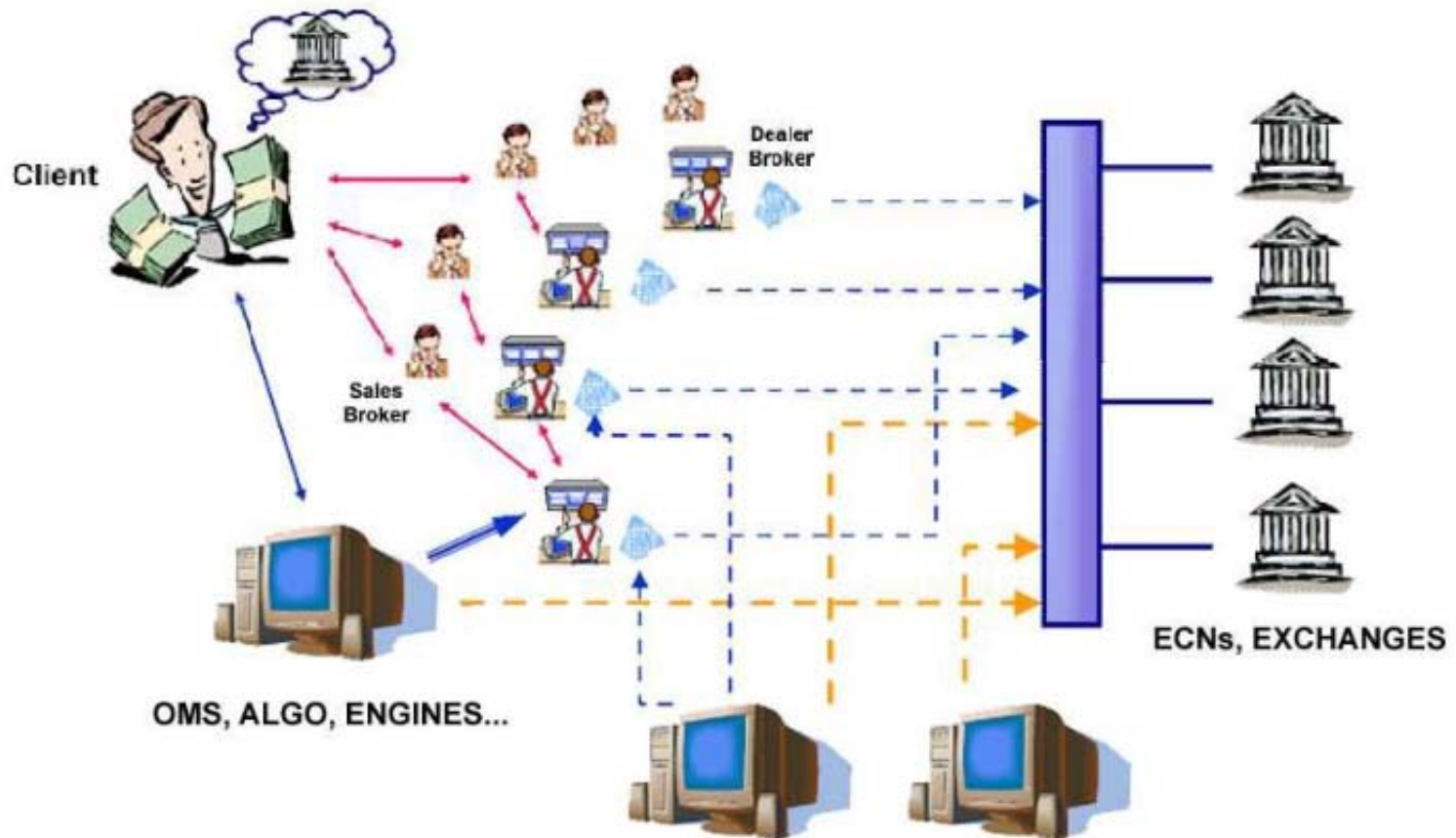
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Enterprise IMS Division
Thomson Reuters Markets KK

AGENDA

- Industry background
- SOR today
- SOR system outlook
- SOR tomorrow

Industry Background

Flows in presence



INDUSTRY BACKGROUND

Challenges

Fragmentation of liquidity

Growing number of liquidity providers with all their own rules

Best Execution

Prove best execution when orders have been executed over several venues in the form of child orders or partial fills

Cut Execution costs

Manage if not cut rising execution costs

Streamline the sales and trading desk

Automate the workflow

Fast time to market

Easy to deploy and modify – responsive to the market changes

Needs

Integration with order management connectivity to multiple venues

Open neutral platforms and networks

Automation and execution quality

Scalability and system resilience

Reduce technical complexity

High performance improving probability of execution

Flexible solution tailored to specific needs

SOR system

Connectivity

Aggregation

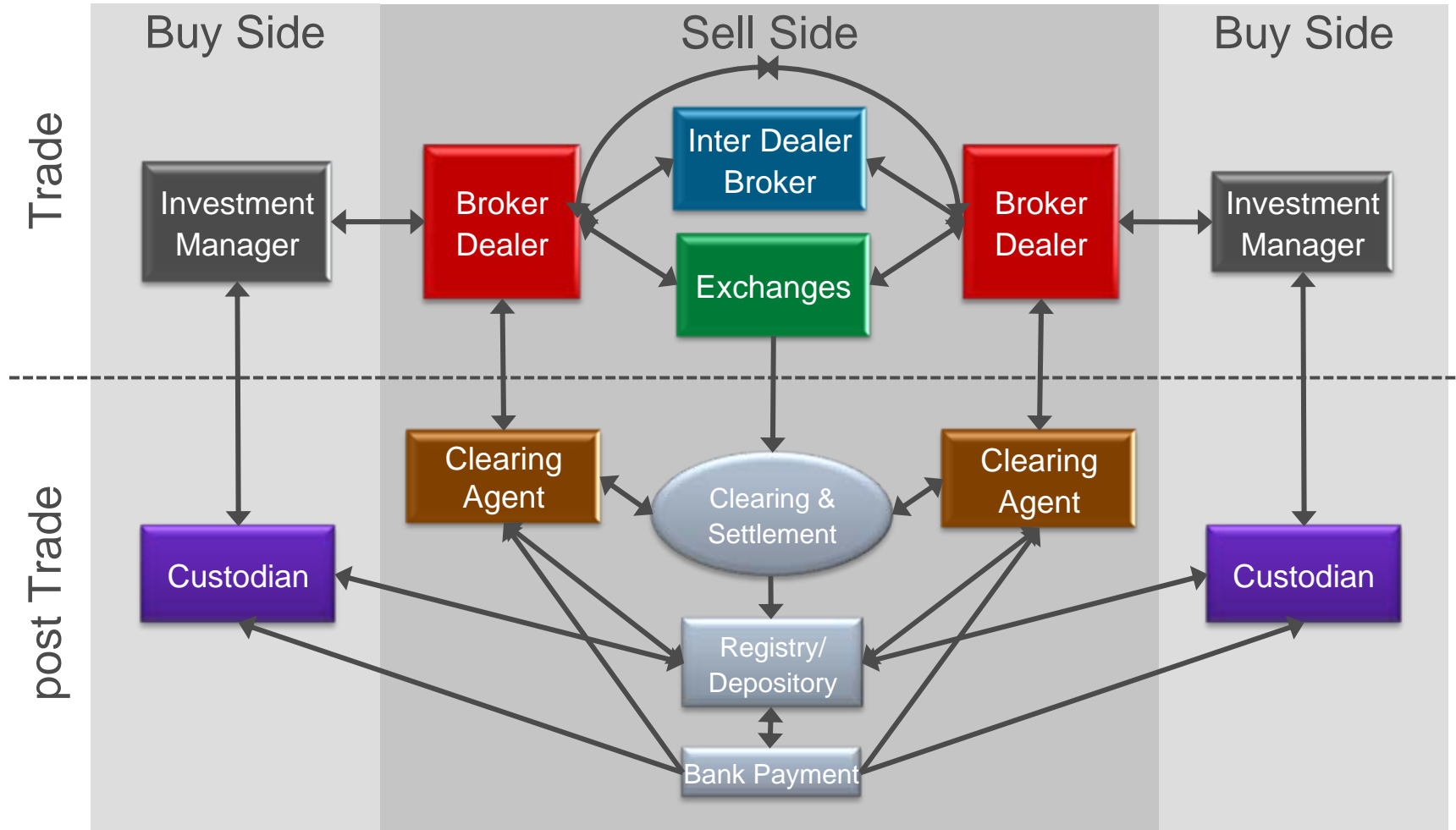
Peer-to-Peer trading

Cross-asset class

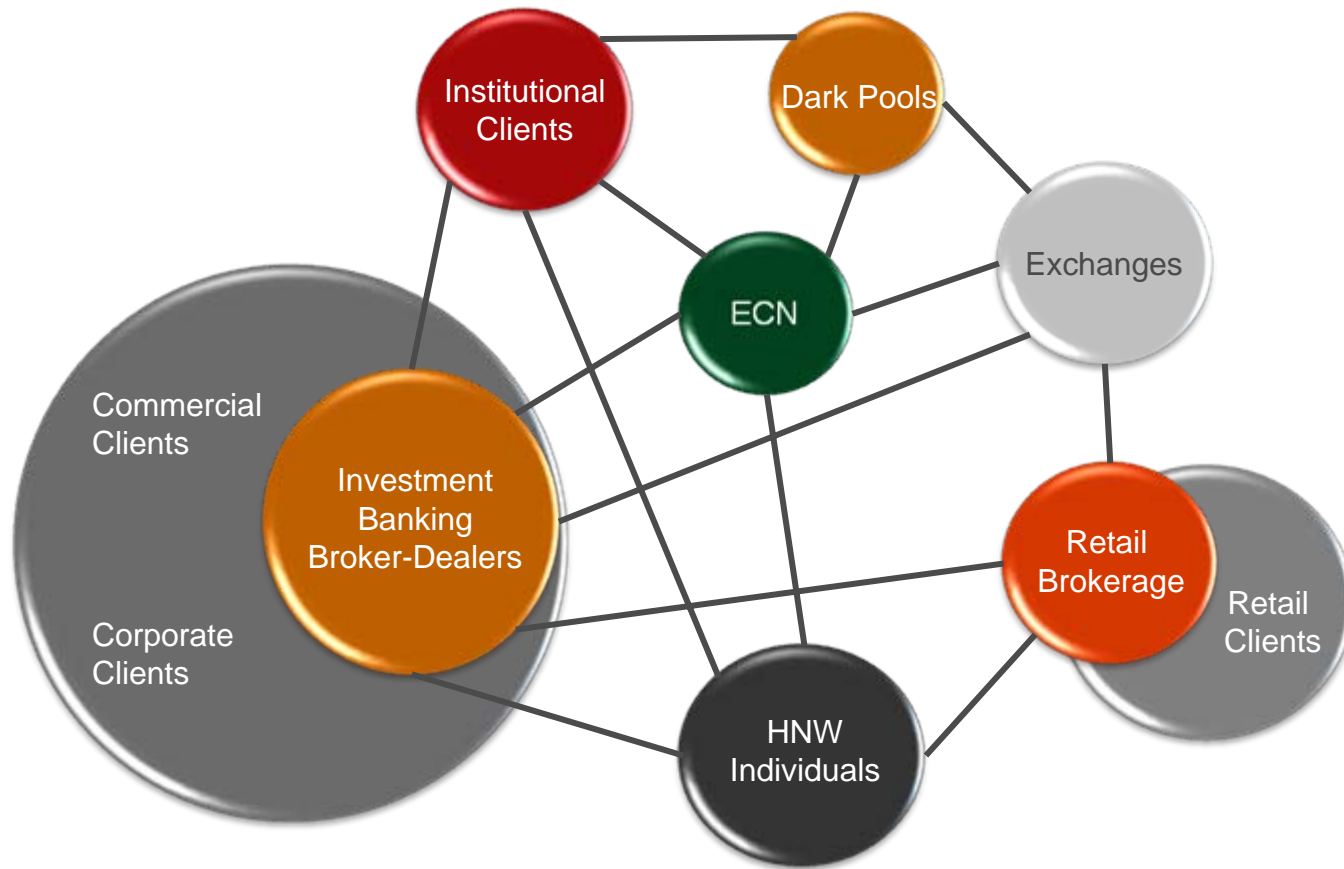
Low Latency

Lightweight solution

Traditional Trade Flow



Changing Market Place – Fragmentation



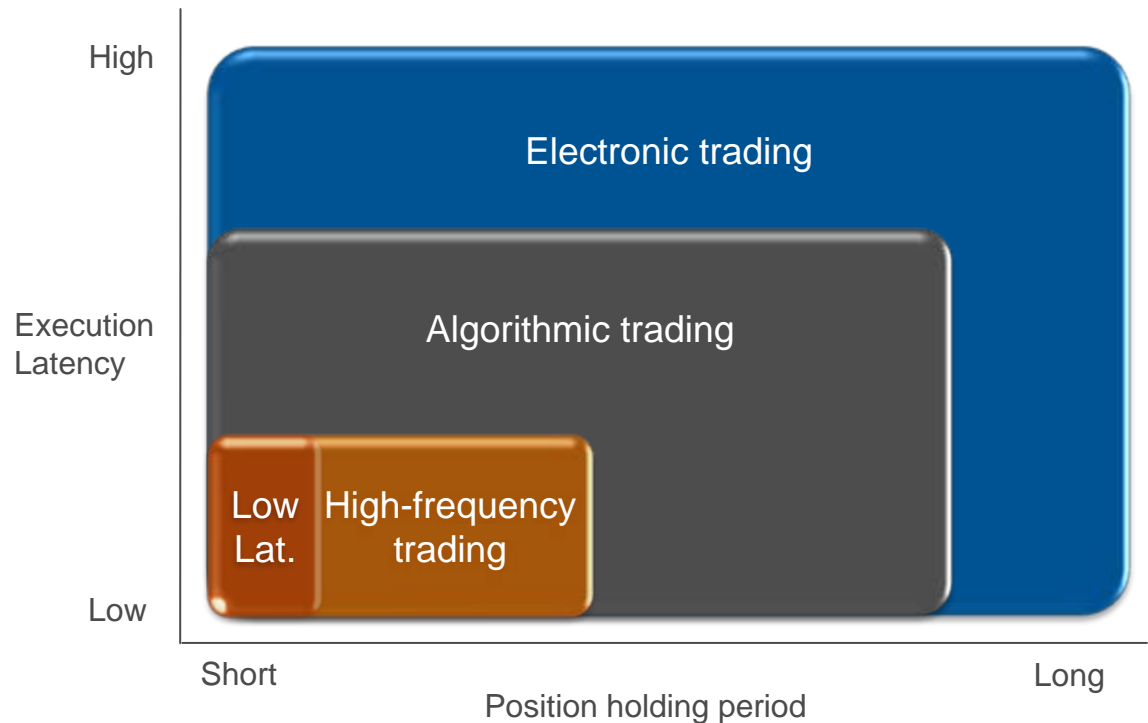
— Possible dealing routes

Electronic Trading

Indication of **Electronic** trading adoption by asset class

Asset Class	2010
Equity	98%
FX	78%
Options	85%
Futures	90%
Fixed Income	61%

(Source: Aite Group)

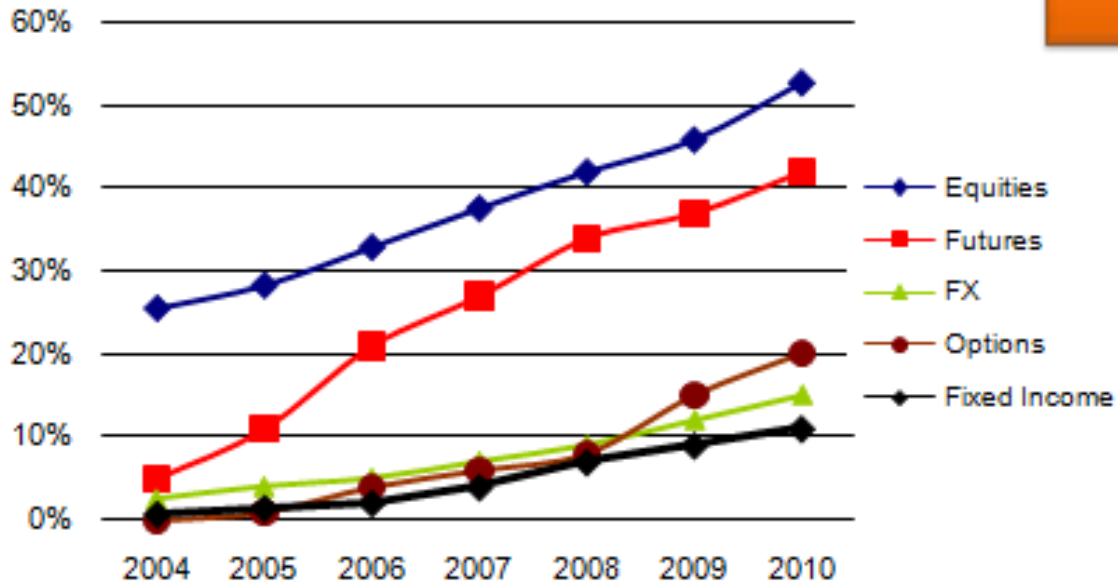


Trend towards trade automation

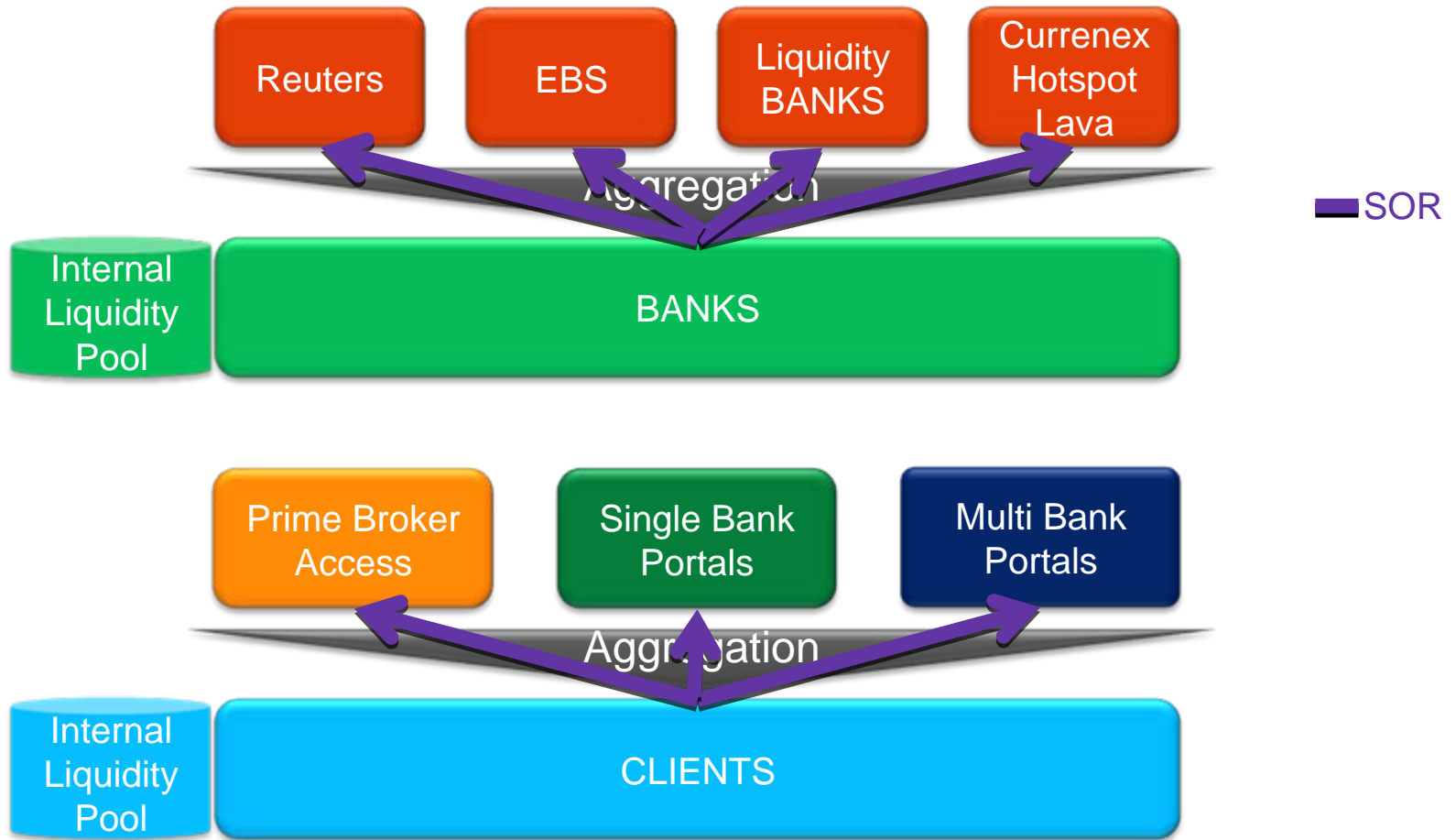
HFT in equities now approaching 70% of volumes by 10% of financial institutions

(Source: Aite Group)

Algorithmic Trading Adoption by Asset Class



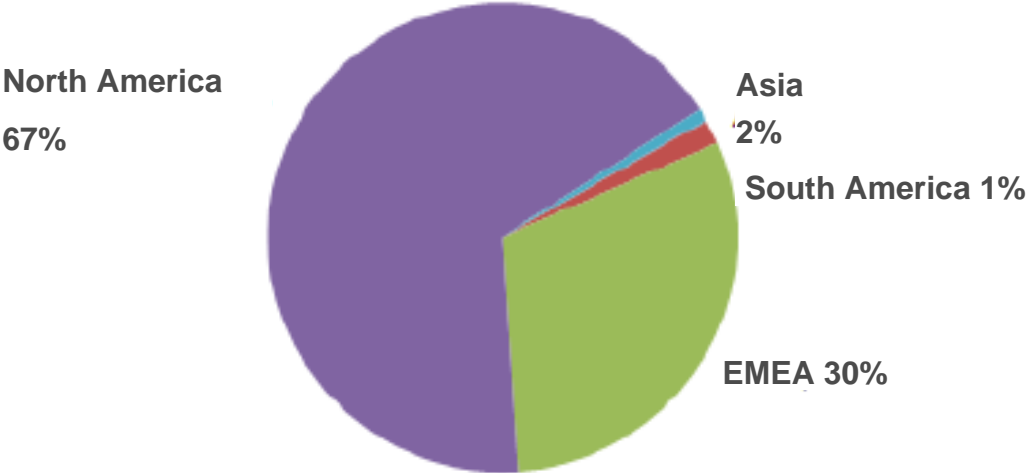
Simplified FX Trade Flow



Smart Order Routing today

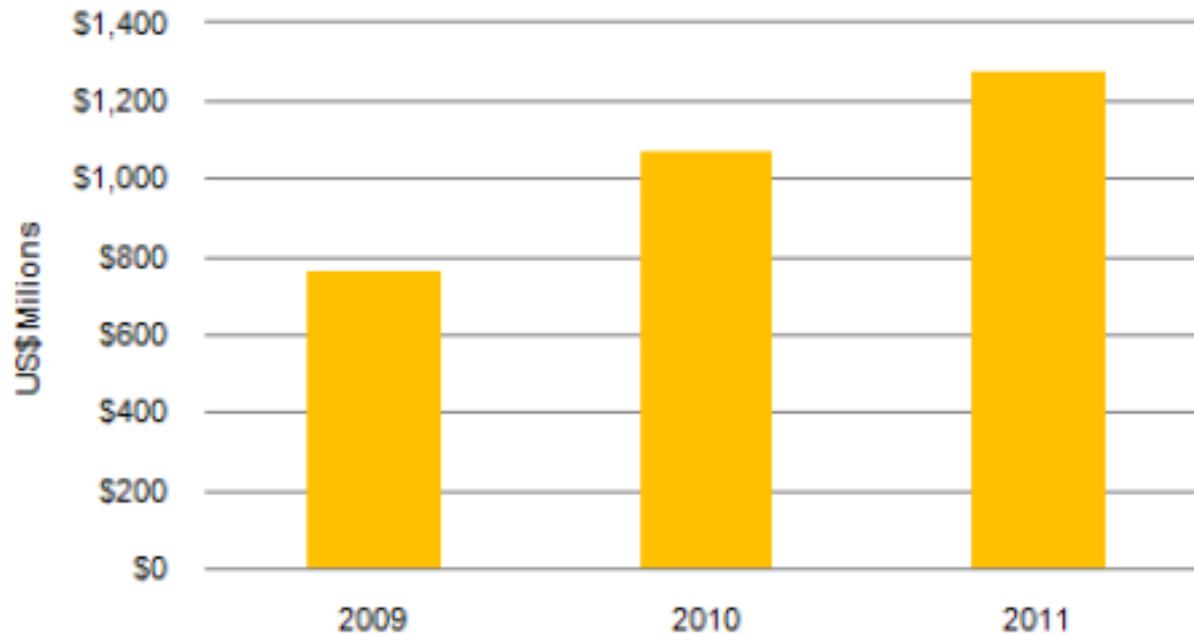
Where are Smart Order Router customers?

Aggregate Clients by Geography



Source: Vendor survey responses, Aite Group estimates

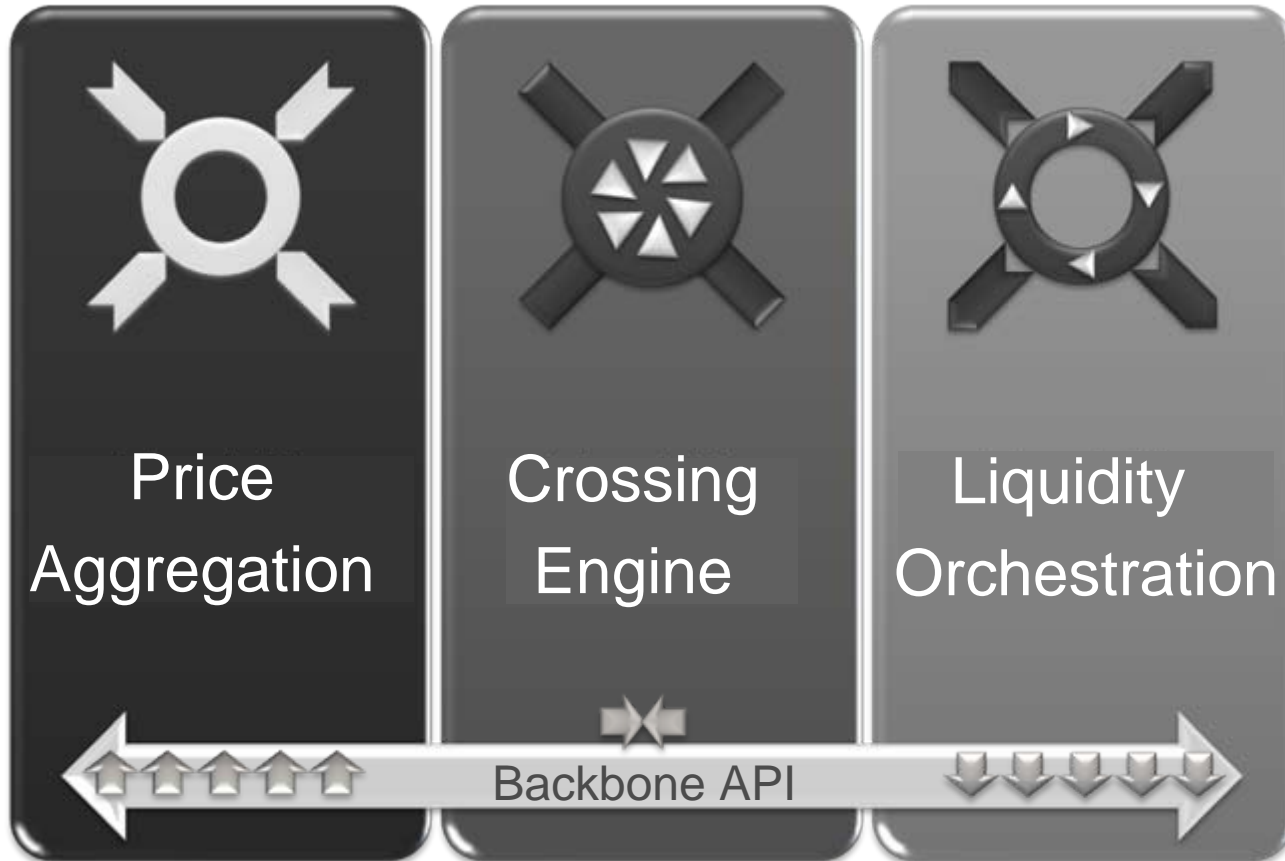
Spending for Smart Order Routing



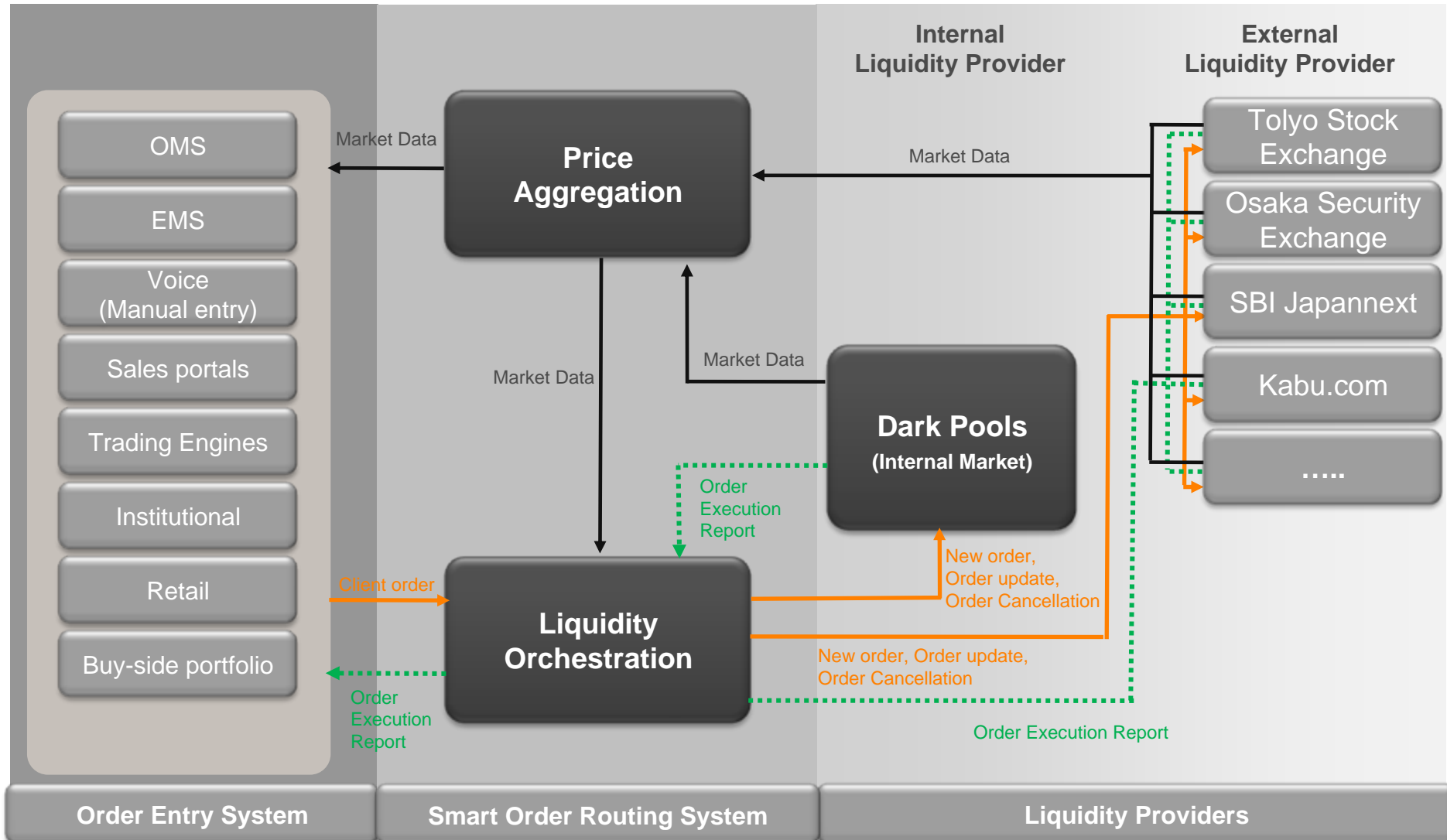
Source: Aite Group estimates

Smart Order Routing system outlook

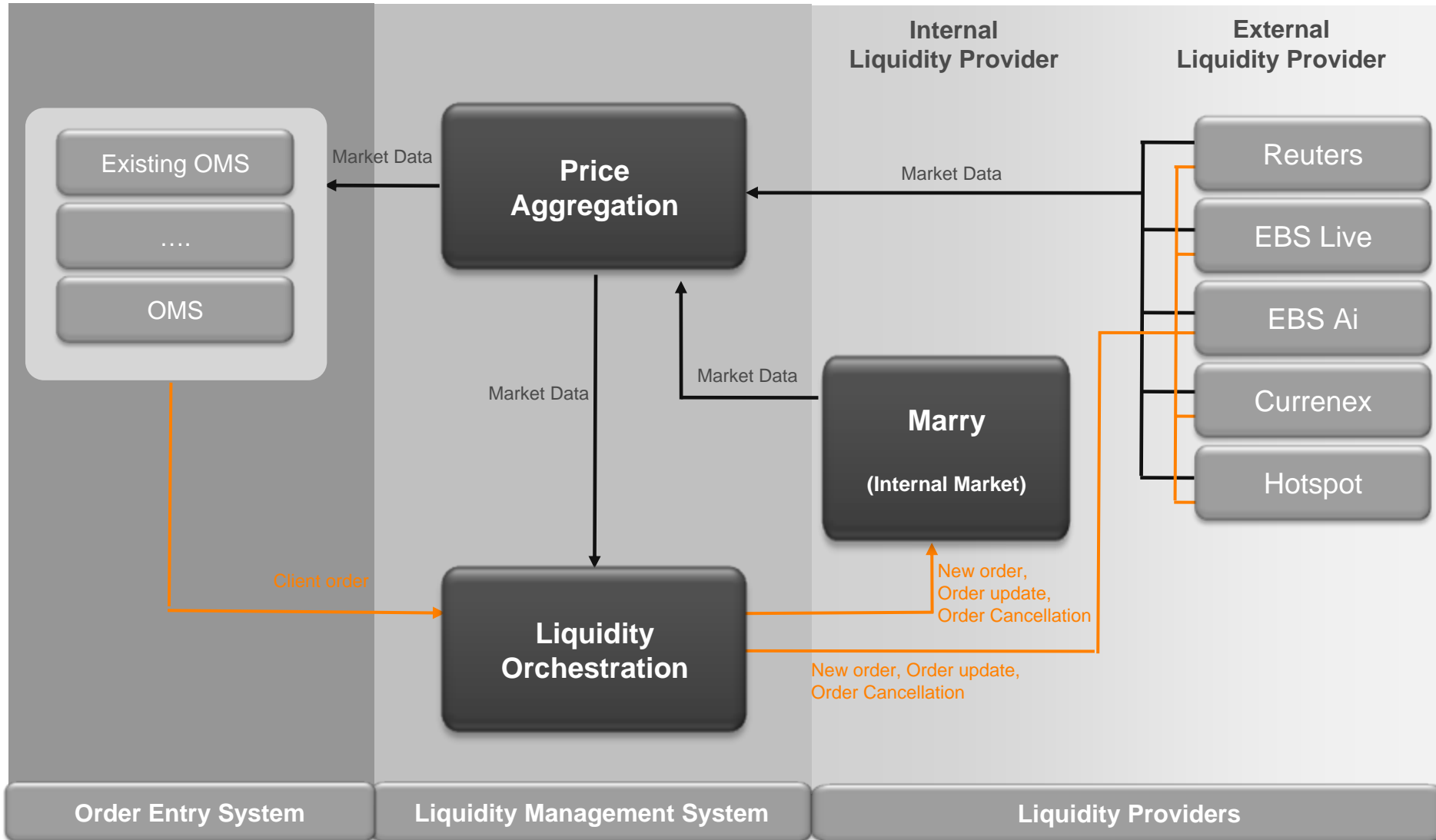
SOR Components



SOR For Equity Trading



SOR for FX trading



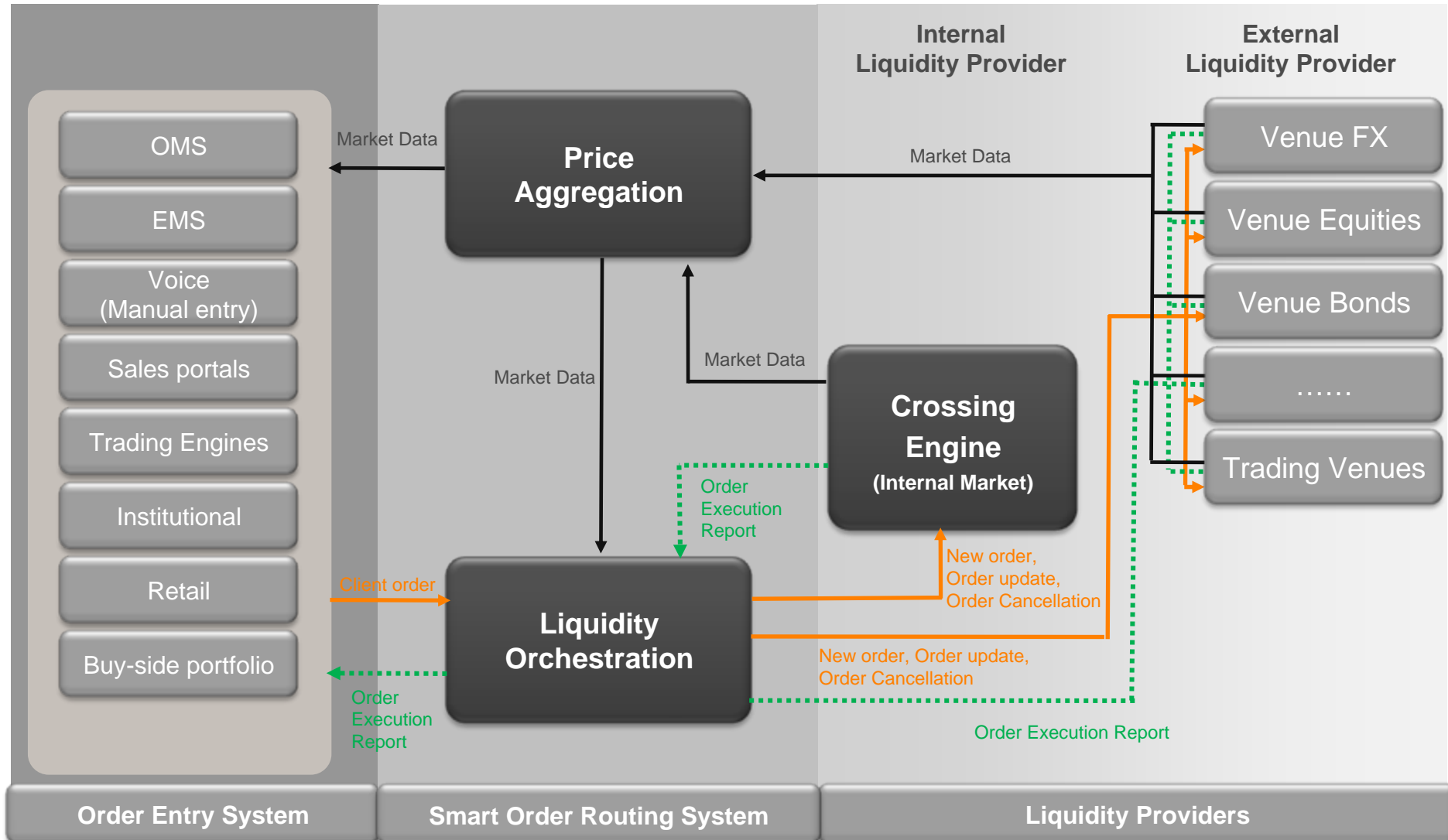
Smart Order Routing

tomorrow

Smart Order Routing - Future

- Product Diversification
- More sophisticated microstructure measurement
 - Latency monitoring tool
- Better Reporting
 - TCA
- More digest, More data
 - economic indicators, event indices
 - machine readable news
 - news sentiment score

SOR for Product Diversification



Machine Readable News

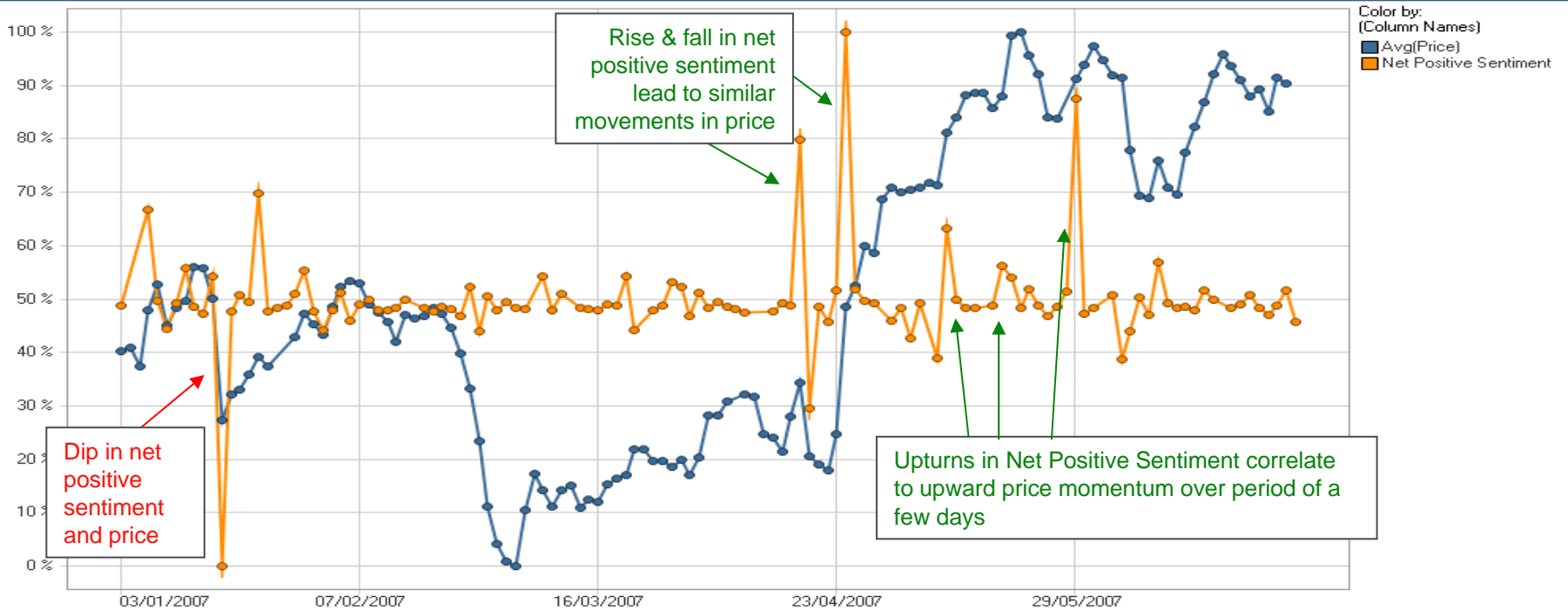
- News Sentiment Scores

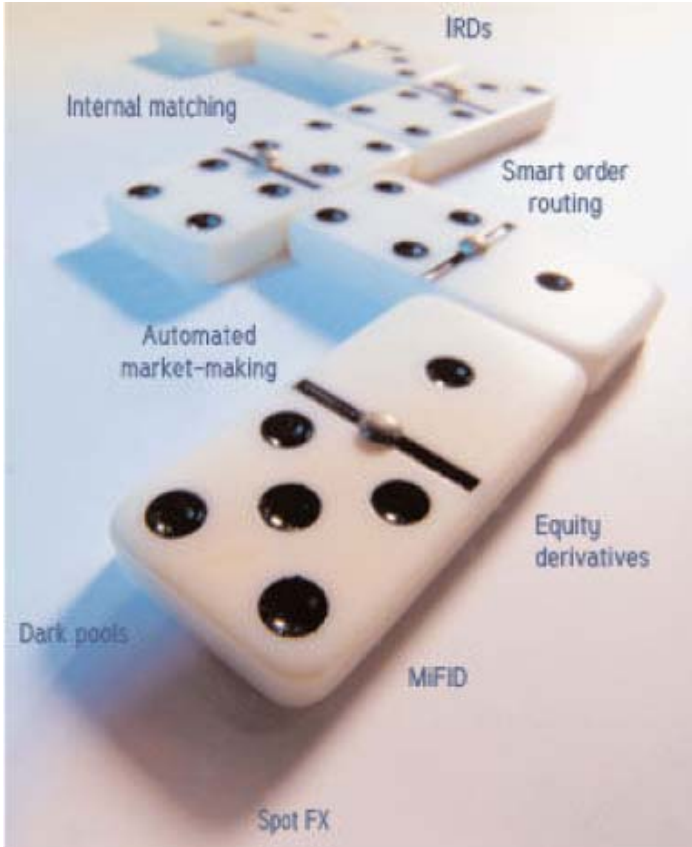
TIME/AMP	RIC	RELEVANCE	SENTIMENT	POSITIVE	NEUTRAL	NEGATIVE	LINKED COUNTS	ITEM TYPE	HEADLINE	TOPIC CODES
00:34:28.944	IBM.N	0.29	1	0.538	0.454	0.008	0;0;0;0;0	ARTICLE	Arrow to buy smaller rival for \$485 million	US WHO LEN RTRS MRG SFWR H
11:14:04.042	IBM.N	1	1	0.842	0.133	0.025	0;0;0;0;0	ALERT	UBS RAISES IBM <IBM.N> TO BUY FROM NEUTRAL - THEFLYONTHEW	RCH US CA LEN RTRS
11:16:55.812	IBM.N	1	1	0.850	0.119	0.031	1;1;1;1;1	ARTICLE	US RESEARCH NEWS-UBS raises IBM to buy - theflyonthewall.com	RCH US CA LEN RTRS
11:20:50.082	IBM.N	1	0	0.247	0.614	0.138	1;1;1;1;1	ARTICLE	RESEARCH ALERT-UBS upgrades IBM to buy - theflyonthewall.com	RCH DPR HDWR SFWR US LEN R'
12:22:43.689	IBM.N	1	1	0.842	0.133	0.025	0;0;0;0;0	ALERT	IBM <IBM.N> SHARES RISE 1.1 PCT TO \$98.50 BEFORE THE BELL AFTE	RCH US CA LEN RTRS
12:36:50.695	IBM.N	1	1	0.542	0.450	0.008	3;3;3;3;3	ARTICLE	Before the Bell - Bed Bath & Beyond, IBM rise early	DPR HDWR US STX HOT LEN RTR
12:49:19.943	IBM.N	0.28	0	0.213	0.609	0.178	3;3;3;3;3	APPEND	HEADLINE STOCKS - U.S. stocks to watch Jan 8	US STX FIN RESF RES BUS HOT L
14:59:02.943	IBM.N	1	1	0.701	0.164	0.135	1;1;1;1;1	ARTICLE	UPDATE 1-RESEARCH ALERT-UBS upgrades IBM to buy from neutral	US RCH DPR HDWR SFWR BUS LI
15:05:53.790	IBM.N	0.13	-1	0.056	0.125	0.819	1;1;1;1;1	ARTICLE	US RESEARCH NEWS-Credit Suisse recommends trading buy on GM	RCH US CA LEN RTRS
15:06:13.000	IBM.N	0.08	-1	0.056	0.125	0.819	2;2;2;2;2	APPEND	US RESEARCH NEWS-Credit Suisse recommends trading buy on GM	RCH US CA LEN RTRS
16:31:45.041	IBM.N	0.25	0	0.218	0.612	0.170	4;4;4;4;4	APPEND	HEADLINE STOCKS - U.S. stocks on the move on Jan 8	US STX FIN RESF RES BUS HOT L
16:31:55.631	IBM.N	0.25	0	0.218	0.612	0.170	6;6;6;6;6	APPEND	HEADLINE STOCKS - U.S. stocks on the move on Jan 8	US STX FIN RESF RES BUS HOT L
18:49:48.004	IBM.N	0.32	0	0.221	0.613	0.166	7;7;7;7;7	APPEND	HEADLINE STOCKS - U.S. stocks on the move on Jan 8	US STX FIN RESF RES BUS HOT L
19:18:14.726	IBM.N	0.20	-1	0.180	0.251	0.568	0;0;0;0;0	ARTICLE	UPDATE 1-Sears aims to drive sales with virtual showroom	RET US WWW LEN RTRS
20:09:19.547	IBM.N	0.34	1	0.830	0.128	0.042	0;0;0;0;0	ARTICLE	US STOCKS-Indexes higher; upgrades boost tech sector	US STX BUS MUNI FIN NEWS LEN
20:09:54.796	IBM.N	0.14	1	0.830	0.128	0.042	1;1;1;1;1	APPEND	US STOCKS-Indexes higher; upgrades boost tech sector	US STX BUS MUNI FIN NEWS LEN
04:09:34.780	IBM.N	1	1	0.512	0.382	0.107	0;0;0;0;0	ARTICLE	IBM appoints new Greater China CEO	CN ASIA ELI HK TW F EMRG LEN I
19:13:02.511	IBM.N	0.17	0	0.216	0.611	0.174	0;0;0;0;0	ARTICLE	CES-Visa, Nokia turn mobile phones into mobile wallets	WEU EUROPE WWW DE NORD US
19:13:59.476	IBM.N	0.17	0	0.216	0.611	0.174	1;1;1;1;1	APPEND	CES-Visa, Nokia turn mobile phones into mobile wallets	WEU EUROPE WWW DE NORD US
11:55:22.595	IBM.N	1	-1	0.188	0.112	0.700	0;0;1;1;1	ALERT	AG EDWARDS CUTS IBM <IBM.N> TO HOLD FROM BUY - THEFLYONTHT	RCH US DPR HDWR SFWR LEN R'
12:02:25.855	IBM.N	1	-1	0.137	0.217	0.645	1;1;3;3;3	ARTICLE	RESEARCH ALERT-AG Edwards cuts IBM to hold - theflyonthewall.com	RCH US DPR HDWR SFWR LEN R'
15:20:49.892	IBM.N	1	-1	0.311	0.145	0.544	1;1;3;3;3	ARTICLE	UPDATE 1-RESEARCH ALERT-AG Edwards downgrades IBM	US RCH DPR HDWR SFWR LEN R'
11:29:20.729	IBM.N	0.18	1	0.841	0.123	0.036	0;0;0;0;0	APPEND	FACTBOX-UK companies cut, close final-salary pensions	GB WEU EUROPE FUND FIN RTM F
12:57:47.150	IBM.N	1	1	0.552	0.441	0.007	0;0;0;0;0	ALERT	BANC OF AMERICA RAISES IBM <IBM.N> PRICE TARGET TO \$110 FROM	RCH DPR US LEN RTRS ENT HDW
13:24:15.667	IBM.N	1	1	0.565	0.342	0.093	3;3;5;7;7	ARTICLE	RESEARCH ALERT-BofA raises price targets on IBM, Apple, EMC	RCH DPR US LEN RTRS ENT HDW

- Positive, Negative, Neutral scores
- 41 metadata fields for each company scored in article

Impact of daily news sentiment on price

Overall Price, Daily Net Positive Sentiment Weighted by Relevance





Thank you