

waters

JANUARY 2008

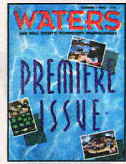
Our 15th Anniversary

The way we were and how we got here:
15 IT innovations and major developments
that reshaped our world

Industry Luminaries
Catching up with 15 of the brightest
Fast Forward
What's next on the horizon?
AFTAs 2007
Meet our annual award winners

TIMELINE

12 FIFTEEN YEARS OF WATERS



We look back at the technology and major events that brought us to where we are today, from the birth of the Web browser and FIX to the rise of the machines and the creation of the modern global market.

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- Consortium FIXes New Standard
- The Pipes, the Pipes Are Calling
- The Internet Changes Everything
- EMU Inspires Trepidation
- FX Settles in Real Time
- Y2K: Dire Straits Avoided
- STP and the Thwarted Move to T+1
- The Rise of the Machines
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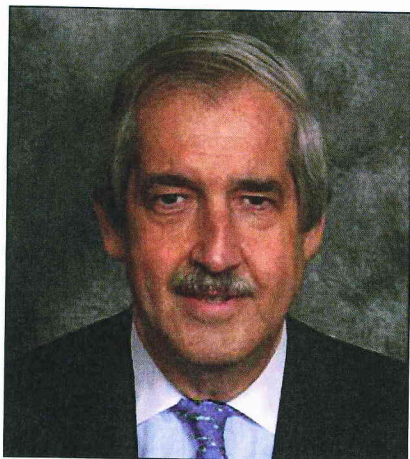


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Change will accelerate as technology becomes more complex.

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February 26, 2008
Westin Times Square,
New York City



Jim Leman

Jim Leman's 35 years on Wall Street have given him an insider's perspective on critical junctures in the growth of global capital markets.

He helped create arguably the most important industry messaging protocol, FIX—piloted in 1993 and live in 1995—which underwrites the massive explosion in trading volumes around the world. Originally built to streamline equity trading and processing, over the years, the FIX engine has moved across asset classes. In the early 1990s, he had to convince his management at Salomon Brothers why they should do anything that could help the competition. Fidelity,

“The good ol’ boy game is gone. You have to be multi-product; you have to be quant oriented and you’ve got to think mathematically.”

the 800-pound gorilla, was a good reason. After gaining his managing directors' approval, Leman had to evangelize the securities industry in North America, Europe and Asia.

But, back to his day job: Leman's sweet spot is analyzing trading processes and then designing and installing systems that automate the workflow. Along the way, he's had to design around the bottleneck between the new

front-office system and the old mainframe in the back. He has built and managed global teams to support proprietary and customer electronic trading and push uphill toward STP by wringing efficiencies from the post-trade process.

Leman believes that the capital markets business experienced a sea change with the advent of technology. “It introduced paperless trading and connectivity to the buy side, sell side and exchanges,” he says. “It fosters this fantastic transparency today where customers can access markets directly, get instant pricing information, and understand the status of their orders.”

Technology created the

capabilities to apply complex analytics and handle massive volumes with low latency that transcend geography and time, according to Leman.

Twenty years ago, few Wall Street firms had sophisticated technology. As broker-dealers adopted NYSE's Designated Order Turnaround (DOT) system, they offered these tools to their biggest institutional accounts. “If you walked into a big portfolio manager's office,

you'd see 10 different terminals, all speaking a different language,” recalls Leman. Rationalizing these systems led to the adoption of the Merrin order management system (OMS), but it was like Henry Ford offering cars in any color so long as it was black. “If you wanted an OMS, it was Merrin, Merrin or Merrin,” he says.

Along the way there were some amazing ideas and technologies that never made it. “Optimark, Bill Lupien's elegant dark pool concept, designed by mathematicians who grew up in anti-submarine warfare game theory, was too advanced for its time. The buy side was used to the sell side doing their analysis and execution,” Leman says. He cites Global Straight Through Processing Association as another great idea, but expectations were mismanaged. “The network wasn't ready, the tech bubble burst, people didn't want to spend money and again, the buy side blinked so the sell side pulled the plug,” he says. But, he adds, global pressure for risk and cost control will force the market to revisit this topic.

Going forward, Leman sees the pursuit of performance as the major driver in the adoption of new technologies by hedge funds, broker-dealers and exchanges. “Long-only managers are now embracing hedge

fund strategies to mimic their superior returns. Capturing enhanced alpha incorporates more derivatives trading, so more sophisticated technologies,” he says. Conversely, fund managers are “going after international markets because they're less efficient and have wider spreads and perhaps less sophisticated populations in terms of traders.”

Leman says that many challenges have yet to be met. “Technologists need to be key members of the business team. Their decision process should have three legs: Do I absolutely have to build this? Can I find it in the market or push a vendor to build it? Is this something I can outsource to somebody where they are not going to end up shooting me in the foot?”

The real problem, though, according to Leman, is “the people whom you've got to go sell these ideas to are the guys who are going to lose people, lose power and lose budget. Those are the guys who are going to fight it. Organizations that eradicate this mindset will have success; the ones that don't will regress.”

It's a new world, he says. “The good ol’ boy game is gone. You have to be multi-product; you have to be quant oriented and you've got to think mathematically.” ■