Institutional Investor

JULY/AUGUST 2011 WWW.INSTITUTIONALINVESTOR.COM

The 2011 Tech 50

This year's leading executives in financial technology hope to gain a competitive edge by catching the next wave of disruptive innovation.

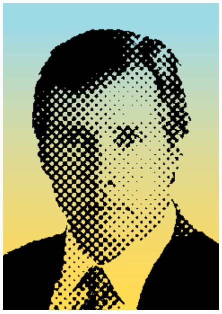
"SOME OF THE BEST THINGS ON the web are free," muses Lance Uggla, CEO of Markit Group. "When I look at how financial markets will use technology to transform their networks of participants, I think the word 'free' has to be included."

He is referring to the way Facebook and Google are free — and to the new commercial models they have spawned. The financial services industry is poised for its own Google-like revolution, says Uggla, who in ten years has built Markit into a global force in market information and transaction-processing services. No. 5 in this year's Tech 50, *Institutional Investor*'s annual ranking of financial technology leaders and innovators, Uggla says he spends 10 to 15 percent of his time "thinking and talking with others about a free strategy and how disruptive it would be to today's business model."

"Disruptive" is the operative word, and it is a thread running through the Tech 50. The idea harks back to *The Innovator's Dilemma*, a 1997 book by Harvard Business School professor Clayton Christensen that explained how long-entrenched, industry-leading companies can fail to anticipate "disruptive technologies" or seize the opportunities they present.

Today's financial services disrupters do not so much fear falling into obsolescence like Christensen's 20th-century case studies — such as Digital Equipment Corp., which was blindsided by the personal computer — as they are eager to make innovative leaps to gain competitive advantages. Taking the productivity and efficiency afforded by automation as a given, executives see technology in a more opportunistic light: as a tool for growth.

Disruption defines why Reto Francioni and Duncan Niederauer, the respective CEOs of Deutsche Börse and NYSE Euronext, jointly rank No. 1 on the Tech 50. Their agreement in February to merge and create the world's biggest exchange organization was itself a disruptive, even provoca-



26

Peter Bernard
Chief Risk Officer
D.E. Shaw & Co.
(24)

• With $16 billion in hedge fund assets and a total $19 billion in investment capital, ranking No. 21 in *Institutional Investor*'s Hedge Fund 100, D.E. Shaw & Co. continues the quantitative-systems-based investing tradition set by founder David Shaw in 1988. The computer scientist left day-to-day management in 2002 to work on a computational approach to curing cancer. A couple of New York City blocks away from his lab, at D.E. Shaw's new headquarters, chief risk officer Peter Bernard is focused on improvements in portfolio risk management and modeling. Bernard, 53, a former RiskMetrics Group CFO who joined the firm in 2006, says he is concerned that "the world is beginning to rely on a static library of stress tests — a potentially dangerous way to think about portfolio risk." He is developing technology for crisis scenarios using a flexible set of variables rather than rigidly defined events. Bernard is also taking a new approach to portfolio optimization, using adverse scenario testing to balance liquidity needs and alpha capture. On the horizon: an initiative that will automate the filtering of data to indicate the difference between temporary volatility and the start of a crisis.

---

tive, strategic stroke. Now they face the further test of making their deal pay off in ways that few large-scale mergers do.

It falls to an executive team of seasoned technologists — including, besides Francioni and Niederauer, Deutsche Börse derivatives chief Andreas Preuss and NYSE president (and IBM Corp. veteran) Dominique Cerutti — not only to accomplish the essential systems integrations but also to develop and deploy disruptive, business-transforming, revenue-enhancing technology services as their company becomes bigger and more complex.

If NYSE's June announcement of the Capital Markets Community Platform — a cloud computing utility touted as a financial services industry first — is any indication, then they may very well be able to keep that focus as the merger moves forward.

Two other CEOs in the top ten, Jeffrey Sprecher of IntercontinentalExchange and Robert Greifeld of Nasdaq OMX Group, were disruptive in another sense when they joined forces in March to try to derail Deutsche Börse's deal with NYSE Euronext by making a hostile bid for the latter. Sprecher and Greifeld eventually had to withdraw for antitrust reasons, but technology was central to the case they tried to make. They asserted that their own postmerger track records for efficiency and innovation were superior to those of Börse and NYSE. Indeed, Sprecher could be speaking for any number of the Tech 50 in stressing ICE's "culture of enabling change" and "unwavering dedication to product innovation, technological advancement, customer service and transparent markets."

The influence of Facebook and Google is evident not only at Markit, which in May introduced an investment research app for the Apple iPad in partnership with Deutsche Bank, but also in mobile and social network applications for mass consumption championed by other Tech 50 honorees (Bank of America Corp.'s Catherine Bessant, No. 14; Cortal Consors' Olivier Le Grand, No. 13; and StockTwits' Howard Lindzon, No. 46).

Thomson Reuters (Jon Robson, No. 9) and Bloomberg (Shawn Edwards, No. 15) — whose traditional, subscription-based publishing businesses, Markit's Uggla believes, are vulnerable to a free platform model — are hardly standing idle. Both are transforming their technology architectures to look more like openly accessible clouds. Thomson Reuters enterprise president Robson, who likens his Elektron network to an app store, says, "We really had to be disruptive to our own model."

Avid Modjtabai (No. 10), Wells Fargo & Co.'s head of technology and operations, views innovation as an extension of everyday problem solving. The motivation is never "technology for technology's sake," she says — a conviction also voiced by Stephen Scullen (No. 6), Fidelity Investments' president of corporate operations. "We pride ourselves on being a firm that is innovative and disruptive to the way things are done in the financial services world," says Scullen, but always with the aim of "making things easier for customers, improving their experience."

The Tech 50 ranking, identifying leading executives, system developers, entrepreneurs and others at the forefront of change and innovation in financial technology, is compiled by the editors and staff of *Institutional Investor*, with nominations and other input from industry experts. Four primary sets of attributes were evaluated: experience and contributions over the course of a career; scope and complexity of responsibilities; influence and leadership inside and outside one's organization; and pure technological innovation or achievement. Of the 50 entries, 24 return from last year's Tech 40; the rest are designated "PNR" (previously not ranked).