The 2015 Tech 50

Racers to the Edge

The global financial technology elite sets itself apart by understanding the strategic and societal implications of high-tech advances and pushing innovation at Silicon Valley–like speed.

GROUNDED AS IT IS IN INFORmation and money — and information about money — financial services is, was and always will be a technology business. "Good information received in a timely fashion" defined sound banking, the late Citibank chairman Walter Wriston said more than 30 years ago.

But money, banking and capital markets have come a long way from what they were in Wriston's time, or even a year ago, because technology is advancing so quickly and changing industry and society as it goes.

That is the day-to-day reality for the Tech 50, the visionaries and innovators on *Institutional Investor*'s annual ranking of financial technology leaders. What sets these executives apart goes beyond their considerable understanding of software applications and system performance as components of corporate strategy. These leaders think big about the global or macro implications of technology-driven change — from cloud computing and machine learning to emerging sensations like the Apple Watch, cryptocurrencies and the Internet of Things. They relate such developments to their organizations' and customers' on-the-ground challenges and opportunities; set budget, investment and R&D priorities; and come up with solutions, to use the technological term of art.

And they put a premium on speed and agility. "It's all about speed to innovate," says Robert Alexander (No. 24), chief information officer of Capital One Financial Corp.

Intercontinental Exchange chairman and CEO Jeffrey Sprecher, repeating in the No. 1 position, brought his company from nowhere to the top of the global exchange world in part because, he says, "technology enabled us to scale quickly." It also can fail. ICE's three-and-a-half-hour outage on July 8 was only the latest to affect a major market platform — and demonstrate the importance of two other differentiating qualities: resiliency and recovery.

Catherine Bessant (No. 2), global technology and operations executive at Bank of America Corp., frets that the technology world at large is "moving at the speed of the consumer, not the speed of the enterprise." The answer? "The best and brightest talent." Bessant believes that "in conjunction with advanced-state thinking, financial services is magnetic for tech people." But that means competing against Apple, Google and other name brands.

The Tech 50 ranking was compiled by *Institutional Investor* editors and staff, with nominations and input from industry participants and experts. Four primary sets of attributes were evaluated: achievements and contributions over the course of a career; scope and complexity of responsibilities; influence and leadership inside and outside the organization; and pure technological innovation. The top ten appear in the following pages, and full profiles for all 50 can be viewed online at iim.ag/tech50.

Of the 50 entries, 36 return from last year. The returnees' 2014 ranks are shown; and the rest are designated "PNR" (previously not ranked).

THE 2015 TECH 50: NEIL KATZ

The D.E. Shaw managing director debuts at No. 20 on this year's Tech 50 ranking.

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NEIL KATZ
Managing Director
D.E. SHAW & CO.

PNR

When Neil Katz graduated from Stanford University in 1994 with a BS in electrical engineering and a BA in quantitative economics, he had every intention of going for a master's in computer science and then applying to a Ph.D. program. Then he got a letter from D.E. Shaw & Co. inviting him to New York for an interview. Katz didn't know much about the hedge fund firm, which had been founded by computer scientist and Stanford alum David Shaw six years earlier, but he couldn't pass up a free trip to the Big Apple. "All these senior people met with me, and I was really impressed because they were clearly very smart," says Katz, who learned to hack as a kid on an Atari 400 home computer. "As a double major I was interested in both finance and technology, and this was a firm that was at the intersection of both, so that was attractive to me." Katz joined the then-$350 million-in-assets D.E. Shaw as a junior programmer and operations person in its U.S. equities trading group. Two decades later, at 43, he is still with the firm — which now manages $36 billion in alternative and long-only investment strategies — and oversees the hardware and software at the heart of its trading systems and information technology infrastructure. A key to D.E. Shaw's success is its culture, which emphasizes creativity and values the contributions of technologists, quants and traders alike, Katz says. By working closely with the investment staff, Katz's team of more than 250 technologists focuses on "building transformative tools" that enable the firm's researchers to test their investment ideas and trading algorithms using the trillion data events that D.E. Shaw collects daily. "Our commitment to building these tools — which have transformed the way we provide, process and visualize large volumes of data — means that our researchers have been able to run experiments more quickly and get forecasts into production faster than ever," he adds.

THE BEST OF THE REST: NOS. 11-50*

	NAME	TITLE	FIRM
11	David Craig	President, Financial and Risk	Thomson Reuters
12	Daniel Coleman	CEO	KCG Holdings
13	Michael Spencer	CEO	ICAP
14	Michael Bodson	President and CEO	Depository Trust & Clearing Corp.
15	Charles Li	CEO	Hong Kong Exchanges and Clearing
16	Chris Concannon	President and CEO	BATS Global Markets
17	Christopher Perretta	CIO	State Street Corp.
18	Antoine Shagoury	COO	London Stock Exchange Group
19	Kevin Rhein	CIO	Wells Fargo & Co.
20	Neil Katz	Managing Director	D.E. Shaw & Co.
21	Lee Olesky	CEO	Tradeweb Markets
22	Richard McVey	Chairman and CEO	MarketAxess Holdings
23	Seth Merrin	CEO	Liquidnet Holdings
24	Robert Alexander	CIO	Capital One Financial Corp.
25	Frank Bisignano	Chairman and CEO	First Data Corp.
26	John Marcante	Head, Information Technology Division	Vanguard Group
27	Joseph Squeri	CIO	Citadel
28	Lou Eccleston	CEO	TMX Group
29	Claude Honegger	Co-CIO	Credit Suisse
30	Chris Corrado	CIO	MSCI
31	David Gledhill	Head, Group Technology and Operations	DBS Bank
32	John Bates	Chief Marketing Officer	Software AG
33	Michael Cooper	CTO	BT Radianz
34	Gary Scholten	CIO	Principal Financial Group
35	Sunil Hirani	CEO	trueEX Group
36	Hauke Stars	Head, Information Technology, Market Data and Services	Deutsche Börse
37	Brian Conlon	CEO	First Derivatives
38	Jim Minnick	CEO	eVestment
39	Lars Seier Christensen & Kim Fournais	Co-CEOs	Saxo Bank
40	Tyler Kim	CIO	MaplesFS
41	Jim McGuire	CIO	Charles Schwab Corp.
42	Steven O'Hanlon	President and CEO	Numerix
43	Sebastián Ceria	CEO	Axioma
44	Yasuki Okai	President	NRI Holdings America
45	Stephane Dubois	CEO	Xignite
46	Mazy Dar	CEO	OpenFin
47	Brian Sentance	CEO	Xenomorph Software
48	Mas Nakachi	CEO	OpenGamma
49	John Lehner	CEO	BNY Mellon Technology Solutions Group
50	Jock Percy	CEO	Perseus

*Go to iim.ag/tech50 for full profiles.