



2019 FINRA RegTech Conference

January 17 | New York, NY

Welcome Remarks
Thursday, January 17
8:30 a.m. – 8:35 a.m.

Speaker: Haimera Workie
Senior Director
FINRA Emerging Regulatory Issues

Speaker Biography:

Haimera Workie is Senior Director responsible for heading up FINRA's Office of Emerging Regulatory Issues, which focuses on analyzing new and emerging risks and trends related to the securities market. Previously, Mr. Workie served as Deputy Associate Director in the Division of Trading and Markets at the U.S. Securities and Exchange Commission. In this capacity, Mr. Workie was tasked with developing a variety of Dodd-Frank Act related rulemakings, supervising policy matters related to market intermediaries and financial market utilities, and representing the Commission before several international standard setting bodies. Mr. Workie also previously served as Counsel to Commission Chair Mary Schapiro. Prior to joining the Commission, he was an associate at the law firm of Skadden, Arps, Slate, Meagher & Flom, with a practice focusing on corporate law. He is a graduate of the Massachusetts Institute of Technology (B.S., M.S.) and Harvard Law School (J.D.).

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Welcome Remarks



Panelist

■ Speaker

- **Haimera Workie, Senior Director, FINRA Emerging Regulatory Issues**



2019 FINRA RegTech Conference

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Technology Tools for RegTech

Thursday, January 17

8:35 a.m. – 9:35 a.m.

Join industry experts as they discuss how they leverage technology to remain competitive and compliant with regulatory requirements. During this session, panelists discuss key innovative technologies that are transforming compliance functions including cloud storage, blockchain, big data analytics and artificial intelligence. Panelists also identify unique opportunities to enhance compliance efficiency and efficacy, and the potential regulatory and implementation challenges these tools may pose.

Moderator: Kavita Jain
Director
FINRA Emerging Regulatory Issues

Panelists: Jo Ann Barefoot
Chief Executive Officer
Barefoot Innovation Group

Catherine Makstenieks
Managing Director and Chief Compliance Officer
Deloitte Corporate Finance LLC

David Shrier
Lecturer
MIT Media Lab

Technology Tools for RegTech Panelist Bios:

Moderator:

Kavita Jain is Director in the Office of Emerging Regulatory Issues within FINRA's Department of Risk and Strategy. In this role, she assists the Office in identifying and analyzing new and emerging risks and trends related to the securities industry, and developing strategic responses to potential issues. Some examples of current areas of her work include FinTech, blockchain technology, artificial intelligence, RegTech and online capital-raising platforms. During her tenure at FINRA (previously NASD), Ms. Jain has served in key positions in the Offices of Emerging Regulatory Issues, Finance and Strategic Planning. Ms. Jain has an M.B.A. from the University of Southern New Hampshire and a CRCP™ Certification from the FINRA Institute at Wharton.

Panelists:

Jo Ann Barefoot is CEO of Barefoot Innovation Group, Cofounder of Hummingbird Regtech, Senior Advisor to the Omidyar Network, and host of the podcast show Barefoot Innovation. A noted advocate of "regulation innovation," Ms. Barefoot is Senior Fellow Emerita at the Harvard Kennedy School Center for Business & Government and is writing a book on financial innovation and regulation. She has been Deputy Comptroller of the Currency, partner at KPMG, Co-Chairman of Trelia Risk Advisors, and staff member at the U.S. Senate Banking Committee. She's an angel investor, serves on the board of Oportun, and advises financial companies and governments worldwide. She serves on the fintech advisory committee for FINRA, is an Executive Board Member of the International RegTech Association (IRTA), and a member of the Milken Institute U.S. FinTech Advisory Committee. Ms. Barefoot chairs the boards of the Center for Financial Services Innovation and FinRegLab and previously served on the CFPB's Consumer Advisory Board. Ms. Barefoot has published nearly 200 articles and is a popular keynote speaker, addressing thousands of people annually throughout the world.

Katie Makstenieks is Managing Director with Deloitte Transactions & Business Analytics and the Chief Compliance Officer (CCO) of Deloitte Corporate Finance LLC. Ms. Makstenieks has nearly 20 years of compliance experience in the financial services industry. She is currently attending MIT and pursuing an MBA, along with a certification in Business Analytics. She is an officer of the MIT FinTech Club and helps coordinate hackathons and other events throughout the year. She also belongs to the MIT Blockchain Club and Sloan Women in Management (SWIM). Her undergraduate degrees are in Economics and Political Science. Ms. Makstenieks has broad knowledge of FINRA, SEC, and FCA rules, as well as substantial international compliance experience. She served as the CCO for the Global Electronic Trading Corporation (a high frequency algorithmic trading firm) and worked as the Director of Equities Market Regulation for NYSE Arca (now part of FINRA). Prior to joining Deloitte in 2016, she spent nine years serving as the Global Head of Compliance for Duff & Phelps. In this capacity she oversaw compliance for multiple FINRA registered broker-dealers in the U.S., an FCA regulated business with branch offices in Europe, and other regulated businesses in Europe. Alongside managing regulatory compliance, she also built the firm's global anti-bribery program, data privacy program, and records management program. Ms. Makstenieks also served a four year term on the Securities Industry Regulatory Council from 2015 – 2018, during which she served as the Finance Chair, Vice Chair, and mostly recently Council Chair. She also served for three years on an Advisory Board for Charles Schwab prior to joining Deloitte. She is a frequent speaker at conferences and events, and currently holds the FINRA Series 7, 79, 99, and 24 licenses.

David Shrier is a globally recognized authority on financial innovation, who works with corporations and governments to generate economic expansion. He specializes in helping established organizations to build new revenue and new markets, having developed \$8.5 billion of growth opportunities with C-suite executives for Dun & Bradstreet, Wolters Kluwer, Ernst & Young, The Massachusetts Institute of Technology, GE/NBC, The Walt Disney Company, AOL Verizon, and Starwood, as well as private equity and VC funds. He has led a number of private equity and venture capital-backed companies as CEO, CFO or COO, in either interim or full-time capacities. In addition to his corporate experience, Mr. Shrier leads the University of Oxford's online programmes [Oxford Fintech](#) and [Oxford Blockchain Strategy](#), as well as MIT's Future Commerce (the first graduate fintech class in North America), all of which he created, driving entrepreneurial action in over 100 countries to build the new financial ecosystem. He has published multiple books on fintech, blockchain and cybersecurity. Mr. Shrier is the CEO of Distilled Analytics, a VC-backed AI biometrics software company that builds better identity profiles for financial institutions to help with credit, fraud, and payments; Vice Chairman of

Endor, a blockchain-enabled crowd intelligence platform; and Chairman of Riff Learning, an AI-driven collaboration technology platform provider. His current academic appointments include Associate Fellow with the Saïd Business School, University of Oxford; Lecturer at the MIT Media Lab; and Fellow with the Payne Institute at the Colorado School of Mines. He presently counsels Millennium Advisors, a middle market \$120 million revenue credit liquidity provider, on growth strategy, corporate culture, and technology trends. He previously has advised the Government of Dubai on blockchain and digital identity; the OECD, on blockchain policy and standards; Ripple, a blockchain cross-border payments company, on regulatory strategy; and the European Commission on commercializing innovation with a focus on digital technology. Mr. Shrier is presently a member of the FinTech Industry Committee for FINRA, the U.S. securities industry's self-regulatory body; and on the Fintech Trade & Investment Steering Board for the UK Government's Department of International Trade. He also informally engages with the European Parliament, European Commission, OECD, Bank of England, FCA, SEC, US Treasury, and FDIC on innovation, cybersecurity, digital identity, blockchain, and AI. Mr. Shrier is on the advisory board of WorldQuant University, a program offering a totally-free, accredited, online Master's degree in financial engineering. Mr. Shrier and MIT Professor Alex "Sandy" Pentland have published books including *Frontiers of Financial Technology*, *New Solutions for Cybersecurity*, and *Trust::Data*. The European Parliament and European Commission have asked him to author a chapter on the distributed data economy in their book *Disintermediation Economics* (2019, Palgrave Macmillan). Mr. Shrier is a *Forbes* contributor, has been published in *Newsweek* and *CNBC.com*, and also co-edits, together with Professor Pentland, the Connection Science imprint of MIT Press. He was named 2018 Global Fintech Person of the Year by Fintech Galaxy, and listed on One World Identity's Top 100 People for 2017. Mr. Shrier was granted a Sc.B. from Brown University in Biology and Theatre, and worked professionally as a dramaturg and director after college.



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Technology Tools for RegTech

Panelists


■ Moderator

- **Kavita Jain, Director, FINRA Emerging Regulatory Issues**

■ Panelists

- **Jo Ann Barefoot, Chief Executive Officer, Barefoot Innovation Group**
- **Catherine Makstenieks, Managing Director and Chief Compliance Officer, Deloitte Corporate Finance LLC**
- **David Shrier, Lecturer, MIT Media Lab**

To Access Polling

- Under the “Schedule” icon on the home screen,
- Select the day,
- Choose the Technology Tools for RegTech session,
- Click on the polling icon: 

Polling Question #1

1. Do you use tools at your firm that you would categorize as “RegTech” tools?
 - a. Yes
 - b. No

Polling Question #2

- 2. What do you consider the biggest hurdle to adopting RegTech tools at your firm?**
- a. Don't have the budget for it**
 - b. Cannot find the right people**
 - c. Regulations inhibit adoption**
 - d. Firm culture does not embrace innovation**
 - e. All of the above**

Polling Question #3

- 3. What are you most interested in hearing about today?**
- a. Innovative technologies use for compliance**
 - b. Regulatory challenges**
 - c. Implementation challenges**
 - d. All of the above**

BankThink Banking needs a regtech sandbox

By Jo Ann Barefoot

Published November 02 2018, 10:07am EDT

More in [Regtech](#), [Fintech regulations](#), [Fintech](#), [CFPB](#), [Financial Conduct Authority](#)

One of the best-known inventions in banking oversight in recent years is the “regulatory sandbox.” [Pioneered](#) by the U.K.’s Financial Conduct Authority, these are running now in about [two dozen countries](#) and [several U.S.states](#), allowing fintech innovators to conduct live, small-scale testing under the regulator’s supervision.

The goals are twofold. First, the experiments help policymakers pinpoint areas where technology innovation may be outstripping current rules, signaling a need for clarifications or updates. Second, the tests give officials a way to learn quickly, hands-on, about the technology trends that are revolutionizing finance, so that regulatory wisdom can keep pace.

Among U.S. federal bank regulators, however, only the Consumer Financial Protection Bureau [is developing](#) a sandbox. Other agencies have worried that fintech experiments could harm the consumers involved. Most also lack clear authority to design sandboxes that could waive or suspend existing rules during the tests, features that help attract innovators to participate. In addition, federal bank regulators are limited by jurisdictional mandates that may impede direct lab experiments with nonbank fintechns, which are the trailblazers in innovation.

But there’s an alternative initial step that solves all of those problems and still advances the goals: Set up sandboxes to study not fintech, but regtech — technology that streamlines the government’s regulatory work and bank compliance. By focusing first on their own processes, agencies can gain the hands-on experience they need with the new technology that is transforming the financial sector, from big data and machine learning to cloud computing and blockchains, without having to worry about potentially exceeding their powers or exposing any

consumers to risk. Once they have built their regtech labs, it will be much easier to widen the scope to test fintech innovation as well.

Any or all of the federal financial agencies could create regtech sandboxes to try out new technology, without touching a single consumer or suspending a single requirement. One promising area would be to test “machine-readable” regulations that attach electronic tags to rules, in order to make regulations easier to track and implement. The FCA has even [experimented successfully](#) with this form of regulation — issuing a regulatory reporting requirement in the form of computer code rather than words to permit, in effect, self-implementing compliance, and to make it instant, and cheap.

Securities regulators [have begun using artificial intelligence](#) to search big-data patterns for signs of market misconduct. Several non-U.S. governments are trying to digitize aspects of regulatory reporting by connecting regulators and financial institutions directly through application programming interfaces, so that both parties can monitor risk trends using complete data, in real time, while sharply cutting reporting errors and expense.

And many people are working on digital identity authentication that can modernize compliance with anti-money laundering “know your customer” rules to strengthen the financial system’s security while also expanding consumer access. United Nations’ data indicate that we currently catch less than 1% of the \$2 trillion in annual financial crime that fuels terrorism and [trafficking in humans](#), weapons, endangered animals and drugs. Regulators are testing new technologies for data encryption and “differential privacy” that can enable banks and law enforcement to share anonymized data. AI can then detect suspicious patterns without knowing the identities of the people involved, unless there is justification to unveil them through a formal permissioning process that protects privacy. Such a reform would, for the first time, enable banks and authorities to share data as freely as criminals do, without infringing on civil liberties.

A good first step for regulators would be to run experiments on a model developed by the FCA called “tech sprints.” These are essentially “hackathons” that convene experts in finance, regulation and technology, team them up, and translate regulatory improvements into code, live. Such sprints typically identify a pain point shared by agencies and industry and enlist help with solving it in a safe test environment using dummy data.

Another good U.S. model is a Commodity Futures Trading Commission initiative that’s using

the [Science Prize Competition Act](#) to gather innovative ideas for improving its own processes. Rep. Austin Scott has [introduced legislation](#) to facilitate those efforts.

Just like private-sector tech “accelerators,” regtech sandboxes help regulators get up to speed. They can shorten the learning cycle and they can also move us toward digitally native systems that will be able to do more with less.

Jo Ann Barefoot

BankThink submission guidelines

BankThink is American Banker’s platform for informed opinion about the ideas, trends and events reshaping financial services. View our [detailed submission criteria and instructions](#).



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Regulators' Viewpoint on RegTech

Thursday, January 17

9:45 a.m. – 10:45 a.m.

As the industry leverages new technologies to assist with compliance, regulators are adjusting and adapting their own supervision and surveillance processes. Join our panel of regulators as they discuss what is shaping their agendas and perspectives on the use and adoption of RegTech tools. Panelists discuss how they are exploring innovative technologies to assist with their supervision and surveillance efforts, and how they are examining firms and their use of RegTech tools.

Moderator: Haimera Workie
Senior Director
FINRA Emerging Regulatory Issues

Panelists: Nick Cook
Head of RegTech and Advanced Analytics
Financial Conduct Authority (FCA)

Jeffrey Fortune
Examination Director
FINRA Member Regulation, Office of Risk Oversight and Operational Regulation

Michael Pieciak
President
North American Securities Administrators Association (NASAA)

Regulators' Viewpoint on RegTech Panelist Bios:

Moderator:

Haimera Workie is Senior Director responsible for heading up FINRA's Office of Emerging Regulatory Issues, which focuses on analyzing new and emerging risks and trends related to the securities market. Previously, Mr. Workie served as Deputy Associate Director in the Division of Trading and Markets at the U.S. Securities and Exchange Commission. In this capacity, Mr. Workie was tasked with developing a variety of Dodd-Frank Act related rulemakings, supervising policy matters related to market intermediaries and financial market utilities, and representing the Commission before several international standard setting bodies. Mr. Workie also previously served as Counsel to Commission Chair Mary Schapiro. Prior to joining the Commission, he was an associate at the law firm of Skadden, Arps, Slate, Meagher & Flom, with a practice focusing on corporate law. He is a graduate of the Massachusetts Institute of Technology (B.S., M.S.) and Harvard Law School (J.D.).

Panelists:

Nick Cook, Head of RegTech & Advanced Analytics, leads the FCA's RegTech activities, including the FCA's TechSprint events - the first events of their kind convened by a financial regulator. He is responsible for creating the FCA's Analytics Centre of Excellence to drive the organization's use of data science, machine learning and artificial intelligence. Mr. Cook is the FCA's representative on the European Securities and Markets Authority's (ESMA) Financial Innovation Standing Committee and an advisor to the RegTech for Regulators Accelerator Programme. Mr. Cook joined the Financial Services Authority (the FCA's predecessor) in 2009, initially in its Enforcement and Market Oversight Division. Prior to joining the regulator, Mr. Cook qualified as a chartered accountant at KPMG Forensic.

Jeffrey Fortune is Examination Director in FINRA Member Regulation, responsible for managing the Alternative Net Capital and IT examination programs. Prior to his current role, Mr. Fortune was a Surveillance Director within Member Regulation and served as Risk Lead for the Operational and Customer Protection risks. Prior to his tenure at FINRA, Mr. Fortune worked in the Regulatory Reporting areas at both Lehman Brothers and Merrill Lynch, performing the Net Capital and Reserve Formula computations. At Lehman Brothers, Mr. Fortune also served as Vice President of Operations Control, primary responsible for the firm's compliance with Possession & Control. Mr. Fortune holds a bachelor's degree in Accounting from St. Peter's College.

Michael S. Pieciak is commissioner of the Vermont Department of Financial Regulation. He was first appointed commissioner by Gov. Peter Shumlin in July 2016 and reappointed by Gov. Phil Scott in January 2017. Commissioner Pieciak serves as the chief regulator of Vermont's financial services sector, including the insurance, captive insurance, banking and securities industries. Commissioner Pieciak previously served as deputy commissioner of the Department's Securities Division. Commissioner Pieciak is President of the North American Securities Administrators Association, member of the National Association of Insurance Commissioners and Conference of State Bank Supervisors and served on the SEC Advisory Committee on Small and Emerging Companies. Prior to his service with the Department, Commissioner Pieciak practiced law in New York City at Skadden, Arps, Slate, Meagher & Flom LLP in the Mergers and Acquisitions Group, gaining experience in commercial transactions, corporate governance and investment and financing transactions. Commissioner Pieciak graduated *cum laude* from Union College with a degree in political science. He received his law degree *summa cum laude* from the University of Miami School of Law where he served as editor-in-chief of the *Miami Law Review*.



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Regulators' Viewpoint on RegTech

Panelists

■ Moderator

- **Haimera Workie, Senior Director, FINRA Emerging Regulatory Issues**

■ Panelists

- **Nick Cook, Head of RegTech and Advanced Analytics, Financial Conduct Authority (FCA)**
- **Jeffrey Fortune, Examination Director, FINRA Member Regulation, Office of Risk Oversight and Operational Regulation**
- **Michael Pieciak, President, North American Securities Administrators Association (NASAA)**



2019 FINRA RegTech Conference

January 17 | New York, NY

**Fireside Chat With FINRA Chief Legal Officer Robert Colby and Andrew Gray,
Depository Trust & Clearing Corporation (DTCC)
Thursday, January 17
11:00 a.m. – 11:30 a.m.**

Introduction: Haimera Workie
Senior Director
FINRA Emerging Regulatory Issues

Speakers: Robert Colby
Executive Vice President and Chief Legal Officer
FINRA Chief Legal Office

Andrew Gray
Managing Director and Group Chief Risk Officer
Depository Trust & Clearing Corporation (DTCC)

Fireside Chat With FINRA Chief Legal Officer Robert Colby and Andrew Gray, Depository Trust & Clearing Corporation (DTCC) Panelist Bios:

Introduction:

Haimera Workie is Senior Director responsible for heading up FINRA's Office of Emerging Regulatory Issues, which focuses on analyzing new and emerging risks and trends related to the securities market. Previously, Mr. Workie served as Deputy Associate Director in the Division of Trading and Markets at the U.S. Securities and Exchange Commission. In this capacity, Mr. Workie was tasked with developing a variety of Dodd-Frank Act related rulemakings, supervising policy matters related to market intermediaries and financial market utilities, and representing the Commission before several international standard setting bodies. Mr. Workie also previously served as Counsel to Commission Chair Mary Schapiro. Prior to joining the Commission, he was an associate at the law firm of Skadden, Arps, Slate, Meagher & Flom, with a practice focusing on corporate law. He is a graduate of the Massachusetts Institute of Technology (B.S., M.S.) and Harvard Law School (J.D.).

Speakers:

Robert L.D. Colby is Chief Legal Officer of the Financial Industry Regulatory Authority (FINRA), which he joined in June 2012. In this capacity, he oversees FINRA's corporate and regulatory General Counsel functions as well as FINRA's Advertising and Corporate Financing Departments and the Office of Hearing Officers. Previously, Mr. Colby was a partner in the Washington, DC, office of Davis Polk & Wardwell LLP, where he advised on regulatory and compliance matters involving securities and derivatives for financial institutions, markets and clearing organizations. Before joining Davis Polk in 2009, Mr. Colby served for 17 years as Deputy Director of the U.S. Securities and Exchange Commission's Division of Trading and Markets. In that role, he was responsible for the regulation of broker-dealers, securities markets and clearing organizations. Previously, for 11 years he was Chief Counsel of the Division and Chief of the Division's Branch of Market Structure.

Andrew Gray is Managing Director, Group Chief Risk Officer, with global responsibility for all aspects of DTCC's Risk Management, including Credit, Market & Liquidity Risk, Operational Risk Management and Systemic Risk, Information Security and Technology Risk Management, Business Continuity Management and Global Security Management. Andrew also has responsibility for DTCC's Enterprise Data Management program. Prior to this role, Mr. Gray served as Managing Director, Core Business Management, with overarching responsibility for DTCC's businesses, including Clearance and Settlement of Equities and Fixed Income products, Asset Services, Wealth Management Services, Insurance & Retirement Services, Omgeo and Data Services as well as the firm's Marketing & Communications function. Mr. Gray serves on the Board of the International Securities Services Association (ISSA) and is a member of the Board of Trustees of Global Association of Risk Professionals (GARP). Before joining DTCC in September 2009, Mr. Gray spent more than a decade with Merrill Lynch. Most recently, he served as Managing Director and Chief Operating Officer for Merrill's Latin American and Canadian businesses. Prior to that, he was a Managing Director in Strategy and Business Development for Merrill's Global Markets and Investment Banking businesses and for Global Securities Research & Economics. Previously, Mr. Gray was a principal at Booz-Allen & Hamilton, the global management consulting firm.



2019 RegTech Conference
January 17, 2019 | New York, NY

**Fireside Chat With FINRA Chief Legal Officer
Robert Colby and Andrew Gray, Depository
Trust & Clearing Corporation (DTCC)**

Panelists

■ Introduction

- **Haimera Workie, Senior Director, FINRA Emerging Regulatory Issues**

■ Speakers

- **Robert Colby, Executive Vice President and Chief Legal Officer, FINRA Chief Legal Office**
- **Andrew Gray, Managing Director and Group Chief Risk Officer, Depository Trust & Clearing Corporation (DTCC)**



2019 FINRA RegTech Conference

January 17 | New York, NY

RegTech Initiatives for Customer Identification and Anti-Money Laundering (AML) Compliance

Thursday, January 17

12:30 p.m. – 1:30 p.m.

Anti-Money Laundering (AML) and Know Your Customer (KYC) guidance are critical initiatives for financial institutions. During this panel, attendees learn how new technologies are being leveraged to enhance KYC and AML processes, and the potential regulatory and operational challenges.

Moderator: Blake Snyder
Senior Director
FINRA Anti-Money Laundering Investigative Unit (AMLIU)

Panelists: Patrick Dutton
Regional Head, Intelligence, Analytics and System Delivery Financial Crime Threat Mitigation (FCTM) team
HSBC North America

Jeff Horowitz
Chief Compliance Officer
Coinbase Inc.

Robert Schukai
Senior Vice President, Identity Solutions
Mastercard

RegTech Initiatives for Customer Identification and Anti-Money Laundering (AML) Compliance

Panelist Bios:

Moderator:

Blake Snyder is Senior Director of FINRA's AML Investigative Unit, which consists of a specialized team of examination staff that conduct complex Anti-Money Laundering examinations. The AMLIU's other functions include providing guidance to FINRA examination and Enforcement staff in connection with examinations and investigations; providing training to FINRA staff throughout the country; and providing education and training to the industry on AML issues. Mr. Snyder assists in developing FINRA's AML-related priorities and serves as a Regulatory Specialist within FINRA in the areas of AML, fraud and financial crime. Mr. Snyder holds the Certified Regulatory and Compliance Professional™ (CRCP)™ designation, and graduated from Florida State University with a Bachelor's degree in Finance. Mr. Snyder works from FINRA's Florida District Office, and has been with FINRA for 18 years.

Panelists:

Patrick Dutton is the U.S. Head of Intelligence, Analytics and Systems Delivery for HSBC's Financial Crime Threat Mitigation (FCTM) team. He oversees intelligence production on financial crime as well as advanced analytics and transaction monitoring models. He joined HSBC in 2017 after serving as Director for Transnational Organized Crime at the National Security Council from November 2015 to May 2017. Prior to his work at the White House, he was the Director of the Office of Illicit Finance at the U.S. Department of the Treasury. Mr. Dutton began his government career in 2004 as a Middle East analyst with the Department of Defense. In 2005 and 2006, he deployed to Iraq to support threat finance efforts and from July 2008 to April 2010 he served on President's Daily Briefing staff. Mr. Dutton earned a Bachelor's degree in political science from Marietta College in 2002 and a Master's degree in Public and International Affairs from the University of Pittsburgh in 2004.

Jeff Horowitz is Chief Compliance Officer for Coinbase Inc., where he is responsible for the Firm's global compliance initiatives. Mr. Horowitz is responsible for managing regulatory relationships with foreign and domestic regulators, helping shape the development of thoughtful digital currency regulation, and manage an integrated risk framework covering reputational, operational and regulatory risk. Mr. Horowitz also oversees the Firm's Global AML Program and is representative for Coinbase at the U.S. Treasury Department's Bank Secrecy Act Advisory Group (BSAAG). Mr. Horowitz is also a member of FINRA's Securities Industry/Regulatory Council on Continuing Education. Prior to joining Coinbase, Mr. Horowitz was a Managing Director and Global Head of Compliance for Pershing, a BNY Mellon company. Mr. Horowitz previously served as the Chief Compliance Officer for Pershing LLC as well as the Firm's Chief Anti-Money Laundering (AML) and OFAC Officer, where he was responsible for the development and implementation of the firm's Global AML Program across the Pershing enterprise. Mr. Horowitz represented Pershing on SIFMA's Compliance and Regulatory Policy Committee, FINRA's Large Firm Advisory Committee and FINRA's Continuing Education Content Committee. Mr. Horowitz has represented Pershing, as a securities industry representative to the BSAAG and was also a past co-chair of the Securities Industry and Financial Markets Association (SIFMA) Anti-Money Laundering Committee. Mr. Horowitz has been a member of the International Council of Securities Association and has participated in FATF's public sector/ private sector consultative initiatives, serves on the Florida International Bankers Association AML Compliance Conference Advisory Committee. Prior to joining Pershing, Mr. Horowitz was a Director and Head of AML Compliance for Citigroup's Corporate and Investment Banking Division in North America. His responsibilities included the Institutional Sales and Trading Departments of Citigroup Global Markets Inc., Investment Banking, Global Relationship Banking and Global Transaction Services. Prior to joining Citigroup, Mr. Horowitz held several senior compliance roles at Lehman Brothers, Goldman Sachs and Salomon Brothers Inc. He began his career at the Federal Deposit Insurance Corporation (FDIC) in the Division of Resolutions. Mr. Horowitz earned a Bachelor of Science degree in Economics from Trenton State College. He has also completed the Securities Industry Institute® program, sponsored by the Securities Industry and Financial Markets Association, at the Wharton School of the University of Pennsylvania. Mr. Horowitz holds the FINRA Series 7, 14, and 24 registrations.

Robert (Bob) Schukai is Senior Vice President, Identity Solutions at Mastercard. He is responsible for the development of innovative identity solutions to enable people to validate and authenticate themselves digitally in both payment and non-payment transactions. Prior to his current role, Mr. Schukai was the Global Head of Design for Digital Identity Solutions and Head of Applied Innovation for Thomson Reuters. Focus areas included artificial

intelligence, financial technology, blockchain, and user experience. From 2005-2010, Mr. Schukai was the Vice President of Wireless/Broadband Technologies for Turner Broadcasting System, Inc. During that time, he was responsible for global R&D activities in the areas of mobile, broadband, Internet protocol television (IPTV) and games. Mr. Schukai spent 18 years working for Motorola, Inc., in the United States and United Kingdom. In his last role at Motorola, he served as director of global 3G strategy and business development. Mr. Schukai holds a Bachelor of Science degree in electrical engineering from Rose-Hulman Institute of Technology and a Master's degree in electrical engineering from Arizona State University. He is a long-term member of the Institute of Electrical and Electronics Engineers (IEEE). In 2014, he was named a Member of the British Empire (MBE) in the Queen's 2014 New Year Honours List for services to British trade and investment and for promotion of STEM education.



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RegTech Initiatives for Customer Identification and Anti-Money Laundering (AML) Compliance

Panelists


■ Moderator

- **Blake Snyder, Senior Director, FINRA Anti-Money Laundering Investigative Unit (AMLIU)**

■ Panelists

- **Patrick Dutton, Regional Head, Intelligence, Analytics and System Delivery Financial Crime Threat Mitigation (FCTM) team, HSBC North America**
- **Jeff Horowitz, Chief Compliance Officer, Coinbase Inc.**
- **Robert Schukai, Senior Vice President, Identity Solutions, Mastercard**

To Access Polling

- Under the “Schedule” icon on the home screen,
- Select the day,
- Choose the RegTech Initiatives for Customer Identification and Anti-Money Laundering (AML) Compliance session,
- Click on the polling icon: 

Polling Question #1

- 1. Does your firm utilize digital identity technology as part of its account opening process?**
 - a. Yes**
 - b. No**
 - c. I don't know**

Polling Question #2

- 2. Does your firm utilize biometrics to allow customers to access brokerage accounts?**
 - a. Yes**
 - b. No**
 - c. I don't know**

Polling Question #3

- 3. Does your firm's suspicious activity monitoring utilize machine learning or artificial intelligence?**
- a. Yes**
 - b. No**
 - c. No, but we are considering adding one or both of those components**
 - d. I don't know**



2019 FINRA RegTech Conference

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RegTech Initiatives for Surveillance and Monitoring

Thursday, January 17

1:45 p.m. – 2:45 p.m.

Technologies like artificial intelligence and big data analytics have the potential to overhaul surveillance systems from the traditional rule-based methods to more predictive, risk-based processes. During this session, panelists discuss the evolution of market surveillance and conduct-monitoring tools in recent years and the shift to more holistic, enterprise-wide surveillance. Panelists also share their thoughts on how these tools might offer the potential to make surveillance and monitoring more proactive and risk-based.

Moderator: Lore Aguilar
Director, Strategic Research
FINRA Market Regulation

Panelists: Gregg Berman
Director of Research for Market Integrity, Monitoring, and Surveillance
Citadel Securities

John Davidson
Senior Vice President and Global Head of AML
E*TRADE Financial

Jon Kroeper
Executive Vice President, Quality of Markets
FINRA Quality of Markets

John Stecher
Managing Director and the Chief Innovation Officer
Barclays

RegTech Initiatives for Surveillance and Monitoring Panelist Bios:

Moderator:

Lore Aguilar is Director of Strategic Research with the Surveillance, Research, Methodologies, and Governance Group (SRMG) of FINRA's Market Regulation Department. SRMG is responsible for applying innovative analytical methods, including machine learning, to market research, surveillance development, and alert investigations. Prior to joining FINRA in 2014, Mr. Aguilar worked in the Trading Analysis team of Bridgewater Associates. Mr. Aguilar received his PhD in Economics from the University of Minnesota - Twin Cities.

Panelists:

Gregg Berman, Ph.D. is director of the market analytics and regulatory structure unit of Citadel Securities where he focuses on utilizing data and analytics to better inform on a host of advanced topics at the crossroads of market structure, rules, and regulations. Prior to joining Citadel, Mr. Berman was a principal at Ernst & Young in its financial services organization. From 2009 to 2015 Mr. Berman served at the U.S. Securities and Exchange Commission in Washington, DC, where he established and was associate director of the office of analytics and research in the division of trading and markets. Mr. Berman covered a wide array of areas with a particular focus on market structure data, analytics, and associated rules and regulations. Mr. Berman was also a founding partner of New York-based RiskMetrics Group where he primarily served as its head of the risk business (1998-2009). Before joining RiskMetrics Group, Mr. Berman co-managed a number of multi-asset hedge funds within New York-based ED&F Man. Mr. Berman is a physicist by training and holds degrees from Princeton University (Ph.D. 1994, M.S. 1989), and the Massachusetts Institute of Technology (B.S. 1987).

John J. Davidson, Esq. is Senior Vice President and Global Head of Anti-Money Laundering for E*TRADE Financial. Mr. Davidson joined E*TRADE Financial in October 2007 and in August 2008 was named Global Head of Anti-Money Laundering. He has responsibility for global AML Compliance and Fraud Investigations. Mr. Davidson received E*TRADE's Leadership Award as a result of his efforts in building the firm's AML program. Prior to joining E*TRADE, Mr. Davidson spent 19 years as an Enforcement Attorney and BSA/AML Policy specialist at the Office of Thrift Supervision, the Board of Governors of the Federal Reserve and the SEC. As an Enforcement attorney, Mr. Davidson assisted financial institution regulators in recovering over \$50 million in ill-gotten gains from individuals and financial institutions; which had violated federal banking laws, federal securities laws and the Bank Secrecy Act. As a BSA/AML Policy specialist, Mr. Davidson represented first the OTS and then the Fed on interagency working groups, which drafted many of the regulations associated with the USA PATRIOT Act. At the SEC, Mr. Davidson helped pilot the Enforcement division's SAR review program. Mr. Davidson's efforts resulted in numerous awards and promotions from financial institution regulators. Mr. Davidson also frequently serves as a speaker at industry sponsored AML forums and at FFIEC examiner training schools. He received his BA with awards and honors from the George Washington University and his JD from the College of William and Mary.

Jon Kroeper is Executive Vice President of the Quality of Markets Section of FINRA's Market Regulation Department. The Quality of Markets Section is responsible for the conduct of post-trade surveillance and investigations related to data integrity, market conduct and customer protection rules, and market manipulation activity in the U.S. equity and fixed income markets regulated by FINRA as a self-regulatory organization and as a provider of regulatory services to other U.S. SROs. Prior to joining FINRA's predecessor NASD in early 2007, Mr. Kroeper served as Counsel to U.S. Securities and Exchange Commission Chairman Chris Cox in 2006 and 2007, and Counsel to Commissioner Paul S. Atkins in 2005. From 2000 to 2005, Mr. Kroeper was First Vice President and Associate General Counsel for Instinet Group Incorporated. Mr. Kroeper began his career at the U.S. Securities and Exchange Commission in 1994, serving as a senior counsel in the Division of Market Regulation and subsequently as Counsel to Commissioner Laura S. Unger. Mr. Kroeper received a bachelor's degree from Georgetown University and a law degree, *cum laude*, from Chicago-Kent College of Law.

John Stecher is Managing Director and the Chief Innovation Officer of Barclays, based in New York. He is a member of the Barclays Technology Management Committee. Mr. Stecher is accountable for developing new strategies, business opportunities, and product capabilities across all lines of business for Barclays by embracing and applying disruptive technologies, driving strategic investing for the firm, and leveraging relationships with partners and the wider FinTech ecosystem. He owns the innovation process for the firm as well as Barclays award winning Rise Fintech platform. Prior to joining Barclays in August 2017, Mr. Stecher worked for Goldman Sachs

where he held a variety of senior management and engineering roles across the firm's capital markets, technology, and most recently build their Marcus branded consumer finance division. Mr. Stecher has had an extensive career in technology and engineering across industry sectors. Mr. Stecher was appointed as an IBM Master Inventor and led application development, architecture and strategy for IBM's WebSphere product line in the Software Group. He delivered/created more than 45 patents across a number of diverse problem spaces. Mr. Stecher holds a Master in Computer Science from the University of Minnesota and a bachelor's degree in Computer Science from the University of Wisconsin – Madison.



2019 RegTech Conference
January 17, 2019 | New York, NY

RegTech Initiatives for Surveillance and Monitoring

Panelists


■ Moderator

- Lore Aguilar, Director, Strategic Research, FINRA Market Regulation

■ Panelists

- Gregg Berman, Director of Research for Market Integrity, Monitoring, and Surveillance, Citadel Securities
- John Davidson, Senior Vice President and Global Head of AML, E*TRADE Financial
- Jon Kroeper, Executive Vice President, Quality of Markets, FINRA Quality of Markets
- John Stecher, Managing Director and the Chief Innovation Officer, Barclays

To Access Polling

- Under the “Schedule” icon on the home screen,
- Select the day,
- Choose the RegTech Initiatives for Surveillance and Monitoring session,
- Click on the polling icon: 

Polling Question #1

- 1. Are you currently using any machine-learning techniques as part of your surveillance and monitoring programs:**
 - a. None at all**
 - b. Started to experiment, but nothing in production**
 - c. Some small use cases in production**
 - d. Substantive use in production**
 - e. Not sure – I don't really know what is, and is not, defined to be machine learning**

Polling Question #2

- 2. If you have started using machine-learning techniques, what are the main challenges you've encountered:**
 - a. Data availability and/or quality**
 - b. Data and computational infrastructure**
 - c. In-house expertise in applying techniques**
 - d. Explaining/interpreting output**
 - e. Getting buy-in from leadership**
 - f. Other**



2019 FINRA RegTech Conference

January 17 | New York, NY

Industry Views on the Current State and Future of RegTech

Thursday, January 17

3:00 p.m. – 4:00 p.m.

During this session, FINRA staff and industry practitioners share their views on how RegTech can benefit firms and the industry, but may also pose new challenges. Panelists discuss their approach to investing in RegTech and other emerging technologies, and consider how these tools influence the financial services industry.

Moderator: Steven Polansky
Senior Director
FINRA Regulatory Operations/Shared Services

Panelists: Jonah Crane
Executive Director
RegTech Lab

Kerry Gendron
Managing Director, Head of Technology Strategy and Compliance Oversight
Morgan Stanley

Boris Khentov
President
Betterment Securities

Melissa MacGregor
Managing Director and Associate General Counsel
Securities Industry and Financial Markets Association (SIFMA)

Industry Views on the Current State and Future of RegTech Panelist Bios:

Moderator:

Steven Polansky is Senior Director in FINRA's Office of Shared Services. In this capacity, Mr. Polansky leads special national initiatives--including FINRA's digital investment advice and earlier cybersecurity and conflicts of interest reviews--and special projects. In addition, he leads development of FINRA's annual regulatory and examination priorities. Previously, Mr. Polansky worked in FINRA's International Department, where he was responsible for analyzing international regulatory developments and leading FINRA's relationships with select financial regulators in Europe and Asia as well as international financial institutions. In addition, Mr. Polansky led advisory projects in a number of jurisdictions related to, among other things, risk-based supervision, prudential oversight and market surveillance. Prior to joining FINRA, he was a management consultant with PricewaterhouseCoopers, and he served for seven years as a professional staff member on the Committee on Foreign Relations in the United States Senate. At the Committee, Mr. Polansky was responsible for advising the Chairman on funding for the Department of State and other foreign policy agencies, missile non-proliferation and international environmental issues. Mr. Polansky received his master of business administration in finance from The Wharton School at the University of Pennsylvania, his master of public administration from the Kennedy School of Government at Harvard University, and his bachelor degree in history from Colgate University.

Panelists:

Jonah Crane is a strategic advisor to financial technology startups, helping them stay ahead of regulatory change as they scale. Mr. Crane is also Regulator in Residence at the FinTech Innovation Lab in New York, and Executive Director of RegTech Lab in Washington D.C. Until January 2017, Mr. Crane served as Deputy Assistant Secretary and Senior Advisor at the U.S. Treasury Department, and prior to that as a policy advisor to Senator Chuck Schumer. Prior to joining Senator Schumer's staff, Mr. Crane was a corporate attorney focusing on mergers and acquisitions at Milbank, Tweed, Hadley & McCloy LLP in New York. Mr. Crane received a J.D. from New York University School of Law.

Kerry Gendron is Managing Director in Morgan Stanley's Legal and Compliance Division. She is the Head of Technology Strategy for the Division, and the Head of Compliance Oversight. She has spent more than 16 years working within the Financial Services industry and has held various full time and consulting roles spanning the functions of technology, strategy, regulatory compliance and risk management. Ms. Gendron joined Morgan Stanley in 2010 from Diamond Consulting. She holds an MBA from the Wharton School, University of Pennsylvania and a BS in Applied Mathematics, Minor in Computer Science.

Boris Khentov is President of Betterment Securities, the FINRA member broker-dealer entity of the first and largest independent robo-advisor. Since launching in 2010, Betterment has grown rapidly, and today manages \$14.5 billion in assets for 400,000 customers. In the process, it has raised \$275 million in venture capital. Mr. Khentov oversees all of Betterment's operations. He was an early employee, bringing a mix of engineering and legal experience to a leadership role, working closely with teams of software engineers to automate and scale Betterment's back office operations across multiple regulated entities. He played a key role in the development of Betterment's suite of automated tax optimization services, including tax-loss harvesting and asset location. He also led design of the regulatory framework for Betterment for Business, the company's direct-to-employer 401(k) offering. Before joining Betterment, Mr. Khentov practiced tax and capital markets law at Cleary Gottlieb Steen & Hamilton LLP, and has a J.D. from Northwestern Law. Prior to that, Mr. Khentov was a software engineer at Antenna Software, and has an A.B. in Computer Science from Harvard University.

Melissa MacGregor is Managing Director and Associate General Counsel at SIFMA in Washington, D.C. Her responsibilities at SIFMA include advising the advocacy and policy activities of the SIFMA General Counsels Committee and the Technology and Regulation Committee, along with several specialized working groups. Most recently, Ms. MacGregor has dealt with issues relating to electronic communications and records, financial technology, data aggregation, social media, privacy, data protection, and market data. Ms. MacGregor is a member of the board of the directors of the Financial Data Exchange. Prior to joining SIFMA in 2005, Ms. MacGregor practiced securities regulation at Crowell & Moring LLP and Clifford Chance LLP. She holds a J.D. from American University Washington College of Law and a B.A. from St. Lawrence University.



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Industry Views on the Current State and Future of RegTech

Panelists


■ Moderator

- **Steven Polansky, Senior Director, FINRA Regulatory Operations/Shared Services**

■ Panelists

- **Jonah Crane, Executive Director, RegTech Lab**
- **Kerry Gendron, Managing Director, Head of Technology Strategy and Compliance Oversight, Morgan Stanley**
- **Boris Khentov, President, Betterment Securities**
- **Melissa MacGregor, Managing Director and Associate General Counsel, Securities Industry and Financial Markets Association (SIFMA)**

To Access Polling

- Under the “Schedule” icon on the home screen,
- Select the day,
- Choose the Industry Views on the Current State and Future of RegTech session,
- Click on the polling icon: 

Polling Question #1

- 1. What is the level of adoption of RegTech at your firm?**
 - a. We have RegTech tools that are live or will become live in 2019**
 - b. We are developing or acquiring RegTech tools that will go live in 2020 or later.**
 - c. We are evaluating RegTech opportunities, but have not made a decision to develop or acquire a RegTech tool.**
 - d. We are not exploring RegTech tools at this time.**

Polling Question #2

2. Does your firm have in-house RegTech tool development capabilities?

- a. Yes**
- b. No**

Polling Question #3

- 3. Who is responsible for your RegTech vendor relationship?**
- a. Compliance**
 - b. Technology**
 - c. Dedicated vendor management function**
 - d. Other**