



2021 FINRA Virtual Technology Conference

June 23, 2021

Welcome Remarks: Robert Cook
Wednesday, June 23
10:00 a.m. – 10:05 a.m.

Speaker: Robert Cook
President and Chief Executive Officer
FINRA

Speaker Biography:



Robert W. Cook is President and CEO of FINRA, and Chairman of the FINRA Investor Education Foundation. From 2010 to 2013, Mr. Cook served as the Director of the Division of Trading and Markets of the U.S. Securities and Exchange Commission. Under his direction, the Division's professionals were responsible for regulatory policy and oversight with respect to broker-dealers, securities exchanges and markets, clearing agencies and FINRA. In addition, the Division reviewed and acted on over 2,000 rule filings and new product listings each year from self-regulatory organizations, including the securities exchanges and FINRA, and was responsible for implementing more than 30 major rulemaking actions and studies generated by the Dodd-Frank and JOBS Acts. He also directed the staff's review of equity market structure. Immediately prior to joining FINRA, and before his service at the SEC, Mr. Cook was a partner based in the Washington, DC, office of an international law firm. His practice focused on the regulation of securities markets and market intermediaries, including securities firms, exchanges, alternative trading systems and clearing agencies. During his years of private practice, Mr. Cook worked extensively on broker-dealer regulation, advising large and small firms on a wide range of compliance matters. Mr. Cook earned his J.D. from Harvard Law School in 1992, a Master of Science in Industrial Relations and Personnel Management from the London School of Economics in 1989, and an A.B. in Social Studies from Harvard College in 1988.

Welcome Remarks: Robert Cook

Speaker

- **Speaker**

- Robert Cook, President and Chief Executive Officer, FINRA



2021 FINRA Virtual Technology Conference

June 23, 2021

Moving Regulated Workloads Onto the Cloud

Wednesday, June 23

10:05 a.m. – 11:00 a.m.

Steve Randich discusses implications of financial services firms moving regulated workloads and data to the cloud - including implementation strategies, security, and compliance risks and controls.

Speakers:

Steve Randich
Executive Vice President and Chief Information Officer
FINRA Technology

Rubyna Zito
Vice President, Technology Administration and Operations
FINRA Technology

Moving Regulated Workloads Onto the Cloud Panelist Bios:

Speakers:



Steven J. Randich, Executive Vice President and Chief Information Officer (CIO), oversees all technology at FINRA. Previously, Mr. Randich served as Co-CIO at Citigroup, and CIO and Global Head of Technology for Citigroup's Institutional Clients Group. Prior to joining Citigroup, he was Executive Vice President of Operations and Technology and CIO at NASDAQ, where he was responsible for all aspects of NASDAQ technology, including applications development and technology infrastructure. From 1996 to 2000, Mr. Randich served as Executive Vice President and CIO for the Chicago Stock Exchange. He was responsible for all technology, trading-floor and back-office operations, and business product planning and development. Prior to joining the Chicago Stock Exchange, Mr. Randich was a Managing Principal at IBM Global Services and a Manager at KPMG. Mr. Randich has an undergraduate degree in computer science from Northern Illinois University and an M.B.A. from the University of Chicago.



Rubyna Haslani Zito is Vice President of Technology Operations and Services and the Chief of Staff to the CIO at FINRA (Financial Industry Regulatory Authority). She manages Technology Operations and Services that include Technology Compliance Office, Training, Communications, Reporting, Space planning and redesign. Her responsibilities as Chief of Staff include coordinating strategic priorities, driving key initiatives and monitoring progress against critical deliverables. She also owns the implementation and governance of the Vendor Management Office, enterprise wide at FINRA, which includes management of the Vendor management system, Fieldglass, supplier optimization, and executive reporting. Prior to this role, Ms. Zito has held a variety of leadership roles at Citi including Chief Administration Officer and Communications manager for ICG (Institutional Clients Group) Technology, Compliance manager in Global Transaction Services, and led the Technology Strategy and Planning team within ICG. Most recently prior to FINRA, she was a Program Director of a Global Re-engineering initiative across technology where she was responsible for creating and improving processes, standards, and helped in the planning for technology investments, and on ongoing initiatives to improve the organization's overall efficiency. Ms. Zito received her undergraduate degrees in Economics and Philosophy from Rutgers University.

Moving Regulated Workloads Onto the Cloud

Speakers

- Steve Randich, Executive Vice President and Chief Information Officer, FINRA Technology
- Rubyna Zito, Vice President, Technology Administration and Operations, FINRA Technology



2021 FINRA Virtual Technology Conference

June 23, 2021

Fireside Chat: FINRA Innovation and Culture

Wednesday, June 23

11:15 a.m. – 12:00 p.m.

During this session, gain insights on the culture and innovative initiatives happening at FINRA Tech that include recognition programs, diversity and inclusion efforts, the 6th Annual Createathon, AI-related work and the analytics transformation program.

Moderator: Michael Dillon
Senior Vice President, Enterprise Delivery Services
FINRA Technology

Panelists: Ivy Ho
Vice President, Enterprise Shared Applications
FINRA Technology

Greg Jones
Director, Market Regulation Technology (MRT),
FINRA Technology

Geethalaksmi Ramachandran
Director, Director of Application Engineering, Enterprise Delivery Services
FINRA Technology

Fireside Chat: FINRA Innovation and Culture Panelist Bios:

Moderator:



Michael Dillon is Senior Vice President of Enterprise Delivery Services for FINRA. Mr. Dillon's responsibilities include overseeing key development and enterprise business services such as Enterprise Services, Network Services, Enterprise Operations, Delivery Engineering and Assurance Engineering. He was the executive sponsor for FINRA's first public Open Source projects, internal and external hackathons and a co-founder of the Createathon which has become the signature innovation event at the company. Before joining FINRA in 2006, Mr. Dillon spent 20 years developing large-scale information systems serving customers such as the airline industry, the Department of Defense, the State Department and the National Security Agency. Mr. Dillon served in the United States Air Force and received his undergraduate degree from Golden Gate University.

Panelists:



Ivy Ho, Vice President of Technology at FINRA, leads product development of a diverse portfolio of applications for FINRA's external stakeholders including firms, SEC, other regulators and the public. Ms. Ho is a technology leader with more than 32 years' experience in technology. Before joining FINRA in 2003, Ms. Ho held leadership positions consulting with large corporate clients in delivering innovative technology solutions to drive business strategy. Ms. Ho began her career as a software engineer and assumed increasing responsibility in software architecture and project management with Marriott International and General Electric over a 10-year span.



Greg Jones is Director within FINRA's Market Regulation Technology (MRT) department that oversees some of the engineering platforms FINRA leverages to detect potential abuses across the financial markets within its purview. Circa 2016, he helped manage the migration of MRT technologies into the cloud and continues to drive projects with a cloud-driven approach. Mr. Jones has been with FINRA since 2010 and has the pleasure of working with other technologists who are geographically dispersed with diverse levels of experiences and backgrounds.



Geetha Ramachandran is Director of Application Engineering in the Enterprise Delivery services Department at FINRA. Ms. Ramachandran's responsibilities include supporting Build and Delivery capabilities for over 150 business applications at FINRA. In this capacity, she has been a critical player in FINRA's Enterprise Cloud Migration effort, which has delivered new, more cost-effective business enhancements and infrastructure changes, while ensuring compliance and cybersecurity requirements. Ms. Ramachandran has published blog posts in FINRA and AWS technology sites. She has participated and won multiple internal and external Hackathon events. She has also played coach and mentor role at such events. Ms. Ramachandran has been with FINRA since 2010. Most recently, Ms. Ramachandran was a Lead Application Engineer located in the Rockville, MD office, where she led infrastructure teams responsible for CAT and Digital Experience Transformation initiatives, focused on Containers and Serverless technologies, while working in an Agile environment and championing Devops culture. She entered the Technology industry in 2005, as a Software Developer, working for a Global IT services and consulting firm. Ms. Ramachandran has a Bachelor of Technology in Computer Science and Engineering.

Fireside Chat: FINRA Innovation and Culture

Panelists

○ Moderator

- Michael Dillon, Senior Vice President, Enterprise Delivery Services, FINRA Technology

○ Panelists

- Ivy Ho, Vice President, Enterprise Shared Applications, FINRA Technology
- Greg Jones, Director, Market Regulation Technology (MRT), FINRA Technology
- Geethalaksmi Ramachandran, Director of Application Engineering, Enterprise Delivery Services, FINRA Technology



2021 FINRA Virtual Technology Conference

June 23, 2021

Transforming the Digital Experience of Firms

Wednesday, June 23

1:30 p.m. – 2:30 p.m.

FINRA is in the middle of a wide-ranging, multi-year effort to revolutionize the digital experience that firms have when interacting with FINRA. The Digital Experience Transformation (DXT) is a transformation driven by firms for firms. The initiative is focusing on six solution areas that have been identified as priorities by FINRA member firms, including a simplified user experience and flexibility and automation when it comes to access to FINRA data. During this session, hear about upcoming changes to Firm Gateway, Reporting, and Request Manager and exciting advances in technology on FINRA Gateway's multiyear roadmap. FINRA staff and Industry panelists share what they have learned through significant industry outreach, firms' experience as they have adopted these changes how they are saving time and money with FINRA Gateway. Be a part of the conversation of how FINRA is listening and advancing technology with you.

Moderator: Claudia Holanda
Director, Technology
FINRA Technology

Panelists: Bob Blonchek
Director, Technology
FINRA Technology

Julia McCafferty
Lead Product Manager, Technology
FINRA Technology

Rashmi Srinivasa
Director, Technology
FINRA Technology

Eric Weller
Senior Director, Technology
FINRA Technology

Transforming the Digital Experience of Firms Panelist Bios:

Moderator:



Claudia Holanda is Director of Product Management at FINRA's Enterprise Data Platform Technology department. In this capacity, Ms. Holanda drives the vision and strategy for FINRA's Digital Experience Transformation. Before joining FINRA, Ms. Holanda was a Senior Product Manager at Capital One, NA where she led the program for customers to securely share financial data with third parties. She began her product management career in 1998 and has held leadership roles in different industries such as higher education, publishing and business intelligence. Ms. Holanda graduated from New York Institute of Technology with a B.S. in Computer Science and is an active member, mentor and speaker in Women in Product and

Women in Technology events.

Panelists:



Bob Blonchek is Director of Technology for FINRA and the Product Leader for FINRA's data dissemination product line. He has more than 30 years of experience in the software and technology industries and is the founder/co-founder of three technology businesses. Mr. Blonchek is a creative and entrepreneurial product leader with a passion for creating resonator products. His strength is combining actionable market insights, emerging technologies, and new business models to rapidly bring innovative digital products to market. He has a proven ability to identify and drive key operational strategies and tactics and is recognized for exceptional team development, mentorship, and leadership. Prior to FINRA, Mr. Blonchek was

co-founder and president of Digital Health Innovations, LLC the creator of an innovative mobile app and software platform for administering consumer-directed employee benefits. Mr. Blonchek was responsible for leading the development and implementation of the company's product, market, and business strategy. Before founding Digital Health Innovations, Mr. Blonchek was the Chief Technical and Product Officer for Allegeant LLC, a third-party administrator in the employee benefit industry. He led the development and initial market launch of a digital personal health application and platform consisting of a web application and REST Web API integration framework, to more than 12 self-insured employers totaling over 20,000 revenue-generating users in just one year. Prior to Allegeant, Mr. Blonchek held various executive level positions in engineering, strategy and general management within the computer and software industries. Mr. Blonchek attended the Ohio State University and received an undergraduate degree in Computer and Information Science. He also received a Master of Science degree from the Johns Hopkins University. In addition, Mr. Blonchek has been a highly rated instructor at Towson University. He also co-authored a book on the Act Like an Owner model titled *Act Like an Owner: Building an Ownership Culture*, published by John Wiley and Sons in 1999. Mr. Blonchek has been a frequent contributing writer and speaker on leadership and strategy and is a Certified Product Manager.



Julia McCafferty joined FINRA in 2019 as lead product manager for FINRA's Digital Experience Transformation (DXT). Ms. McCafferty has pursued human-centered product design for 15 years. As a financial representative, she quickly realized her strengths in providing better user experiences in fintech and transitioned from business to technology with great ease. Ms. McCafferty has worked for two Fortune 500 companies, The Ohio State University, and three startups: always bringing her passion for efficiency and innovation. Most recently, she spent five years at JP Morgan, partnering globally with financial clients to optimize the firms' global digital experience. Ms. McCafferty holds a bachelor's in

computer science technical management from DeVry University and a master's in user experience design from Kent State.



Rashmi Srinivasa is Director of Technology in Enterprise Data Platforms and Business Applications, responsible for the data dissemination program serving broker-dealer firms, securities regulators and investors. Dr. Srinivasa oversees APIs, reporting and data exploration products that empower firms and regulators to gain efficiencies in their regulatory operations. She also oversees tools that help investors make informed financial decisions. Previously, Dr. Srinivasa worked for 5AM Solutions, Inc., and managed a portfolio of projects at the National Cancer Institute. The projects focused on data sharing standards, tools and interoperability with the aim of accelerating cancer research. She holds a Ph.D. in Computer Science from

the University of Virginia.



Eric Weller is Senior Director in technology at FINRA. He joined FINRA in 2019, leading the Digital Experience Transformation initiative. His primary responsibility is to reimagine how firms perform their compliance obligations with FINRA. Mr. Weller oversees all aspects of the product development for this initiative, including development, architecture, security, quality assurance and automation. Prior to FINRA Mr. Weller spent 13 years working for three different startups. Focusing on building highly scalable and cost-effective software to run in the cloud. He successfully helped in growing all those businesses to achieve their exit strategies. After college Mr. Weller spent eight years working in the public sector with state and

local governments. He assisted in the transformation of using GPS for data collection as well as establishing and maintaining computer aided dispatch (CAD) for EMS 911 systems. Mr. Weller has a Bachelor of Science degree in Computer Science as well as Geography and Environmental Planning from Towson University.

Transforming the Digital Experience of Firms

Panelists

○ Moderator

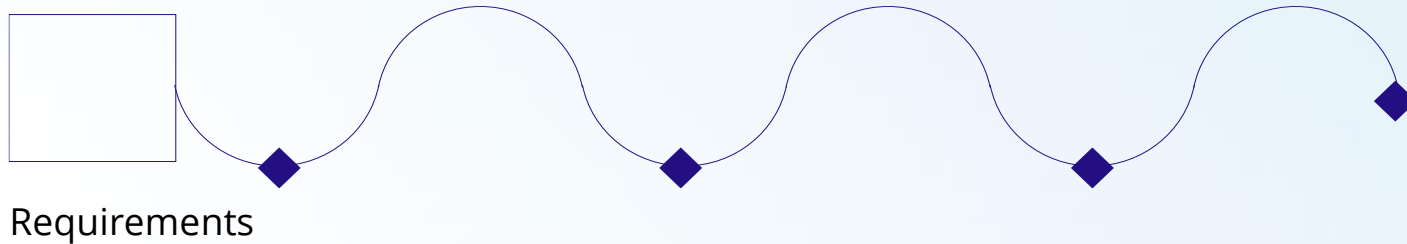
- Claudia Holanda, Director, Technology, FINRA Technology

○ Panelists

- Bob Blonchek, Director, Technology, FINRA Technology
- Julia McCafferty, Lead Product Manager, Technology, FINRA Technology
- Rashmi Srinivasa, Director, Technology, FINRA Technology
- Eric Weller, Senior Director, Technology, FINRA Technology

Design & Delivery Principles

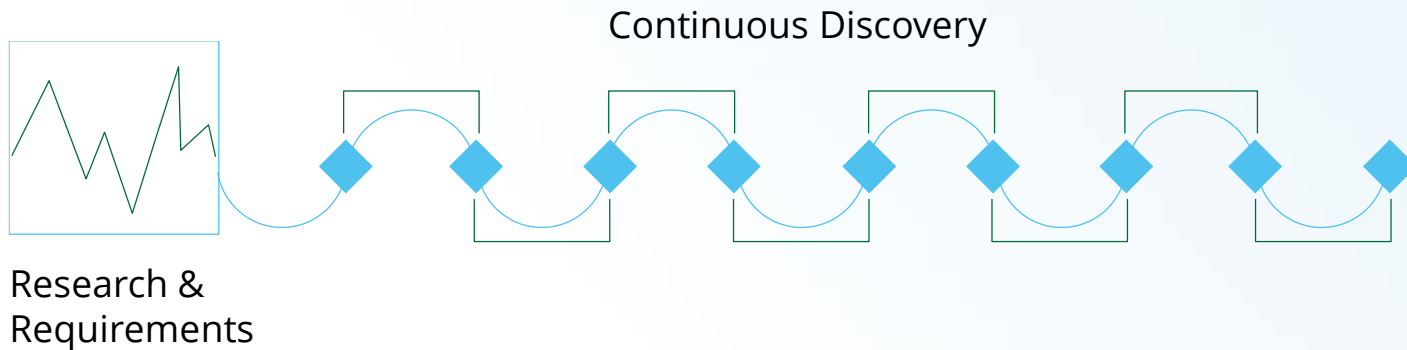
Past



Outcomes

- Long Cycles (weeks – months)
- User feedback happens after delivery
- Delivery focused
- Change Management is difficult

Present



- Short Cycles (days – weeks)
- User feedback happens continuously
- User Value focused
- Change Management is part of the process

Architecture Principles



Code Less --> Cloud
More



Serverless First



Ingrained Security



Single Purpose
Services



Event driven
asynchronous
processing



Autonomous apps



API First Approach



Stateless Services



Open Data

Optimizing with Serverless

Content Delivery



CloudFront

Compute



Lambda

App Integration



API Gateway



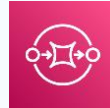
Kinesis



Kinesis
Data Streams



Simple Notification
Service (SNS)



Simple Queue
Service (SQS)

Database & Storage



DynamoDB



Simple Storage
Service (S3)



DocumentDB

Search



Elasticsearch
Service

Building Blocks for Scale and Delivery

FINRA GATEWAY

RICH CLIENT PLATFORM

Walk Me	Interceptor
FINRA UI Library	Micro App Onboarding
Common Services	Micro-App Hosting

ANALYTICS

BEAST
Splunk
MS Dynamics

MICRO APPS

User Settings	Dynamic Reporting
Profiles	Work Management
E-Bill	Notifications
Contacts	Customer Support
My Account	Forms (eFOCUS)
Role Management	Forms (U4, U5)

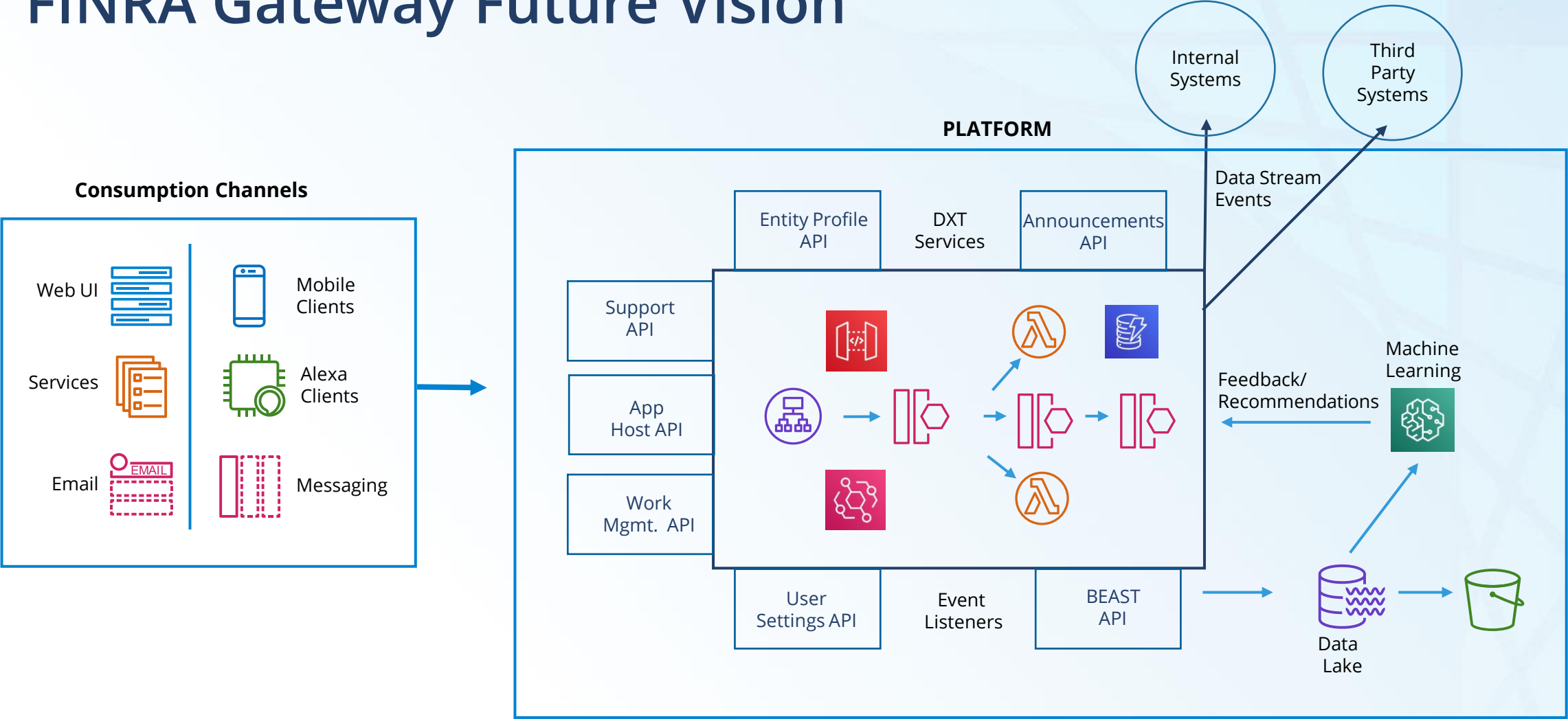
LEGACY SUPPORT

Quick Links
In App Pop Outs

Micro App Builders

Team 1
Team 2
Team 3
Team ...

FINRA Gateway Future Vision

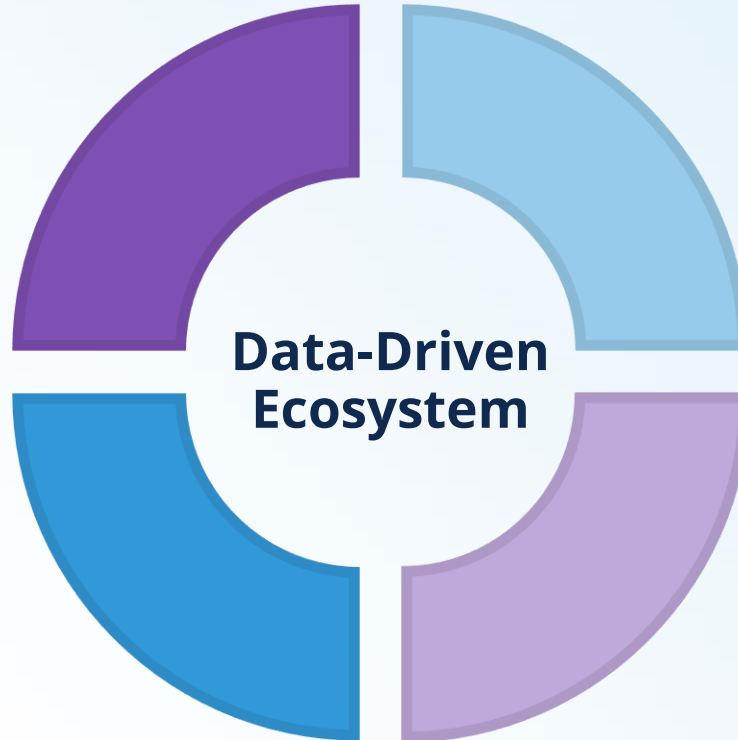


API Vision

WHY

- Minimize time spent reconciling compliance data
- Minimize likelihood that a key regulatory priority is overlooked

1. Increase Efficiency

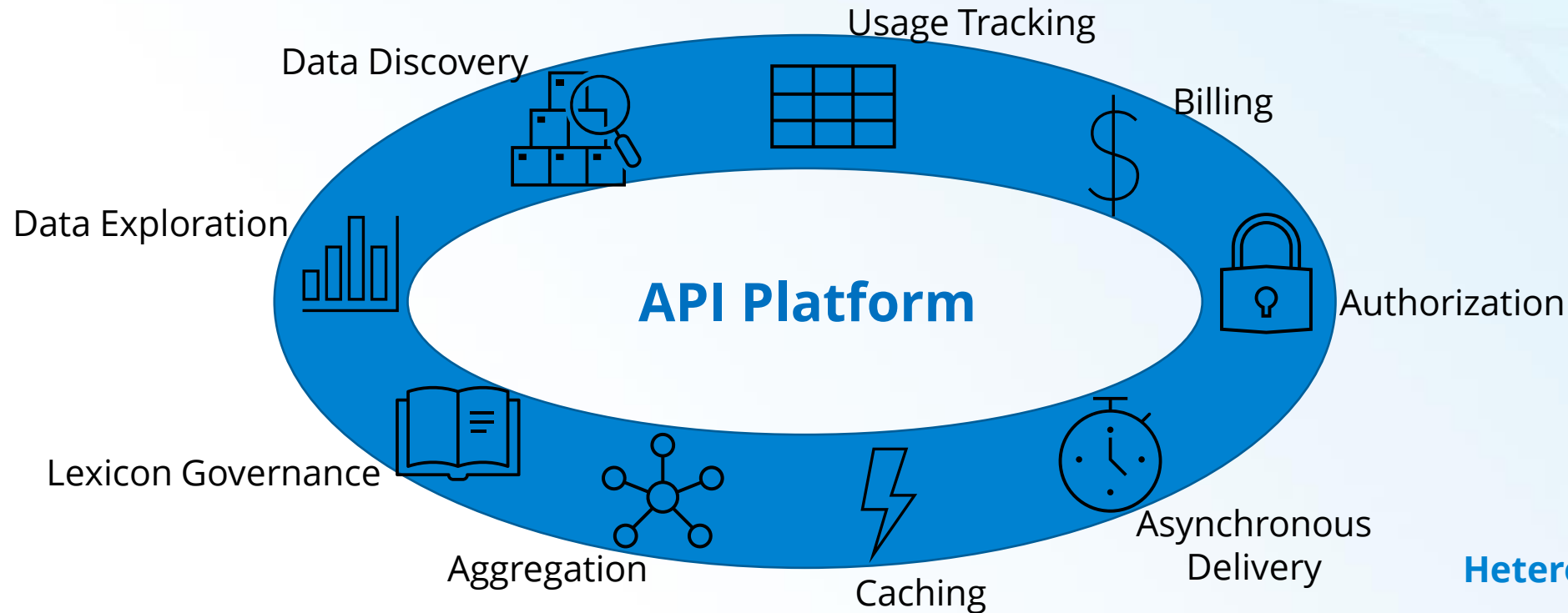


2. Improve Compliance

HOW

- Automate and deeply integrate
- Use FINRA Data and Analytics to power decisions

API Foundational Components



Equities

Fixed Income

Registrations

Filings

Rules

Heterogeneous Domains and Data Sources



ElasticSearch



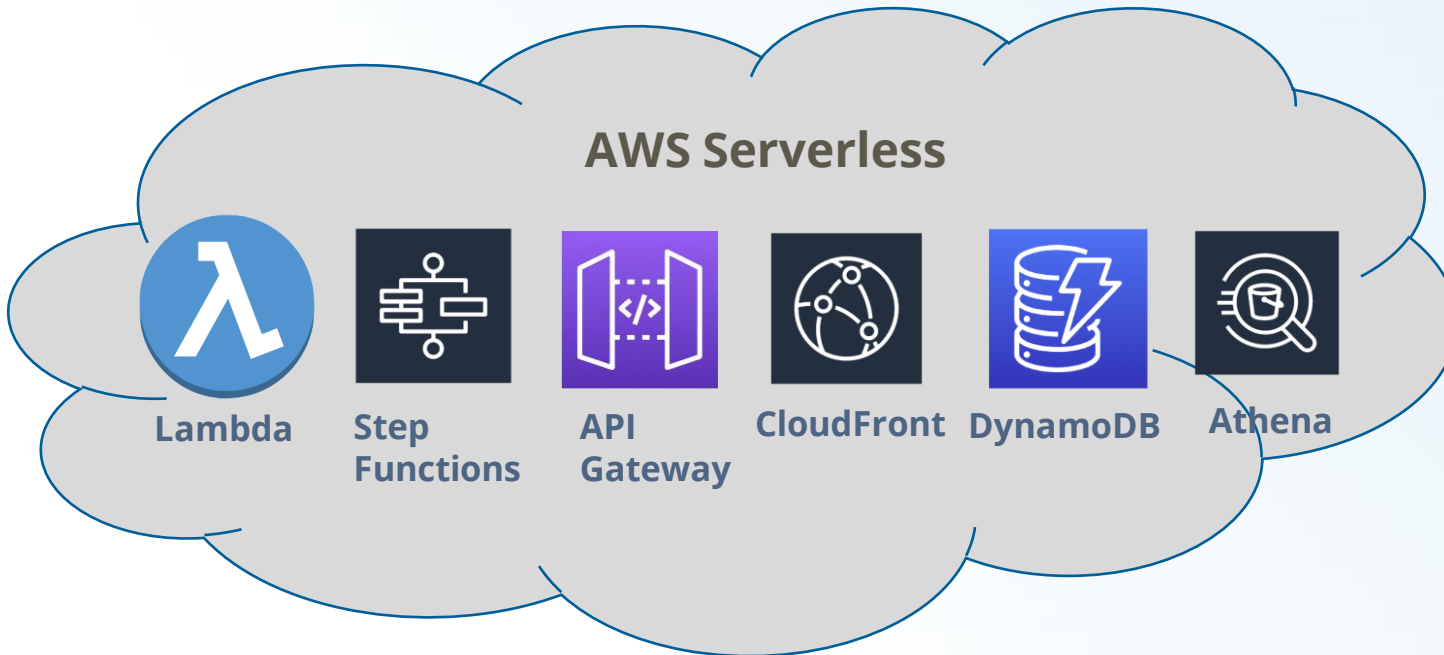
S3



Aurora / RDS

Uniform, standardized APIs
Faster releases, Faster adoption

Maximize Cloud Investment



- Scalable and Resilient Integrations
- Less Maintenance, More Innovation



Sophisticated auto-scaling and burst-handling



*Pay only for what you use
- 7M calls, 19M invocations in May*

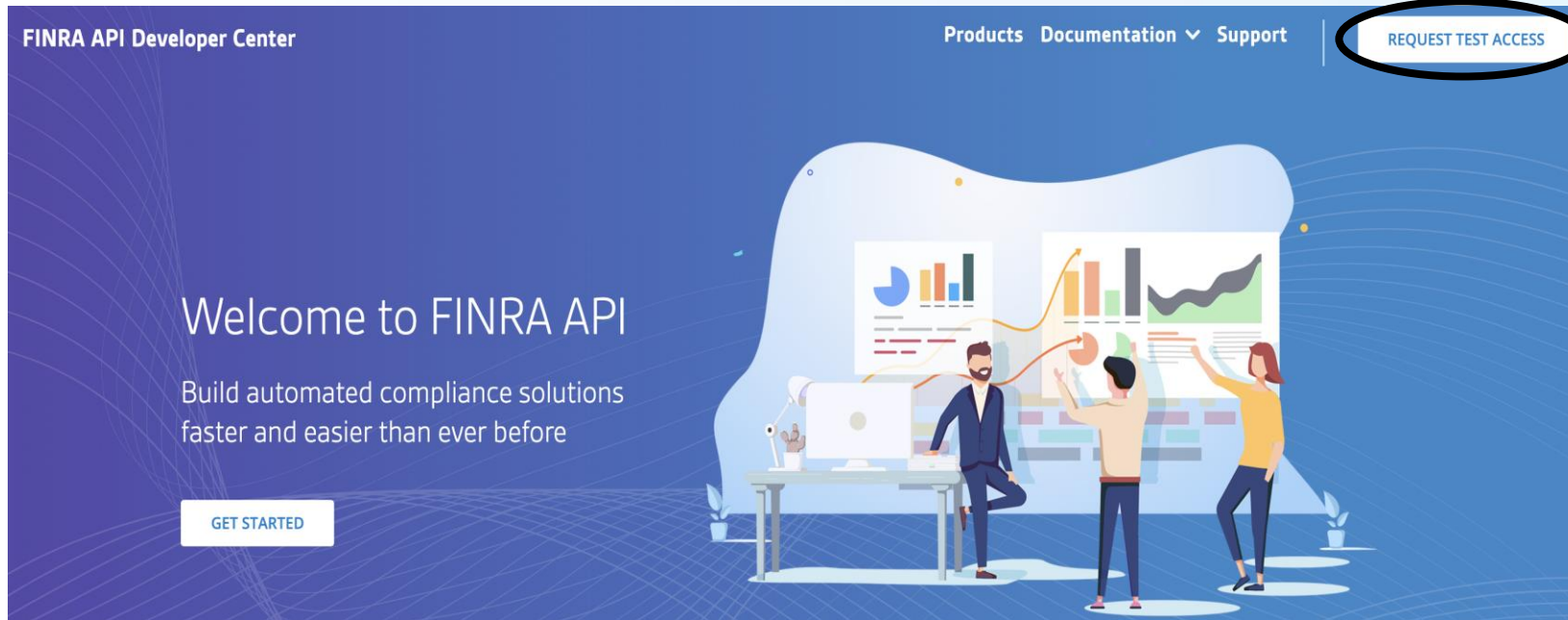


*Offload mundane maintenance ->
Engineers focus on innovation*



*Partner with AWS ->
Drive product improvements*

Automation and Self-Service

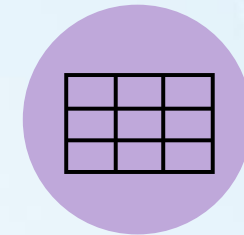


SELF SERVICE. *Up and running with mock API in 15 minutes*

A
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API Connection Provisioning



Usage Tracking

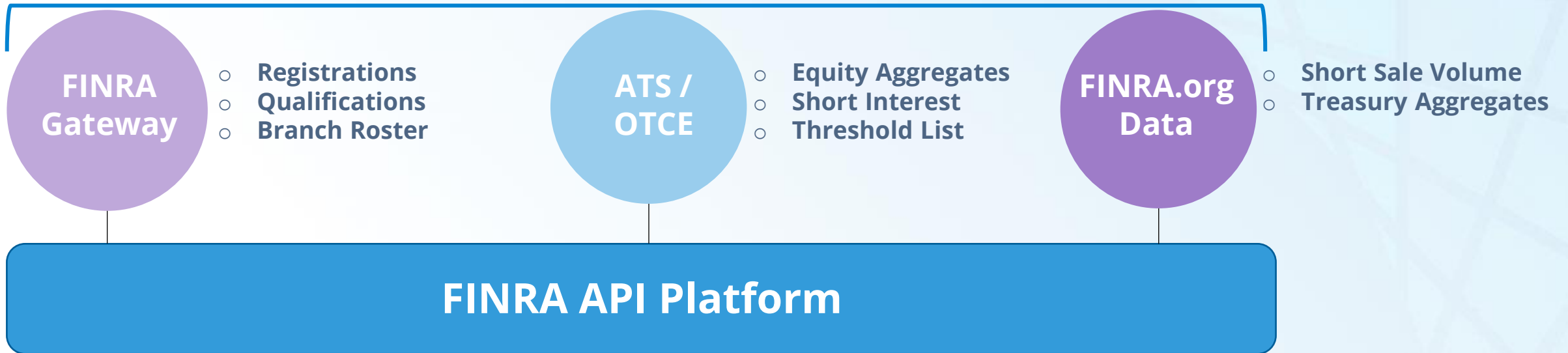


Invoice Generation

■ Get started with FINRA APIs as quickly as possible



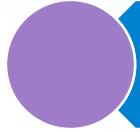



Leverage API Platform across all Channels

User Interfaces



Consistent data and user experience across all data delivery channels

API Future Vision

-  **Query API+**
-  **Notification API**
-  **Submission API**
-  **Analytics API**
-  **Self-Service API Account Mgmt**
-  **Simplified API Pricing**



2021 FINRA Virtual Technology Conference

June 23, 2021

Cybersecurity Update **Wednesday, June 23** **2:45 p.m. – 3:45 p.m.**

Join FINRA cybersecurity leaders as they discuss the current state of cybersecurity and the ever-changing threat landscape. The conversation will focus on three facets of FINRA's cybersecurity initiatives: how FINRA secures its own systems, unique security features of the Consolidated Audit Trail (CAT) system, and how FINRA supports member firms' cybersecurity programs.

Moderator: Carmi Moser
Senior Principal Risk Specialist – Dallas Office
FINRA Member Supervision

Panelists: John Brady
Senior Vice President, Cyber Security and Chief Information Security Officer (CISO)
FINRA Technology

David Kelley
Director, Member Supervision Specialist Programs – Kansas City Office
FINRA Member Supervision

Eric Pickersgill
Vice President and Deputy Chief Information Security Officer (CISO)
FINRA Technology

David Yacono
Vice President and Chief Information Security Officer (CISO)
FINRA CAT, LLC

Cybersecurity Update Panelist Bios:

Moderator:



Carmi Moser joined FINRA on November 2, 2020 as Sr. Principal Risk Specialist with the team leading cybersecurity examinations, providing cybersecurity consultations and training. Prior to joining FINRA, Ms. Moser performed 12 years of combined hands-on and management experience in the Information Technology and Cybersecurity domains working in roles responsible for Governance, Risk & Compliance, Security Operations, and IT Operations. Her broad experience includes work at Kaseya, PyeongChang Winter Olympics, Virgin Hyperloop One and the Department of Energy's cybersecurity operations center. She completed her Master's in Information Technology at American

InterContinental University and holds several cybersecurity certifications including CISSP, CISM, CIPM and GCIH.

Panelists:



John Brady is Vice President in Technology for Cyber and Information Security for FINRA and is the organization's Chief Information Security Officer (CISO). In this capacity, he is responsible for all aspects of FINRA's information and cyber security programs, as well as ensures compliance with related laws and regulations. He oversees staff focused in four primary information security areas: security architecture and controls, security management tools, application security, and identity management. Mr. Brady, along with counterparts in FINRA's Data Privacy Office, establishes policy and technical controls to ensure information is appropriately protected throughout its lifecycle. He began his career with FINRA

more than 10 years ago as the Director of Networks and Firewalls. He then broadened and deepened his technical knowledge by taking on responsibility for server and storage infrastructure, where he led system engineering efforts to expand capacity and performance of Market Regulation systems in response to data volumes growing more than 40 percent year over year. Mr. Brady recently led the establishment, design, and implementation of FINRA's new data centers and the seamless migration of more than 175 applications from an outsourcer to those new data centers. Prior to the commencement of his work with FINRA in October 2002, Mr. Brady was Director of Networks at VeriSign from 2000 to 2002 and Network Solutions from 1998 to 2000. From 1995 to 1998, he built and operated Citibank's Internet Web and email services as Vice President, Internet Services. From 1993 to 1995, Mr. Brady worked for Sun Microsystems as Senior Consultant, where he built integrated network systems for prominent customers. Mr. Brady began his professional career as a member of technical staff at The Aerospace Corporation from 1987 to 1993, designing satellite systems and command and control networks for the Air Force Space Command. Mr. Brady holds a bachelor's degree in Computer and Electrical Engineering from Purdue University of West Lafayette in Indiana, and a master's degree in Industrial Engineering and Operations Research from the University of California at Berkeley. He also is an (ISC)² Certified Information Systems Security Professional (CISSP).



Dave Kelley, Director, Member Supervision Specialist Programs, is based out of FINRA's Kansas City office. He has been with FINRA for more than 10 years and leads the specialist team dealing with cybersecurity and information technology controls. Prior to joining FINRA, he worked for more than 19 years at American Century Investments in various positions, including Chief Privacy Officer, Director of IT Audit, Director of Electronic Commerce Controls and AML Officer. He led the development of website controls, including customer application security, ethical hacking programs and application controls. Mr. Kelley is a CPA and Certified Internal Auditor, and previously held the Series 7 and 24 licenses.



Eric Pickersgill is a technology leader and subject matter expert in information security, cloud computing, risk management, and IT governance with more than 15 years of experience supporting Fortune 500 companies and federal agencies. Mr. Pickersgill is currently the Deputy Chief Information Security Officer (CISO) at FINRA. As Deputy CISO, Mr. Pickersgill supports the CISO in leading FINRA's Cyber and Information Security program. Previously, Mr. Pickersgill served as the SVP of Cloud Security Strategy at Wells Fargo where he led the development and implementation of the cloud security program and solutions across the enterprise. Prior to Wells Fargo, Mr. Pickersgill served as the Director of Cloud Governance and Security at Capital One where he established and implemented the enterprise

cloud governance and security strategy. He successfully oversaw the secure deployment and use of core enterprise cloud platforms such as AWS, Google Cloud Platform, Microsoft Azure, Salesforce, and ServiceNow. Prior to Capital One, Mr. Pickersgill served as the CISO of Smartronix Cloud Assured. As CISO, he established and operated an information security program to protect AWS environments for federal agencies, financial institutions, media and entertainment companies, and pharmaceutical firms. Prior to Smartronix, Mr. Pickersgill worked for Verizon Enterprise Solutions as an Information Assurance Manager where he oversaw the FedRAMP authorization of Verizon Terremark's IaaS offering, Enterprise Cloud Federal Edition (ECFE). His past work experience also includes tenures at large consultancies such as KPMG and Booz Allen Hamilton where he assisted various organizations across different industries in meeting security and regulatory requirements. He holds a Master of Science (MS) degree in Information Technology from Marymount University, a Graduate Certificate in Computer Security and Information Assurance from Marymount University, a CISO Executive Certification from Carnegie Mellon University, a Bachelor of Science (BS) degree in Accounting and Information Systems from Virginia Tech, and a second BS in Entrepreneurship, Innovation, and Technology Management from Virginia Tech. He is also a Certified Information System Security Professional (CISSP), a Certified Information Security Manager (CISM), a Project Management Professional (PMP), and a Certified Ethical Hacker (CEH).



David A. Yacono is Chief Information Security Officer for FINRA CAT LLC, a subsidiary of FINRA that is the Plan Processor for the Consolidated Audit Trail (CAT). Mr. Yacono has more than 25 years of experience in a range of information-technology disciplines including system operations, software development, network security, and cyber and information security, with nearly 20 years of this experience focused on cyber and information security. Prior to his current role, Mr. Yacono was responsible for several of FINRA's core cybersecurity functions, including leading a comprehensive Application Security Program, which Mr. Yacono established a decade earlier; the Security Compliance Program, which includes compliance with the globally recognized

NIST/FISMA standards; and the Third-Party Risk Management Program, which he also created. Mr. Yacono also facilitated FINRA's secure adoption of cloud services, establishing a program that included cloud-aware policies and standards, a cloud-security evaluation process, and the development of tools for automating management and monitoring of critical cloud-security controls. Mr. Yacono has a Bachelor of Science in Electrical Engineering from the University of Maryland, and holds several security certifications, including Certified Information Systems Security Professional (CISSP), Certified Secure Software Lifecycle Professional (CSSLP), and Certified Third Party Risk Professional (CTPRP).

Cybersecurity Update

Panelists

○ Moderator

- Carmi Moser, Senior Principal Risk Specialist – Dallas Office, FINRA Member Supervision

○ Panelists

- John Brady, Senior Vice President, Cyber Security and Chief Information Security Officer (CISO), FINRA Technology
- David Kelley, Director, Member Supervision Specialist Programs – Kansas City Office, FINRA Member Supervision
- Eric Pickersgill, Vice President and Deputy Chief Information Security Officer (CISO), FINRA Technology
- David Yacono, Vice President and Chief Information Security Officer (CISO), FINRA CAT, LLC



2021 FINRA Virtual Technology Conference

June 23, 2021

Consolidated Audit Trail (CAT)

Wednesday, June 23

4:00 p.m. – 4:55 p.m.

Join FINRA CAT, Exchange and Industry staff to hear an overview of technology used in the Consolidated Audit Trail. Learn about secure connectivity, enhanced disaster recovery testing and how big data processing is managed in CAT. Also, learn about tools that help to make big data smaller and easier to understand.

Moderator: Jeff Wells
Technical Project Manager
Cboe Global Markets, Inc.

Panelists: Shelly Bohlin
President and Chief Operating Officer
FINRA CAT, LLC

Judy McDonald
Associate Director and Head of Compliance Technology, Enterprise Risk and
Enterprise Order Management
Susquehanna International Group, LLP (SIG)

Paul McKenney
Vice President, FINRA CAT Business
FINRA CAT, LLC

Cindy Retterer
Vice President, Regulatory Technology
Nasdaq

Consolidated Audit Trail (CAT) Panelist Bios:

Moderator:



Jeff Wells is Technical Project Manager at Cboe Global Markets, Inc. (Cboe). In this role, Wells oversees the project management for innovations designed to improve the markets and satisfy participant demand. Additionally, he serves as an exchange liaison for development of the Securities Exchange Commission's (SEC) Consolidated Audit Trail (CAT). Prior to joining Cboe, Mr. Wells helped launch Exegy, a field-programmable gate array (FPGA) technology company into the financial markets segment. He worked for the company as a product and marketing manager. Previously, Mr. Wells worked for Bridge Information Systems, focusing on a variety of projects, including the development of a new trader workstation, the introduction of the Euro, Decimalization and Y2K. He also led the Quality Assurance/Software Release and Indices and Analytics teams. Mr. Wells began his career in finance in the late 1980s trading equities, options and futures. He transitioned to the information systems side of the business in 1990, focusing on trader workstations designed to harness the increasing amount of information that arrived electronically. Mr. Wells is an active member of the Financial Information Forum (FIF) and has served as chair of the FIF Data & Technology Committee since 2001. Mr. Wells has a first-class Bachelor of Arts in history from the University of London (Goldsmiths) and Master of Science in international relations from the London School of Economics.

Panelists:



Shelly Bohlin is President and Chief Operating Officer of FINRA CAT LLC, a subsidiary of FINRA that is the Plan Processor for the Consolidated Audit Trail (CAT). She also co-chairs the CAT Industry Member Technical Specifications Working Group. In addition, Ms. Bohlin served on the CAT Plan Participant Leadership Team until FINRA was selected as the CAT Plan Processor. Previously, Ms. Bohlin was Vice President in the Quality of Markets Section of FINRA's Market Regulation Department. She oversaw the Market Analysis and Audit Trail Group, which is responsible for monitoring member-firm compliance with FINRA rules and federal securities laws related to market making, order handling, trade reporting and FINRA's Order Audit Trail System (OATS). She is a Certified Public Accountant and has a B.S.B.A. in Finance and Accounting from the University of Arkansas.



Judy McDonald has been an IT professional for more than 25 years, with most of her experience being in the financial industry, including front-, middle- and back-office technology for private trading firms. Ms. McDonald is currently chair of the SEC CAT Advisory Committee and co-chair of the SEC CAT Industry Member Technology Specification Working Group. Ms. McDonald is currently an Associate Director at Susquehanna International Group, LLP (SIG), Head of Compliance Technology and Enterprise Risk. Prior to joining SIG, Ms. McDonald was an IT manager at BNP Paribas. She has also been involved with proprietary trading, market making, institutional brokerage, order routing, position management, risk, clearing and settlement systems. Ms. McDonald received her Master of Science degree in Applied Mathematics from The George Washington University.



Paul J. McKenney is Senior Director of Business Operations for FINRA CAT, LLC. In this capacity, he is responsible for educating and onboarding industry member firms on the Consolidated Audit Trail. Prior to this role he served as a Senior Director in FINRA's Market Regulation Department. He is an expert on the Consolidated Audit Trail and FINRA's Order Audit Trail System (OATS). In his role in Market Regulation, he was responsible for firm education and implementation of OATS Phase III, OATS for OTC Securities and OATS for NMS Securities. Mr. McKenney holds a B.A. in English from Loyola University Maryland and an M.B.A. from Marymount University.



Cindy Retterer is Vice President of Regulatory Technology for Nasdaq. She has been the primary representative for Nasdaq on the Consolidated Audit Trail project since 2010, and is currently a member of the CAT Leadership Team. In her role with Nasdaq, she focuses on the trading systems rulebook compliance program as well as equities and options real-time and T+1 regulatory surveillance design and review. Ms. Retterer is a 20-year veteran of Nasdaq and has her B.S. and M.S. in Information Systems Management.

Consolidated Audit Trail (CAT)

Panelists

○ Moderator

- Jeff Wells, Technical Project Manager, Cboe Global Markets, Inc.

○ Panelists

- Shelly Bohlin, President and Chief Operating Officer, FINRA CAT, LLC
- Judy McDonald, Associate Director and Head of Compliance Technology, Enterprise Risk and Enterprise Order Management, Susquehanna International Group, LLP (SIG)
- Paul McKenney, Vice President, FINRA CAT Business, FINRA CAT, LLC
- Cindy Retterer, Vice President, Regulatory Technology, Nasdaq



2021 FINRA Virtual Technology Conference

June 23, 2021

Consolidated Audit Trail (CAT)

Wednesday, June 23

4:00 p.m. – 4:55 p.m.

Resources

FINRA CAT, LLC Resources

- FINRA CAT Small Firm Road Map to December 13, 2021

www.catnmsplan.com/sites/default/files/2021-05/05.24.21-Small-Firm-Roadmap.pdf

- CAIS Onboarding & LTID Submission for Small Firms (February 2021)

www.catnmsplan.com/sites/default/files/2021-02/02.17.21-CAIS-Onboarding-LTID-Submission-Small-Industry-Members.pdf



2021 FINRA Virtual Technology Conference

June 23, 2021

Closing Remarks
Wednesday, June 23
4:55 p.m. – 5:05 p.m.

Speaker: Tigran Khrimian
Senior Vice President, Enterprise Data Platforms & Business Applications
FINRA Technology

Speaker Biography:



Tigran Khrimian is Senior Vice President of Enterprise Data Platforms & Business Applications, responsible for programs that enable FINRA to make more data-driven decisions by streamlining data collection and maximizing the value of data collected. Mr. Khrimian oversees technology that collects billions of records daily from exchanges and broker-dealers and reconstructs stock market activity to enable monitoring of trading practices by organizations that trade securities. He is also responsible for technology that handles qualification exams for securities professionals and central licensing and registration for the U.S. securities industry and its regulators. Prior to joining FINRA, Mr. Khrimian was a key member of the technology team at Chessiecap—an arm of an investment banking company specializing in mergers and acquisitions. Prior to his tenure at Chessiecap, he worked at the Adrenaline Group as a software architect, performing rapid software development of commercial products to help start-up companies and well-established businesses with their online presence. Mr. Khrimian started his professional career working as a developer at IBM, building software products in support of IBM's business critical operations. He holds a B.S. in Computer Science from the University of Maryland and an M.S. in Computer Science from Johns Hopkins University.

Closing Remarks

Speaker

○ Speaker

- Tigran Khrimian, Senior Vice President, Enterprise Data Platforms & Business Applications, FINRA Technology