

AI in Securities Services Industry

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NSDL
Technology, Trust & Reach



Agenda

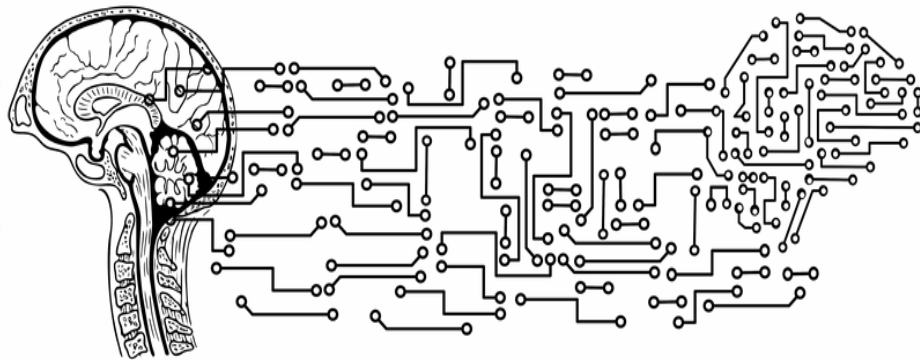
Background

Overview of AI Technology

AI Applications in Securities Industry

Challenges and Regulatory considerations

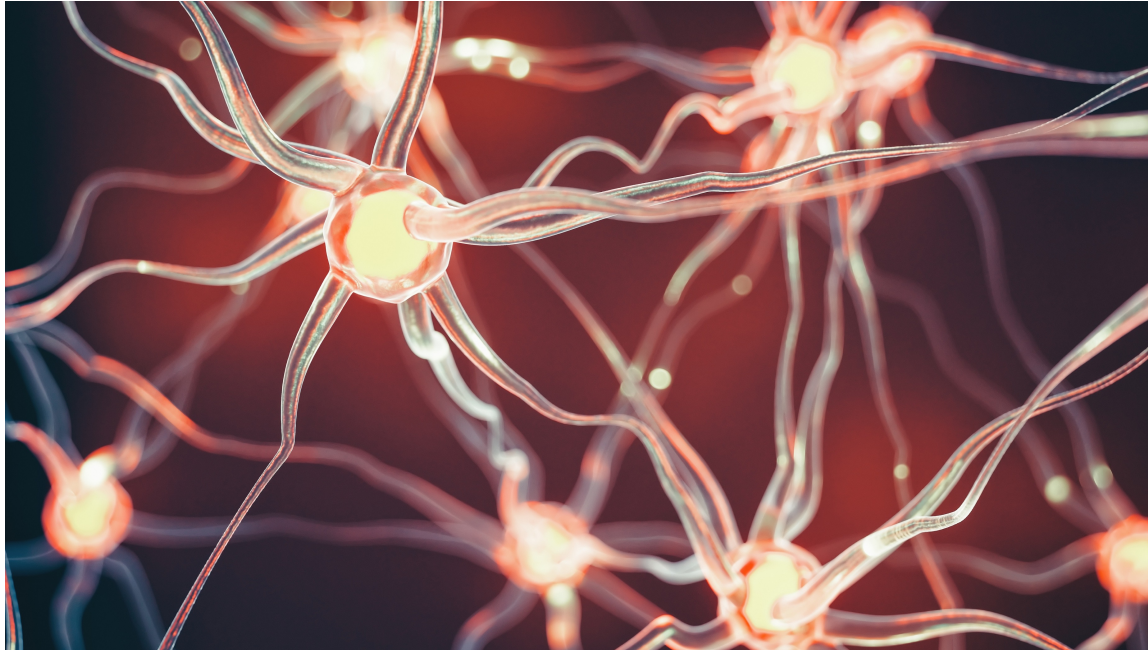
Questions



Background



- Developed in early 1940, gained momentum in last decade
- AI-based applications are being used/considered in various areas by Financial organizations including
 - customer experience
 - Investment lifecycle
 - Operational activities.



Overview of AI Technology

Overview of AI Technology



Pattern Detection

Automated detection of patterns and (ir) regularities in data



Foresight- Extrapolating learned patterns in the presence of uncertainty. Generation of such actionable scenarios. with information that can be used to tune the future towards desirable states by taking the right actions



Customization

by generating rules from specific profiles and applying general data to optimise outcomes



Decision making

by generating rules from general data and apply specific profiles against those rules



Interaction

by communicating with humans through digital or analogue mediums



AI Applications in Securities Industry

Customer Experience



Chatbots/Virtual Assistant



Email queries/inquiries



Outreach Targeting

Data collection and analysis
Personalized Marketing

Operational Areas



Compliance and Risk Management



Automation of Administrative Functions

Compliance & Risk Management

Threat analysis & Detection

- Threat intelligence
- Integrated log analysis

Fraud detection

- Analyze large number of transaction to detect unusual trends
- AI models can be used to reject or flag suspicious transaction

Automated data classification and control

- Based on type, usage and origin AI models can dynamically classify data and enforce controls

Compliance

- AI driven GRC dashboards
- Compliance trend management with real time alerting



Challenges and Regulatory Considerations

Challenges



PROTECTING DATA
COLLECTED AND USED



COST OF IMPLEMENTATION
AND UPKEEP



PREVENT BIAS ON AI
DECISIONS

Regulatory consideration



- AI governance & regulating usage of AI
- Ascertaining accountability and liability of AI system
- Transparency on the design and operations of AI systems- May impact ML; a trade off



Questions