



Exchange of Information Task Force

Big Data Technology in Capital Markets

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News Snippets



- **Indian Central Bank enters the exciting new world of Big Data analytics**

Two advancements in technology offer potential opportunity for investors to begin working in a smarter, more profitable way. These two technologies are **Big Data** and **Machine Learning (ML)**.

- **According to recent survey by WHISHWORKS, only 18 percent of companies in the UK have fully implemented Big Data.**

- **IDC has recently predicted that the big data technology and services market is expected to reach \$58.9 billion in 2020**

In 2018, we expect to see companies to process more of their data with Big Data technologies and start implementing more complex and/or impactful use cases

Trends in Big Data Technologies



Predictive Analytics and ML for insights to investor

- Significant increase in data
- Expected short time to analyse these large datasets for meaningful outcomes



Increased Regulatory Reporting for institutional clients

- New regulatory guidelines and initiatives forcing MIIs to adopt technology-led approach
- The digitalization of compliance is only just beginning - bring more benefits to clients, meet regulatory requirements, manage risks and support compliant growth



Cyber-security and Digital Privacy

- Enables deep analysis and detects potential threats
- Big data becomes critical in IDS (Intrusion Detection System)

Use Cases for Big Data in Depository



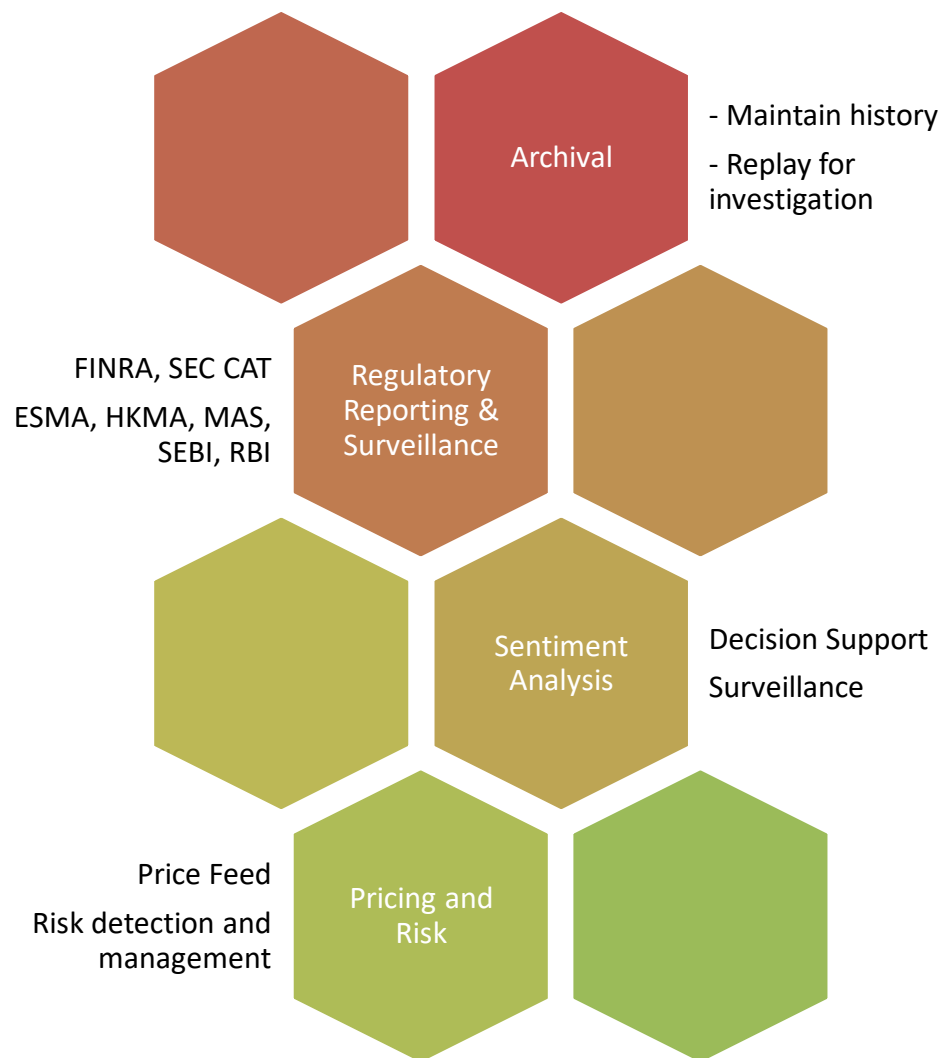
- Archival

- Regulatory Reporting and Surveillance

- Sentiment Analysis

- Pricing and Risk management

- Security Analytics



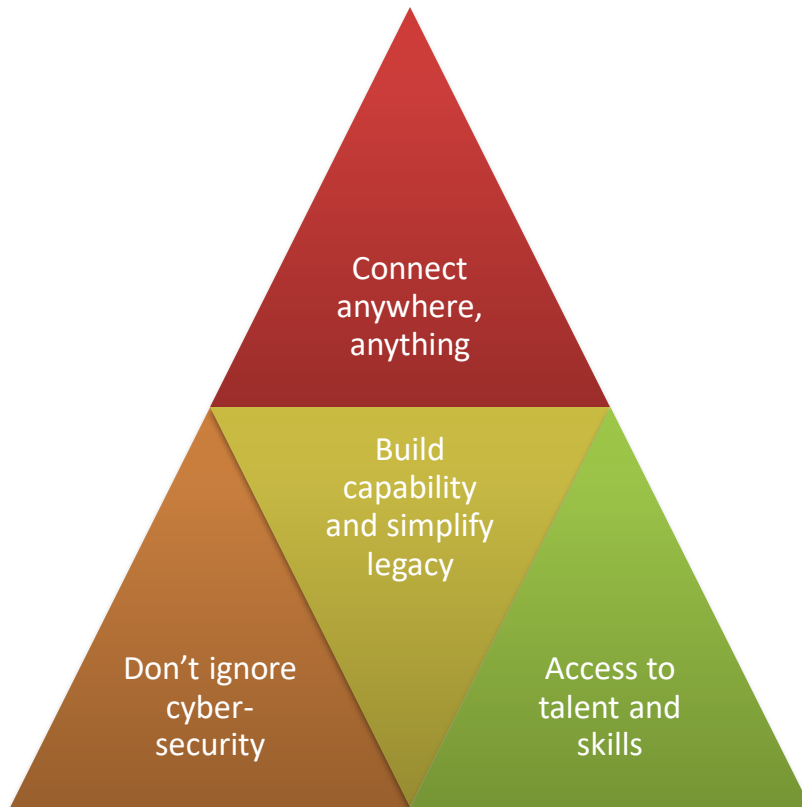
Big Data Journey of NSDL



- Embarked journey to migrate entire data warehouse and related application stack in Hadoop
- Hadoop brings performance optimisation and improvements in complex business process
- With commodity storage servers, NSDL shall leverage storage for archivals of core depository systems and peripheral systems



What next?



1. Prepare to connect to devices anywhere – Mobile, Web, Intranet
2. Build the technology capabilities to gain intelligence on customers' needs
3. Don't ignore cyber-security and secure data
4. Necessary to have access to talent and skills to win

Traditional data analytics and relational databases will not be able to compete at all with Big Data, AI and ML once they become a mature and unified technology.



Thank you!