

Big data and risk management

March 2023

Managing risks is at the core of the financial sector and the role it plays in the economy; therefore, financial institutions (FI) have many reasons to use innovative tools for risk management including big data and big data analytics. The March session of DataTalk explored big data and its applications for driving innovation and risk management in FIs. The session covered use cases, data governance frameworks and the importance of understanding the data analytics tools and models for regulatory compliance and informed decision-making. This briefing note summarizes the discussion held on 21 March 2023, respecting that the forum is conducted under the Chatham House Rule and does not represent the official position of the IIF or its membership.

Uses cases for big data: from ‘simple’ analysis to behavioral nudges. Leveraging big data sets for FIs can improve daily operations and help manage risk. From insurers to banks, there are many appealing use cases of big data for FIs. With big data analytics, FIs can better understand the needs and behavior of their customers. For instance, insurers are already leveraging big data analytics to automate certain decision-making processes for underwriting, create better pricing for customers, improve cost analysis, support the efficiency of claims processing and fraud detection, as well as for nudging customers towards healthier and more sustainable habits. Other FIs have also been using big data analytics; use cases vary from AML and compliance to cybersecurity.

Understanding data analytics tools goes beyond regulatory compliance. Understanding how data analytics tools work is being required not only by regulators and supervisors, but also by the C-suite, as managers need to be aware of the processes taking place ‘behind the scenes’ in order to make decisions with the broader set of information possible.

Moving away from binary outcomes. Models that provide “red/yellow/green” outcomes, with yellow passed on for human review, can be more useful than binary models for both regulatory and business purposes. Firms need to also be explicit on the cost function the model seeks to minimize. In the AML space, costs can differ markedly for false positives (money left on the table) relative to false negatives (reputational risk).

Leveraging governance frameworks for the age of big data. Big data analytics should balance working for FIs and their business outcomes, working for the consumer and their access to financial services, and maintaining the stability of the financial system –by taking data-driven decisions that are aligned with appropriate risk management practices. In this context, data governance frameworks are key to ensuring the right kind of rules are built to create a model that is accurate and not discriminatory. In these frameworks, data quality is one of the most important components, as having pools of unreliable data does not help – and it might deter – innovation and risk management.

The data localization variable. Even though consumers recognize that FIs are secure repositories for their personal information (since they have data governance strategies in place), governments have taken a more nationalistic approach to data protection, which has directly impacted economies of scale and exacerbated a fragmented landscape that, in turn, may undermine the digital infrastructures consumers have come to rely on.

We look forward to continuing the DataTalk series on Tuesday, April 25 9:00 am Washington DC / 2:00 pm London where we will explore the Data Free Flow with Trust (DFFT) initiative being highlighted by Japan during their G7 Presidency.