July 1, 2021

DEPARTMENT OF THE TREASURY
Office of the Comptroller of the Currency

BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

FEDERAL DEPOSIT INSURANCE CORPORATION

BUREAU OF CONSUMER FINANCIAL PROTECTION

NATIONAL CREDIT UNION ADMINISTRATION

RE: Request for Information and Comment on Financial Institutions’ Use of Artificial Intelligence, including Machine Learning

Dear Mr. Jonathan Gould et al,

The Atlantic Council GeoTech Center is pleased to share comments in response to the Board of Governors of the Federal Reserve System, Bureau of Consumer Financial Protection, Federal Deposit Insurance Corporation, National Credit Union Administration, and Office of the Comptroller of the Currency on their request for information regarding financial institutions’ use of artificial intelligence (AI).

As a leading nonpartisan international affairs organization, the Atlantic Council galvanizes US leadership and engagement in the world, in partnership with allies and partners, to shape solutions to global challenges.

The GeoTech Center champions positive paths forward that societies can pursue to ensure new technologies and data empower people, prosperity, and peace. In that spirit, please accept this input.

Sincerely,
Steven C. Tiell
Nonresident Senior Fellow
Atlantic Council GeoTech Center
Responses to Selected Questions

**Question 4:** How do financial institutions using AI manage risks related to data quality and data processing? How, if at all, have control processes or automated data quality routines changed to address the data quality needs of AI? How does risk management for alternative data compare to that of traditional data? Are there any barriers or challenges that data quality and data processing pose for developing, adopting, and managing AI? If so, please provide details on those barriers or challenges.

Data quality issues are often at the heart of negative downstream impacts. With data sources being as varied as orchards that supply oranges for Tropicana orange juice, merely keeping data quality consistent from the same suppliers can be a challenge and requires constant attention from data scientists. When data formats, fields, and specifications change, there’s often little to no documentation and that knowledge might be exclusively held by a single data scientist.

In the financial services context, this can be even more complex with FSIs using data provided by customers (of which customers are aware) and third-party data (of which customers may not be aware). These data might require different treatment, controls, and disclosure. The fastest growing open source software that attends to and, in many cases, guarantees data quality while documenting, in a structured way, all of the changes required to maintain data quality is Great Expectations. It is good for FSI regulators to be aware of this class and category of solution. These types of systems/projects are gaining investment as well (the parent company behind Great Expectations recently closed a $21M A-round) and governance is a natural progression – more on that in the next response.

**Question 17:** To the extent not already discussed, please identify any benefits or risks to financial institutions’ customers or prospective customers from the use of AI by those financial institutions. Please provide any suggestions on how to maximize benefits or address any identified risks.

As identified by all of the speakers in the June 17, 2021 FDIC-hosted webinar, “Banking on Data: Ethics of Artificial Intelligence and Machine Learning,” a foundational issue all organizations, including FSIs, are dealing with is a failure to define what it means – beyond legal requirements for protected classes – to be “fair”.

In the paper [soon to be] published by the Atlantic Council GeoTech Center, *Moving from Values to Actionable Commitments and Standards of Evaluation* (title subject to change), we partnered with the Ethics Institute at Northeastern University to provide guidance on operationalizing ethics at any organization, based on the local context of their existing values and principles. The framework describes how to operationalize commitments to things such as justice and fairness. No longer should a press release be the end of the journey on commitments to positive social outcomes. This framework also provides for specifications to be defined that organizations can then report against to be held accountable to their
commitments. It is robust and has been successfully tested at a bank, insurer, and public utility. The chart below is copied from the paper referenced above. Please see the full paper for more discussion (should be published by mid-July at the latest).

<table>
<thead>
<tr>
<th>ETHICS</th>
<th>the work performed to specify and satisfy values, according to normative content, through governance</th>
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<tbody>
<tr>
<td>GOVERNANCE</td>
<td>capacity to specify normative guidance across the organization and apply it in specific cases</td>
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<tr>
<td>NORMATIVE CONTENT</td>
<td>the operationalization of foundational values and core concepts into specific norms and commitments that guide actions</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Foundational Values</th>
<th>Core Concepts</th>
<th>Principles</th>
<th>Commitments</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>...indicate what is desirable to promote and protect</td>
<td>...embody or represent foundational and organizational values</td>
<td>...express general norms or guidance on how to honor the concepts and realize the values</td>
<td>...describe specific ways to abide by the principles that will be used or implemented</td>
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| Examples | Privacy, fairness, justice, autonomy, democracy, transparency, accountability | Nondiscrimination, protection from harm, inclusion, equality of access, responsibility to act with integrity | No differential consideration, presumption of eligibility, savings returned to customer | Can AI decisions can be explained? How long does it take different groups to reach customer service? |