

@Insurance Snapshot.

Technology & Innovation News & Views



December 14, 2018

Eyeing AI: Artificial Intelligence and its Increasing Impact on the Insurance Industry

By Larry Hamilton, Brad L. Peterson and Sanjiv Tata¹

The use of artificial intelligence (“AI”), which may be defined as the development of computer systems able to perform tasks normally associated with human intelligence, has grown exponentially across various industries over the past decade. This trend is expected to accelerate due to declining technology costs, improving AI software, and expansions in the amount of data available.

The insurance industry, perhaps reflecting its cautious conservatism, has been slower than many other industries to leverage AI platforms and solutions to replace previous industry practices. Accordingly, the insurance industry is ripe for change, as the use of AI increasingly becomes the norm in other industries. Industry leaders are focusing on uses in marketing (making it faster and easier to buy insurance), policy design (with premiums more focused on risks such as driver behavior), underwriting analytics (using nontraditional data sets), claims (with more rapid settlements based on historical data), and fraud detection (by identifying patterns indicating fraud).

Needless to say, the implementation of AI within the insurance industry presents challenges. From a practical perspective, insurance companies utilize a wide array of different programs and methodologies to conduct their current operations. Insurance data is thus inconsistently

tracked and generally collected for reasons other than the new AI uses. Much of the data is collected by error-prone methods and some is collected from people who have a financial incentive to slant the results toward insurance reimbursement. The spotty and inconsistent quality of insurance data limits the possibility for AI to generate accurate results. The amount of personal data presents [data privacy and cybersecurity concerns](#).

Not surprisingly, state insurance regulators, while generally receptive to the benefits that can be derived from increased use of AI by insurance companies, are sensitive to the potential risks and negative effects. For example, regulators have concerns about how policyholder information will be safeguarded. In addition, the use of AI for insurance underwriting raises questions about whether the algorithms may generate results that would be unfairly discriminatory. The results might be unfairly discriminatory because the AI is trained based on data that includes unfairly discriminatory decisions, because the AI might make decisions that in fact reduce risk but do so in a way that adversely affects a protected class, or because the AI’s algorithms are flawed. The reasons for the AI’s decision may be so complex or involve so many rating factors as to not be explainable. Other regulatory concerns, including:

- How do vicarious liability principles work when an AI platform breaks the law?
- Can an AI act “intentionally,” “knowingly,” or “recklessly”?
- When is failure to supervise a machine negligent; or, how would a “reasonable person” monitor an AI?
- What is bias or discrimination for an AI? (A mathematical algorithm implemented on a computer wouldn’t have “intent.”)
- How do disparate impact principles apply in the AI context?
- How do you monitor a computer for bias or discrimination?
- What records does a financial institution need to retain with respect to an AI system’s activities?
- What is an acceptable form for those records?
- How must regulators be able to access them?
- How should regulators supervise AI? To what extent do they need to understand the inner workings of a system?
- What replaces asking a human decision-maker for his or her reasons for a decision? Does the output of AI need to be “explainable” and, if so, to whom?
- How might regulators use AI in RegTech applications?
- Should the consent of the insured or potential insured be required for automated profiling?

In order to address these concerns, it is likely that state insurance regulators will seek enhanced

oversight over the use of AI by insurance companies. In fact, in connection with the monitoring of the impact of new technological developments, including the increased use of AI, on the insurance industry, the National Association of Insurance Commissioners (the “NAIC”) has established an Innovation and Technology Task Force. As AI is increasingly being used within the insurance industry, the NAIC’s Innovation and Technology Task Force is expected to consider methods by which state insurance regulators can regulate such use, which may include the drafting of model laws or regulations. Although such regulatory developments have yet to materialize, insurance companies would do well to remain attuned to any such initiatives by insurance regulators.

We in the Regulatory Corner would be remiss if we did not note that adoption of AI by insurers also involves numerous non-regulatory issues. Those include, for example, intellectual property rights in AI systems, rights in data, contracts with technology providers, technology due diligence in acquisitions and investments, and laws governing privacy and data security.

Please reach out to the authors of this Regulatory Corner, listed below, to discuss how the influx of new technology, including AI, may impact your business.

Mayer Brown partners [Larry Hamilton](#) and [Brad L. Peterson](#), as well as associate [Sanjiv Tata](#) contributed to this article.

Endnotes

¹ Larry Hamilton leads Mayer Brown’s US insurance regulatory practice within the Insurance Industry group. He advises insurance companies, insurance agencies and investment companies on a broad range of regulatory matters, including those associated with formation, licensing, portfolio investments, reinsurance, e-commerce,

cybersecurity and outsourcing. He is also a member of Mayer Brown’s Cybersecurity & Data Privacy practice. Brad Peterson is a partner in Mayer Brown’s Chicago office. He leads the Technology Transactions practice. In the past five years, he has represented clients in increasing numbers of contracts with digital services providers, including cloud, data analytics, “as a Service” and automated process scopes and cyber security and privacy issues related to

those scopes. He also has extensive experience representing companies' licensing enterprise systems and contracting for systems integration and systems development for those systems. Brad Peterson is a partner in Mayer Brown's Chicago office. He leads the Technology Transactions practice. In the past five years, he has represented clients in increasing numbers of contracts with digital services providers, including cloud, data analytics, "as a Service" and automated process scopes and cyber security and privacy issues related to those scopes. He also has extensive experience representing companies' licensing enterprise systems and contracting for systems integration and systems development for those systems. Sanjiv Tata is an associate in Mayer Brown's New York office and a member of the Corporate & Securities practice, specializing in insurance regulatory work. Sanjiv advises insurance companies, insurance intermediaries and investment companies with respect to a broad range of insurance regulatory and corporate matters, including formation and licensing of insurance companies, mergers and acquisitions of insurance companies, reinsurance transactions, and enforcement, corporate governance, cybersecurity, enterprise risk and general compliance matters.

(the "Mayer Brown Consultancies"). The Mayer Brown Practices and Mayer Brown Consultancies are established in various jurisdictions and may be a legal person or a partnership. Details of the individual Mayer Brown Practices and Mayer Brown Consultancies can be found in the Legal Notices section of our website. "Mayer Brown" and the Mayer Brown logo are the trademarks of Mayer Brown. © 2019 Mayer Brown. All rights reserved.

Mayer Brown is a distinctively global law firm, uniquely positioned to advise the world's leading companies and financial institutions on their most complex deals and disputes. With extensive reach across four continents, we are the only integrated law firm in the world with approximately 200 lawyers in each of the world's three largest financial centers—New York, London and Hong Kong—the backbone of the global economy. We have deep experience in high-stakes litigation and complex transactions across industry sectors, including our signature strength, the global financial services industry. Our diverse teams of lawyers are recognized by our clients as strategic partners with deep commercial instincts and a commitment to creatively anticipating their needs and delivering excellence in everything we do. Our "one-firm" culture—seamless and integrated across all practices and regions—ensures that our clients receive the best of our knowledge and experience.

Please visit mayerbrown.com for comprehensive contact information for all Mayer Brown offices.

Any tax advice expressed above by Mayer Brown LLP was not intended or written to be used, and cannot be used, by any taxpayer to avoid U.S. federal tax penalties. If such advice was written or used to support the promotion or marketing of the matter addressed above, then each offeree should seek advice from an independent tax advisor.

This Mayer Brown publication provides information and comments on legal issues and developments of interest to our clients and friends. The foregoing is not a comprehensive treatment of the subject matter covered and is not intended to provide legal advice. Readers should seek legal advice before taking any action with respect to the matters discussed herein.

Mayer Brown is a global services provider comprising associated legal practices that are separate entities, including Mayer Brown LLP (Illinois, USA), Mayer Brown International LLP (England), Mayer Brown (a Hong Kong partnership) and Taulil & Chequer Advogados (a Brazilian law partnership) (collectively the "Mayer Brown Practices") and non-legal service providers, which provide consultancy services