

The Future of Insurance: AI's Role in the Insurance Industry (Part 4)

In part 3 of our running series on AI's role in insurance NIACE shared how AI could optimise the product development process and enhance existing risk management models. In the fourth and final part of this running series, we will be further exploring regulatory and ethical concerns of AI in the insurance industry.

According to a global survey done by KPMG in 2023, 57% of global financial institutions and insurers have cited ethical and regulatory concerns as the main challenges in implementing artificial intelligence (AI) into daily operations. In response to the challenges and risks associated with the implementation of AI, several jurisdictions across Asia have proactively developed guidelines and frameworks around the usage of AI. For example, the Monetary Authority of Singapore in June 2023 introduced the Veritas Toolkit Version 2.0 for Singapore based organisations to manage their individual compliance frameworks. In a similar vein, China and India have separately introduced guidelines for appropriate usage and implementation of AI frameworks. Therefore, it is evident that insurers globally should follow suit and introduce specific risk management and control measures into existing cybersecurity and governance frameworks.

Building on the next steps for regulation on the usage of AI and machine learning (ML) in the insurance industry, the International Association of Insurance Supervisors (IAIS) has proposed several key focus areas on the ethical, fair and safe adoption of AI and ML technologies within the insurance sector. Firstly, governance (including risk management) on the design, implementation, and usage of AI and ML remains the top priority as the IAIS encourages insurers to continuously formulate new guidelines and patch any gaps in older guidelines. This ensures that implemented governance guidelines continue to safeguard the best interest of the industry and end consumers. Secondly, prevention of customer harm through pertinent monitoring and fair usage. This helps to address and mitigate any discriminatory biases existing AI and ML algorithms might have through pertinent monitoring given the current lack of maturity to handle said biases. Lastly, limitations of data usage aims to restrict the nature and type of data used in AI and ML applications. This ensures sensitive information is protected from accidental leakage while still enabling insurers to deploy AI and ML applications that provide critical market insights and streamline daily operations.

With the three main proposed focus areas that the IAIS has identified, some industry experts have identified ten fundamental principles that will help insurance companies meet current AI regulatory requirements and prepare for any anticipated regulatory changes. These principles address aspects such as frameworks, controls, processes, and tools for the safe design, development, and deployment of AI. These principles are:

Accountability - Assist in fostering mechanisms that promote ownership and accountability

Data Integrity - Build trust through data quality, good stewardship, governance, and enhancement practices

Explainability - Facilitate the comprehension, documentation and interpretation of AI algorithms

Fairness - Support efforts to ensure models are unbiased and upholds equitability

Privacy - Solutions should be crafted in adherence to relevant privacy and data protection laws and regulations

Reliability - Assist in ensuring that AI applications and/or systems achieve the required level of precision and consistency

Safety - Protect against any adverse effects on people, property, and the environment

Security - Protect against unauthorised access, prompt injection, data poisoning and corruption, and other forms of attack(s)

Sustainability - Designed solutions should be energy-efficient, lower carbon emissions, and contribute to a cleaner environment.

Transparency - Champion responsible disclosure to ensure stakeholders have a clear understanding of the AI lifecycle and its effects

NIACE is aware of the prevailing ethical concerns on the usage of AI and ML within the industry and stress that the company adheres to the strict guidelines of the relevant jurisdictions the company operates in. Notwithstanding the challenges faced by insurers in the implementation of AI and ML, the company is committed to upholding the highest level of corporate governance as we strive to be good stewards of our client's safety and security.

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