ARTIFICIAL INTELLIGENCE & MACHINE LEARNING RISKS

Technology is the great disruptor of all industries, and now it is the financial services industry that is feeling the impact. Technology is transforming the way financial service providers operate as well as the services clients are looking for. BDO takes a proactive approach to exploring new business cases and technologies. We monitor the legislative landscape in which financial service providers operate and help clients find solutions. Using the knowledge and resources of our extensive international network, our specialists provide a wide variety of services to help clients focus on their core business and stay ahead of competitors.

Information technology is continuously evolving in fresh and innovative ways, providing businesses with the ability to streamline business processes, decrease operating costs and increase competitive advantage through digital disruption. Our knowledge of emerging technologies allows us to provide governance, risk and compliance assurance on an array of emerging technologies.

BIAS
- Inherent risk introduced by people who built the models.
- Historic data used during model development may also introduce data bias.

DATA MANAGEMENT RISK
- Incomplete and inaccurate data gives rise to poor decisions.
- Unencypted data in the analytics environment is vulnerable to manipulation.
- Privacy issues including data such as race, gender, sexual orientation or their proxies may be used in violation of regulations

THIRD PARTY RISK
- Vetting of third parties to implement Machine Learning and AI solutions.
- Continuous review of the AI infrastructure managed by the third party.

INFORMATION SECURITY RISK
- Vulnerabilities in the source code of the ML and AI solution package.
- Applicability to existing information security policies.

OPERATIONAL IT RISK
- Intergration of ML and AI solutions with legacy applications.
- Integration with existing IT policies.
- Definition of clear business cases preimplementation.

LACK OF MODEL VARIABILIITY
Over optimized models before implementation stand the risk of a decrease in accuracy when real data is implemented.

TRANSPARENCY AND INTERPRETABILITY
Black boxed models with obscure layers of decision making increase difficulty in auditing and tracing how decisions were made.

GOVERNANCE, REGULATORY AND LEGAL RISK
- Increased risk of how roles, accountability, liability and responsibility is apportioned between the firm and its suppliers on the one hand, and the firm and its customers on the other.

ORGANISATIONAL RISK
- Lack of adequate understanding of complex AI models may result in the misinterpretation of AI outputs and poor outcomes.
- Perceived or actual negative impact of implementation on job security and business ethics.

EMERGING TECH TOOLBOX

FOR FURTHER INFORMATION CONTACT

Nevellan Moodley
Partner and Head of Financial Services Technology
nmoodley@bdo.co.za

BDO