1. INTRODUCTION & EXECUTIVE SUMMARY

INTRODUCTION

Artificial Intelligence or AI is portrayed as the next super-power. It is the only technology that we treat as human. We credit it with the skills that people have. Every day we hear how AI is at the forefront of innovation and is on its way to change fundamentally our everyday lives, both in the private and professional spheres. The extent of opportunities, affected industries and possible uses seem unlimited. The development of this technology combined with the ever-increasing amount of data available – which plays a key role – seems to be driving a new AI era. Risk management will not be excluded.

As with every new technology, there are emerging risks and challenges related to AI. Questions on ethics, equality, biases, trustworthiness and reliability of decisions made or suggested by AI, are just some of the topics that need attention. Transparency of algorithms and increasing cyber risks are also issues for the risk manager to address.

Some strategic questions that organisations need to address include:

- How and why is our company using and applying AI?
- What new liability or cyber challenges arise?
- What are the challenges for our workforce on decision, on ethics and biases?

In the AI race, not only companies and scientists are competing with each other, but also countries and governments, because the related impact goes beyond companies and individuals; today's research and decisions will affect societies. Europe has the opportunity to define its own way on how to apply AI and handle the related risks and fears in what the European Parliament described once as a "human-centric" approach to AI.

With this document, FERMA aims to kick off a broader discussion on AI and risk management.

Enjoy the reading and please join in.

EXECUTIVE SUMMARY

To write this paper, FERMA brought together a group of experts from within and beyond the risk management community. The ambition was to develop the first thought paper about AI applied to risk management.

The goal was first, to perform an initial assessment of the potential value of AI to improve enterprise risk management (ERM), and second, to understand how risk managers can be key actors in highlighting to the organisation leadership the opportunities and challenges of AI technologies.

This paper aims to guide risk managers on applying Al. It goes from basic learning to identifying new risks and developing their own strategy on how to take the next steps regarding the implementation of Al. The basics of Al are explained with an emphasis on its requirements and its limits.

To perform well, AI needs data of a certain quantity and of a certain quality. The very first question to consider is therefore about the organisation's strategy for managing its corporate data. As such, solving the data issue and implementing AI in business is a challenging project that impacts many corporate functions, including the risk manager.

In terms of ERM, risk managers will want to consider how AI can be best used:

- How can risk management frameworks integrate AI, especially as a source of new risks across the organisations?
- Can we process more data to mitigate losses?
- How can we use AI in the claims process?
- What processes will we create and what will be provided by brokers, insurers and re-insurance companies?

We expect corporate risk management to benefit from AI in several areas. From its ability to process large amounts of data to the automation of certain repetitive and burdensome risk management steps, AI could allow risk managers to respond faster to new and emerging exposures.

By acting in real time and with some predictive capabilities, risk management could reach a new level in supporting better decision-making for senior management.