Fight or Flight?

The Use of AI and Technology for Current and Future Safety and Risk Managers, Business and and Global Risk Harmonisation

HARNESSING INNOVATION FOR ENHANCED SAFETY AND RISK MITIGATION HUGH MAXWELL CFIOSH, FIIRSM, RSP, FIOL– MAXWELL SAFETY LIMITED

Introduction

Presentation Overview:

- The concept of 'Fight or Flight' in safety and risk management Fear v Acceptance, Macro and Mico levels.
- The growing importance of AI and technology in enhancing decision-making, safety protocols, and risk management strategies.

The Evolution of Safety and Risk Management

Historical Perspective:

- From reactive to proactive safety and risk management. Life after COVID – "Risk focused thinking"
- Current Trends:
- The integration of AI, big data, and IoT in safety and risk management. Putting investment into intent.



Understanding AI in Safety and Risk Management

What is AI?

• AI defined and its capabilities.

AI Technologies:

• Machine learning, predictive analytics, NLP, computer vision.

Applications in Safety and Risk Management:

• Predictive maintenance, hazard detection, incident analysis.

Current Applications of AI in Safety Management

Predictive Maintenance:

• AI predicting equipment failures and scheduling maintenance.

Hazard Detection:

• Real-time AI-driven hazard identification.

Incident Response:

• AI in emergency response planning and execution.

Current Applications of AI in Risk Management

Risk Assessment:

• AI evaluating and quantifying risks.

Fraud Detection:

• AI in identifying fraudulent activities.

Crisis Management:

• AI tools for effective crisis management.

Future Trends in AI and Technology for Safety and Risk Management

Enhanced Predictive Analytics:

• Future of AI-driven predictive safety measures.

Autonomous Systems:

• AI-powered autonomous systems for risk mitigation.

AI in Cybersecurity:

• AI protecting against digital threats.

<u>Building Singapore's Future: Embracing Technology for Safer and Smarter</u> <u>Construction | Singapore Business Review (sbr.com.sg)</u>

<u>Virtual reality technology is revolutionizing the construction industry.</u> (autodesk.com)

Challenges and Ethical Considerations

Data Privacy:

• Importance of data privacy and security.

Bias in AI:

• Addressing potential biases in AI algorithms.

Human-AI Collaboration:

• Balancing AI systems and human oversight.

Case Studies and Examples

Real-World Examples:

• Case studies of AI in safety and risk management.

Lessons Learned:

• Insights from AI implementations in safety and risk scenarios.

The Role of Safety and Risk Managers in the AI Era

Skillsets Required:

• Key skills for future safety and risk managers.

Continuous Learning:

• Importance of staying updated with AI and tech advancements.

Strategic Leadership:

• Leading organizations in AI-driven safety and risk practices.

Conclusion

Key Takeaways:

• Summary of main points.

The Future Outlook:

• AI's transformative potential in safety and risk management.

Q&A

Interactive Session:

• Open the floor for questions and discussions.