

# **RISK MANAGEMENT CONFERENCE & C-SUITE FORUM 2024**

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## **Technological Advancements Aid In Risk Management**

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### ***Speakers:***

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**Suresh Muniandy**, Executive Director, Tricor Roots Sdn Bhd

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# BENEFITS OF TECHNOLOGICAL INTEGRATION IN RISK MANAGEMENT

- Ability to analyse vast amounts of data to identify potential risks and trends using Big Data and Analytics.
- Enhanced ability to predict and prevent potential risks.
- Artificial Intelligence and Machine Learning can improve accuracy and efficiency in risk assessment and response.
- Greater agility in responding to emerging threats.
- Focus on strategic risks which matters most to the organisation.





# FROM DOUGH TO DIGITAL: HOW DOMINO'S TRANSFORMED THROUGH TECHNOLOGY



## ISSUE

Domino's Pizza Enterprises Limited ("Domino's") faced a significant downturn after initial success. Despite a peak stock price of \$32.25 in 2007, it dropped to \$5.95 by October 2008. This decline in demand and popularity pushed Domino's to rethink its strategy and improve service delivery to regain market traction.

## SOLUTION

Transforming into a tech-driven company, Domino's enhanced its customer experience through innovative solutions such as "Domino's Anywhere." This platform allows customers to order via various channels, such as  Smart TVs,  Facebook Messenger,  Alexa, and  Twitter. The use of Artificial Intelligence ("AI") and machine learning enabled Domino's to automate order processing and personalise the customer experience.

## OUTCOME

Through technological innovation, Domino's transformed into a multi-channel, customer-centric business. The ease and convenience of ordering have integrated Domino's into the daily routines of customers, strengthening market presence. This transformation is reflected in the stock price, its current share price has increased to approximately \$414.



By leveraging technology, Domino's not only **overcame a crisis** but also positioned itself as a **leader in customer experience and service innovation** in the fast-food industry.



# RISK MANAGEMENT EVOLUTION: USING CHATGPT TO CREATE RISK REGISTER

## Persona

- You are now a Chief Risk Officer of a Automotive Company with over 15 years of experience in risk management.

## Context

- You need to create a risk profile for Chief Technology Officer to understand the potential risks of migrating its operations to the cloud, using AI-based analytics engines to automatically classify and monitor data. This includes processing various types of sensitive information like PII (Personally Identifiable Information), financial data, intellectual property, and confidential business communications.

## Instruction

- Please return the risk assessment as a table with the following columns: Risk name, risk type, risk description, risk owner, causes, consequences. Be detailed

*Follow up:* Suggest mitigation strategies for each of these risks and include it in the table.

# RISK MANAGEMENT EVOLUTION: OUTCOME FROM CHATGPT

You are now a Chief Risk Officer of a Automotive Company with over 15 years of experience in risk management.

You need to create a risk assessment to Chief Technology Officer to understand the potential risks of migrating its operations to the cloud, using AI-based analytics engines to automatically classify and monitor data. This includes processing various types of sensitive information like PII (Personally Identifiable Information), financial data, intellectual property, and confidential business communications.

Please return the risk assessment as a table with the following columns: Risk name, risk type, risk description, risk owner, causes, consequences. Be detailed

Here is a detailed risk assessment for migrating operations to the cloud and using AI-based analytics engines:

Risk Name	Risk Type	Risk Description	Risk Owner	Causes	Consequences
Data Breach	Security	Unauthorized access to sensitive data such as PII, financial data, or intellectual property.	CTO, Security Team	<ul style="list-style-type: none"> <li>- Weak encryption or access controls</li> <li>- Insider threats</li> <li>- Misconfigurations in cloud settings</li> </ul>	<ul style="list-style-type: none"> <li>- Legal penalties</li> <li>- Loss of customer trust</li> <li>- Financial loss</li> <li>- Regulatory fines</li> <li>- Damage to brand reputation</li> </ul>
AI Model Bias	Operational	AI-based analytics may introduce or amplify biases, leading to unfair or inaccurate data classification.	AI/ML Team	<ul style="list-style-type: none"> <li>- Biased training data</li> <li>- Inadequate model validation and testing</li> <li>- Lack of diverse input in AI development</li> </ul>	<ul style="list-style-type: none"> <li>- Legal challenges</li> <li>- Loss of customer trust</li> <li>- Incorrect business decisions</li> <li>- Regulatory scrutiny</li> </ul>
Regulatory Compliance Failure	Compliance	Failure to comply with relevant data protection regulations like GDPR, CCPA, or industry-specific standards.	Legal & Compliance	<ul style="list-style-type: none"> <li>- Complex and evolving regulatory landscape</li> <li>- Insufficient understanding of regulations</li> <li>- Inadequate compliance monitoring</li> </ul>	<ul style="list-style-type: none"> <li>- Legal fines</li> <li>- Operational disruptions</li> <li>- Reputational damage</li> <li>- Possible legal actions</li> </ul>

# RISK MANAGEMENT EVOLUTION: OUTCOME FROM CHATGPT

Suggest mitigation strategies for each of these risks and include it in the table. Remove Risk Owner, Causes and Consequences from the table



Here is the updated risk assessment table with mitigation strategies included:

Risk Name	Risk Type	Risk Description	Mitigation Strategies
Data Breach	Security	Unauthorized access to sensitive data such as PII, financial data, or intellectual property.	<ul style="list-style-type: none"><li>- Implement robust encryption for data at rest and in transit.</li><li>- Employ multi-factor authentication (MFA) and strong access controls.</li><li>- Conduct regular security audits.</li></ul>
AI Model Bias	Operational	AI-based analytics may introduce or amplify biases, leading to unfair or inaccurate data classification.	<ul style="list-style-type: none"><li>- Use diverse and representative training datasets.</li><li>- Regularly test and validate AI models for bias.</li><li>- Implement fairness and ethics checks in AI development.</li></ul>
Regulatory Compliance Failure	Compliance	Failure to comply with relevant data protection regulations like GDPR, CCPA, or industry-specific standards.	<ul style="list-style-type: none"><li>- Engage legal experts to ensure compliance with regulations.</li><li>- Regularly update policies to reflect changes in laws.</li><li>- Implement compliance monitoring systems.</li></ul>



# USING PERPLEXITY FOR INFORMATION RETRIEVAL AND RESEARCH

1. What are the top 10 cybersecurity risk trends to anticipate in 2025?



2. How will the increasing sophistication of hackers affect cybersecurity strategies in the next few years



3. What are the emerging trends in automotive cybersecurity threats





# SCENARIO ANALYSIS USING CHATGPT

## MANAGING AIRCRAFT MAINTENANCE AND SAFETY RISK

### Background

Skyline Airlines operates a fleet of commercial aircraft, including several aging planes that are nearing their maintenance cycles. Recently, there have been a series of incidents in the industry involving aircraft of similar age, leading to increased scrutiny from aviation authorities and concerns about safety and compliance. Skyline Airlines needs to assess the risk of delaying maintenance and explore the potential consequences, both financially and operationally.

### Data

- Aircraft Fleet: 20 aircraft (5 are nearing major maintenance)
- Aircraft Age: 15-20 years
- Scheduled Maintenance: Within the next 6 months
- Recent Incidents: 3 incidents involving similar aircraft models across the industry
- Maintenance Cost per Aircraft: RM 1 million
- Grounding Costs: RM 100,000 per day per aircraft (if an aircraft is grounded unexpectedly)
- Safety Incidents Impact: Potential fines, reputational damage, and grounding by aviation authorities

### Objective

To evaluate the risk associated with delaying scheduled maintenance on aging aircraft, assess the potential impact on safety and compliance, and determine the best course of action to mitigate these risks.

# SCENARIO ANALYSIS USING CHATGPT

## - QUESTIONS

1

- Assess the risk of delaying maintenance on our aging aircraft, considering recent industry incidents and the potential impact on safety and compliance.

2

- What would be the financial impact if we delay maintenance and one of the aircraft experiences an incident that leads to grounding?

3

- What strategies can we implement to mitigate this risk?

4

- Simulate the outcome if we accelerate the maintenance schedule and avoid any grounding incidents.

# PREDICTIVE ANALYTICS FOR FUTURE MARKET RISKS

## An investment firm

- Anticipate potential *market risks* to make decisions about its portfolio.
- Concerned about the volatility in the tech sector
  1. Rising interest rates
  2. Geopolitical tensions.
- How they should adjust their investment strategy to minimise losses on financial investments caused by adverse price movements



# RELEVANT QUESTIONS TO ASK



1. Analyze the impact of rising interest rates and ongoing geopolitical tensions on the tech sector. Consider historical data from similar economic conditions over the past two decades.



2. Based on current economic trends and historical patterns, predict the performance of the tech sector over the next 6-12 months.



3. What sectors should we consider increasing exposure to in order to hedge against a potential downturn in the tech sector?



4. How should we adjust our portfolio allocations based on these predictions?

**Questions | Answers | Comments**

# THANK YOU





# PROFILE OF PRESENTER



**Ranjit Singh**

**Advisor & Co-Owner, Mainstreet Advisers Sdn Bhd**  
**Mobile: 012 2811042**

## Education & Professional Memberships

**Master in Business** Administration (UK - Heriot Watt University, Edinburgh)

**CIA** – Certified Internal Auditor

**CRMA** – Certification in Risk Management Assurance (USA)

**ARiMM** – Certified Member

**CA (M)** – Chartered Accountant, Member of the Malaysian Institute of Accountants

**CPA (M) & CPA (A)** – Certified Public Accountant, Member of the MICPA and CPA Australia

**CMiIA** - Chartered Member of the IIA Malaysia

**Association of Certified Fraud Examiners**

## GOVERNANCE, RISK & COMPLIANCE | INTERNAL AUDIT | FORENSIC ACCOUNTING | TRANSFORMATION | M&A |

Ranjit Singh has a special focus on ERM, internal audit, forensic accounting and transformation and M&A services. He has over 30 years of experience in these fields through his assignments and appointments in Malaysia and the USA. Ranjit was a partner of a big four firm where he pioneered the ERM, internal audit and forensic practice.

He was a member of the Board of Directors of Global Institute of Internal Auditors (“IIA”) for the term 2017 to 2021. Ranjit was also a member of the Global IIA Audit Committee, IIA’s International Internal Audit Standards Board, President of Asian Confederation of Institute of Internal Auditors (ACiIA) and President of the IIA Malaysia.

Ranjit has led and completed governance, ERM, internal audit and other advisory projects for more than 200 companies (PLCs, GLCs & MNCs) covering various industries

He was selected as the Chairman for the Panel of Judges for Risk Manager of the Year 2010 Award. Ranjit was also invited to be an Adjudicator for the NACRA awards for 6 years (2009 to 2014). He also led five one-day workshops for Bursa Malaysia Berhad on ERM & internal controls for 5 years (2013 to 2017).

Ranjit has a truly international perspective of best practices as he has completed assignments in more than 30 countries, including Australia, Philippines, Panama, Uzbekistan, Afghanistan, Kyrgyzstan, Nepal, Vietnam, Cambodia, Lao PDR, Indonesia, Thailand, Iran, India, China, Solomon Islands, Morocco, Fiji, Syria, Jordan, Djibouti, Mongolia, Kenya, Armenia, Azerbaijan and Sudan.

He has appeared on TV and Radio shows including Biz talk (Astro Awani) and appeared live on BFM’s breakfast grille programmes on the subjects of internal audit, risk and governance.

Prior to his appointment at Tricor Axcelasia, Ranjit was the Group Chief Executive Officer of Axcelasia Inc. and he spearheaded Axcelasia’s listing on the catalyst market of SGX in 2015.



# PROFILE OF PRESENTER



**Suresh Muniandy**

**Executive Director, Tricor Roots Sdn Bhd**  
**Mobile: 016 2602297**

## Education & Professional Memberships

**Bachelor's Degree** in Computing, University of Greenwich

**ISMS** – Certified Internal Auditor

**PSM** – Professional Scrum Master™ I

## GRC SOFTWARE | BUSINESS CONTINUITY MANAGEMENT | E-LEARNING AI RESEARCH & DEVELOPMENT

Suresh Muniandy has more than 15 years of experience in software engineering; project management; software architecture design; and managing high performance technical team. In his previous engagement, Suresh has developed various mission critical systems ranging from contact and contactless card -based payment; e-wallet system; credit card payment gateway; and clearing and settlement system.

He started his IT career in a Technology Consulting company, having spent over 4 years in various capacities, spanning from being a Software Engineer to Technical Lead before leaving for a Financial Technology industry. While he was employed in the Technology Consulting company, Suresh managed clients from Thailand, Singapore and Indonesia by understanding their requirement and translating that into full fledged working systems.

Suresh spent his next four years with a Financial Technology company in various capacities including the complete revamp of an e-wallet and payment gateway system. He was also responsible for the software blueprint and architecture design which included the server specification and the required software. On top of that, he managed to migrate the data from existing system to the new system with 0 incidents and no data loss. Suresh is a part of ISO Committee Team where he drafted he policies and procedures for ISO 9001 & ISO 27001.

During the last two years with the Financial Technology company, Suresh spent his time mainly designing the software architecture blueprint and led the software development team consisting of 20 developers, DevOps and QA. He had also completed the chip-based card payment system for one of Selangor state's initiative programmes. He also spearheaded PCI-DSS certification and completed it within short period of time with a small tech compliance team. Besides that, Suresh designed the payment system for one of the leading Malaysian Oil and Gas companies - where it integrated Wallet and Payment Gateway System with their mobile application. Suresh also sat in the Financial Technology company's leadership team, as Head of Technology Development (Senior Manager).