



Artificial intelligence in the insurance industry

Insights of the Malaysian market

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Foreword

The insurance industry is transforming, where personalized products, instant decision-making and seamless operations are becoming the new norm. A significant number of insurers have already launched digital transformation initiatives, demonstrating strong confidence in making technology and digitalization the centerpiece of their modernization strategies. According to KPMG’s Insurance CEO Outlook, nearly 73% of CEOs see artificial intelligence (AI) as the top investment priority, even amidst economic uncertainties.

AI technology offers immense value to the local insurance industry, with an anticipated annual growth rate of 28.5% between 2024 and 2030, potentially leading to a market value of US\$3.59 billion by 2030.¹ From streamlining claims processing and risk assessments to enabling personalized services and combating cyber threats, AI is poised to handle intricate, time-consuming tasks and revolutionize operational processes, which contributes to the growing enthusiasm for its adoption.

Despite this optimism, the broader adoption of AI across the sector has been slow, often limited to specific functions. Concerns about the accuracy of AI outputs persist, with ethical issues and the lack of regulatory clarity being the most pressing concerns raised by CEOs.

In this report, we address the challenges and opportunities presented by AI and introduce a practical framework designed to help organizations evaluate their progress, set clear priorities, and implement actionable plans for larger-scale AI integration.

By embracing these advancements, insurers can drive innovation, stay ahead of the curve and better serve their customers in a changing landscape shaped by AI.



Mok Wan Kong

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KPMG in Malaysia

1. [Artificial Intelligence – Malaysia](#), Statista Market Insights, 2024



Harnessing the power of AI in insurance

By harnessing the power of artificial intelligence (AI), insurers are unlocking endless possibilities for innovation, transforming data into valuable insights that reshape customer experiences and redefine industry operations. With the ability to streamline processes and connect data from various systems, AI empowers insurers to be more agile and responsive to customer needs, resulting in a customer-focused insurance landscape that is always one step ahead.

In Malaysia, many insurers are embracing AI to revolutionize customer experience by introducing tech-driven solutions. This includes leveraging AI technologies to enable personalized insurance products, virtual assistants and chatbots, e-KYC for digital customer onboarding, and automated fraud detection systems.² These advancements not only orchestrate a seamless customer journey but also elevate operational efficiency, ensuring businesses remain responsive to the evolving market landscape.

While AI presents abundant opportunities, it also introduces challenges such as data privacy, algorithmic bias, traceability and potential conflicts of interest. As the adoption of AI intensifies, managing these risks will become a priority for insurers and regulators alike.

Unlocking the transformative power of AI will require insurers to prioritize trust, talent and value creation in their strategies, fostering a culture of innovation and adaptability that fundamentally revolutionizes how insurance companies operate.

2. [Financial Stability Review 2nd Half 2022](#), Bank Negara Malaysia, 2022



As we navigate the evolving landscape of AI-driven customer experiences, it's essential to acknowledge the profound impact these technologies have on both businesses and their customers. Embracing innovation requires us to balance advanced technology with the human touch, which is vital for creating exceptional customer experiences.

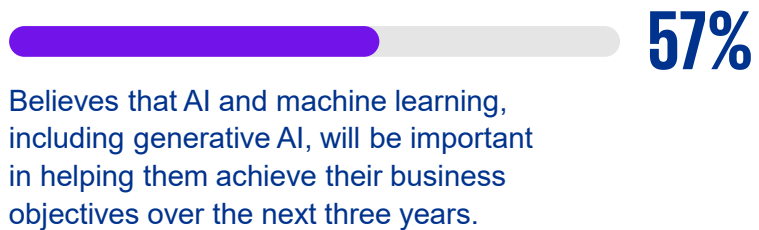
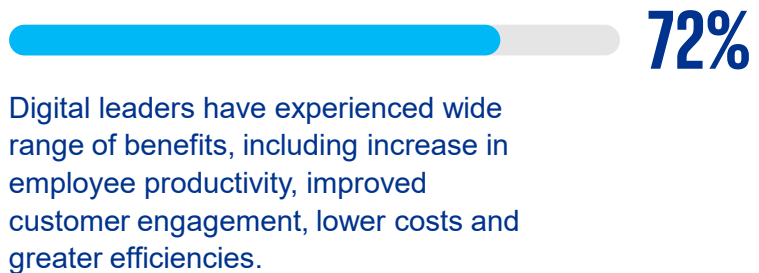


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Artificial Intelligence (AI) by the numbers

Both KPMG's 2023 CEO Outlook and Global Tech Report have highlighted that insurers are increasingly adopting emerging technologies, with AI being recognized as one of the most important advancements shaping the future of the insurance industry.



Benefits of AI

The adoption of AI requires insurers to continuously evaluate both its advantages and challenges. As technology rapidly evolves, industry players must stay current with changes and re-evaluate strategies to achieve the desired results. Industries must stay informed and regularly reassess strategies to achieve optimal outcomes. Embracing AI requires a fundamental shift in business operations and organizational culture, but the potential benefits for the insurance industry are significant and far-reaching, which include the ability to:



Enhance customer engagement



Support new business development



Provide new upsell/cross-sell opportunities



Add new features to existing products



Raise employee satisfaction levels

AI use cases within the insurance sector

The adoption of AI in the insurance industry can unlock valuable data insights, enabling more informed decision-making in risk assessment and underwriting. Additionally, automation allows human resources to focus on more complex, value-added tasks, enhancing overall operational efficiency.

According to a KPMG survey of executives from the financial services sector³, more organizations plan to experimenting on AI in the next 12 months. The potential use cases are:



Sales & Distribution	<p>AI-enabled marketing – By analyzing market trends, customer preferences and branding guidelines, AI can help insurers identify leads as well as tailor sales scripts and marketing materials that can better target potential customers.</p> <p>Optimization of affordability and sustainability assessments – AI can enable the provision of comprehensive insights and tailored suggestions on products that align with customers’ financial capabilities, life targets, risk tolerance and preferences.</p> <p>Chatbots improving customer experience – the availability of chatbots can allow insurers to answer client’s inquiries from anywhere and at any time.</p>
Policy Administration	<p>Automation of repetitive tasks – AI can automate policy administration processes by extracting relevant information from application forms, validating data, and generating policy documents. This helps to save costs and reduce manual errors.</p> <p>Customization of policies – by analyzing real-time data, AI can help tailor-make policies with optimal costs and values – offering the lowest premium with the maximum coverage – for better customer outcomes.</p>
Claims Management	<p>Precise fraud detection – AI can detect potential claims fraud precisely and efficiently by performing pattern and image analysis, helping to mitigate fraud risks and reduce financial losses.</p> <p>More accurate claims estimation – AI algorithms can match claims details against policy coverage, and more efficiently and accurately determine the eligible amount to be claimed and reserved based on policy limits, deductibles, and exclusions.</p>
Product Development	<p>Driving innovation – AI can support agile product development by identifying gaps and suggesting new product concepts, with the capability to analyze market trends, customer feedback and other data sources.</p>
Model Risk Management	<p>AI-powered model risk management – forecasting accuracy can be improved y using AI for model risk management such as back-testing and model variation, and stress testing, optimizing the variable selection process and enabling richer data segmentation.</p>

Leveraging AI technologies to enhance operational processes and customer interactions

Etiqua Insurance & Takaful has launched several AI initiatives to enhance its agency recruitment process and customer experience.⁴ By leveraging AI technologies in the following use cases, Etiqua has achieved significant improvements in their services:

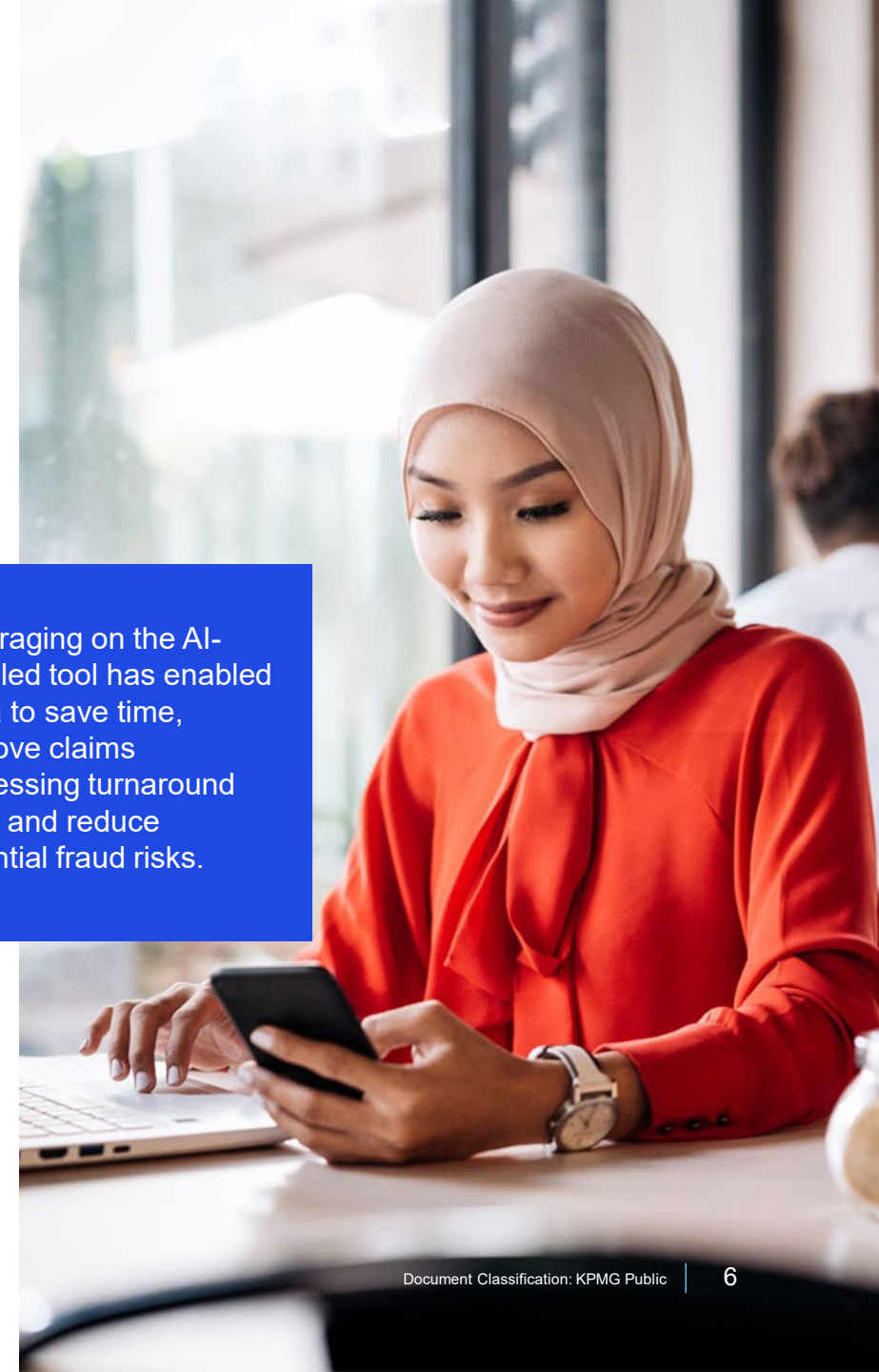
Intelligent fraud monitoring

By implementing an AI-enabled intelligent fraud monitoring tool, Etiqua can analyze processed data to identify potential fraud risks. This tool applies AI to screen claims that are processed electronically, enabling an instant and real-time detection of suspicious claims.

Integrated with the eClaims platform, the intelligent fraud monitoring tool processes structured data points to identify suspicious claims, which are then referred to the fraud investigation team. Non-fraudulent claims follow the standard process, while fraudulent ones are rejected.

The tool enable insurers to quickly aggregate various data points to help insurers quickly identify fraudulent activity. As a result, claims processing is enhanced, which reduce costs, improve turnaround time, and enable more personalized assistance to customers.

4. [Solutions: AI a game changer in combating automotive insurance fraud](#), The Edge, May 2023



Leveraging on the AI-enabled tool has enabled Etiqua to save time, improve claims processing turnaround time, and reduce potential fraud risks.

Provide AI-enabled personalized coverage for new generation

Tune Protect Life, a digital-first life insurer in Malaysia has launched FLEXIOne, a product that employs artificial intelligence (AI) to afford personalized life, medical, and critical illness coverage ⁵. Targeted primarily at millennials and Gen Z, this innovative solution tailors services to individual budgets and coverage needs through the following features:

Personalized Experience

FLEXIOne uses AI to guide customers through the buying process and suggest personalized plans based on customer data

Ease of Purchase

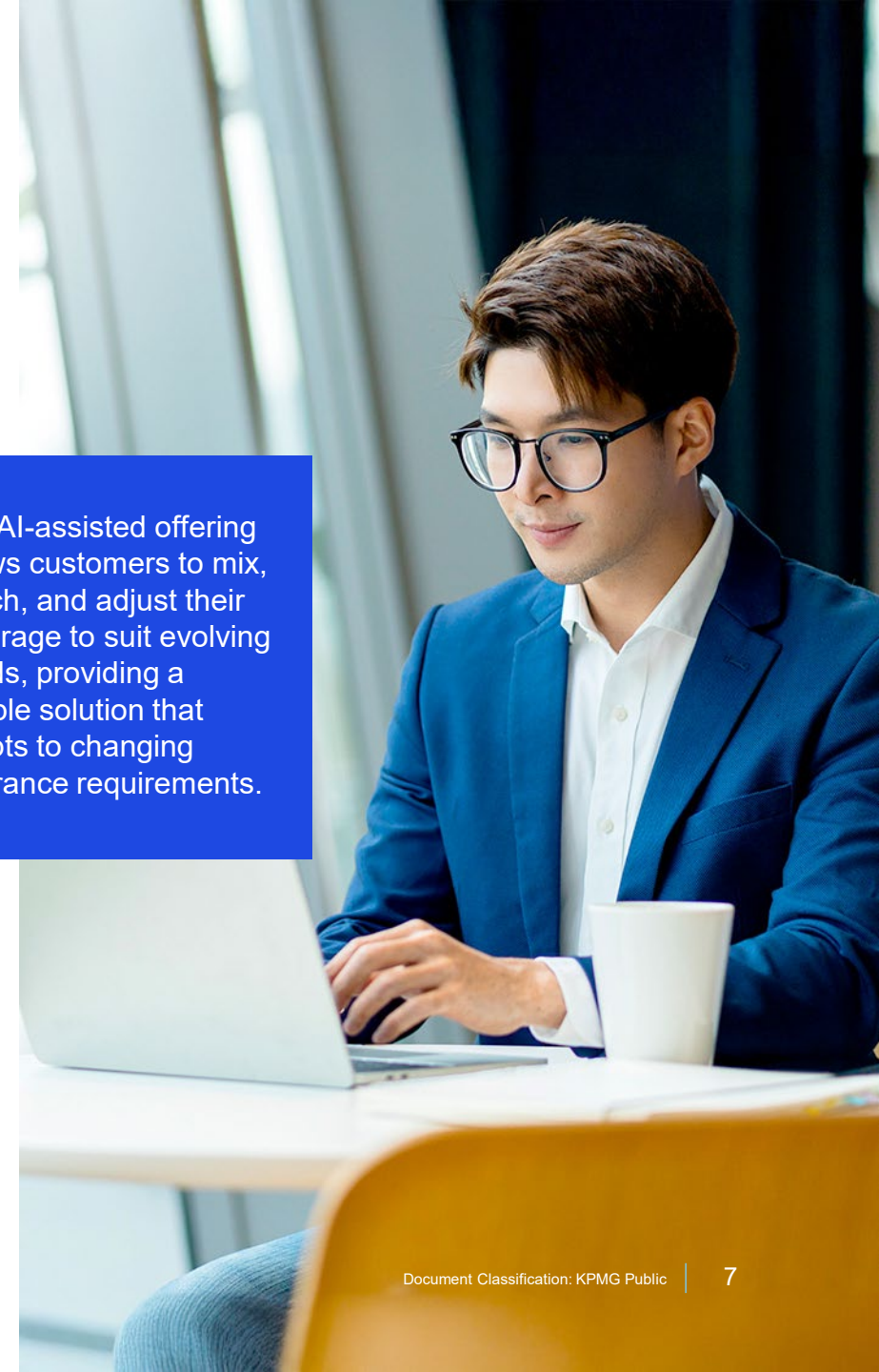
With the help of the AI-virtual assistant, Tracy, the product simplifies the buying process, offering online purchases and flexible coverage

Accessibility and Quick Service

Through a robust digital infrastructure, the insurer enhances customer experience by ensuring quick access to services, swift responses, and efficient claims processes

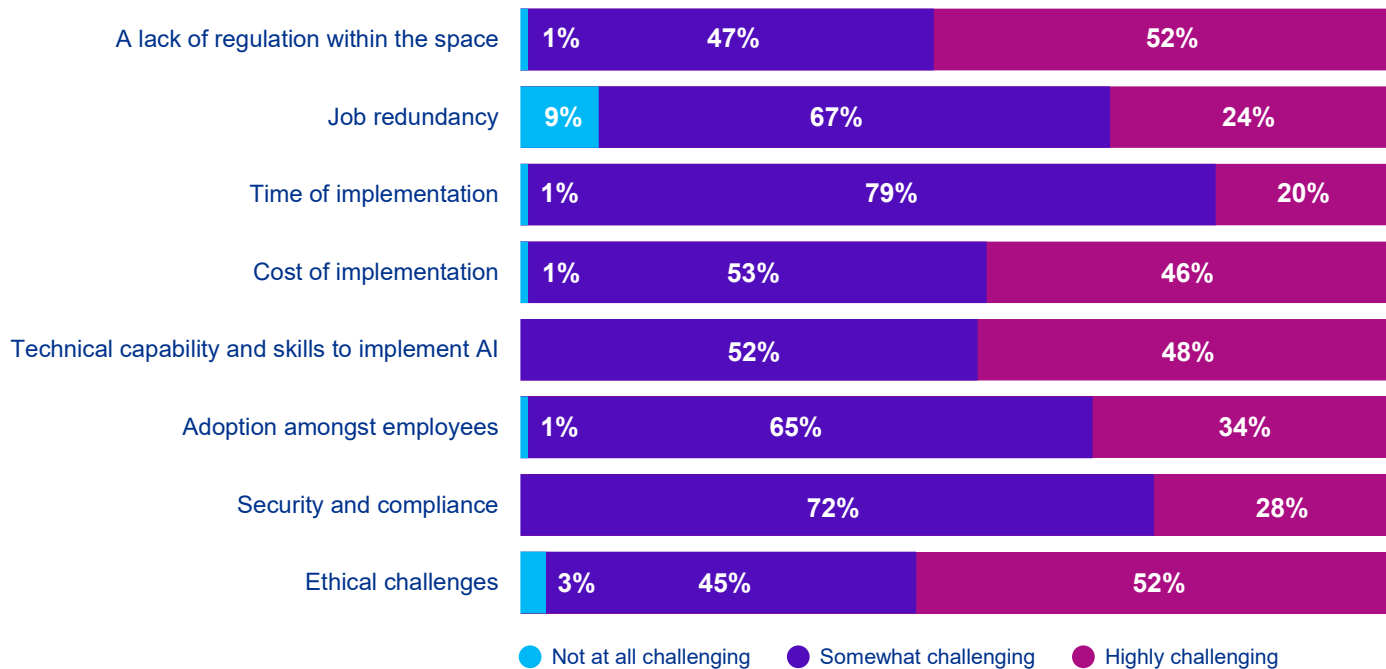
The AI-assisted offering allows customers to mix, match, and adjust their coverage to suit evolving needs, providing a flexible solution that adapts to changing insurance requirements.

5. [Tune Protect Life Launches AI-Powered Insurance Tailored for Millennials and Gen Z](#), Fintech News Malaysia, January 2024



Potential risks and considerations of using AI

Despite the numerous use cases for AI adoption, significant attention must also be paid to its ethical implications and regulatory considerations. This concern is echoed by global CEOs in KPMG's 2023 Global CEO Outlook, where, despite their strong commitment to increasing AI investments, they fully acknowledge the potential risks associated with emerging technologies. Additionally, other factors such as security and compliance, fostering AI adoption amongst employees, acquiring the necessary technical skills for implementation, and managing time and cost, all present potential hurdles.



Progression of AI regulatory frameworks in Malaysia

In response to the associated risks and challenges, governments, and regulators worldwide, including Malaysia, are taking a more proactive approach in establishing requirements and guidelines to regulate the use of AI.

- Malaysia has recently introduced its **National Guidelines on Artificial Intelligence Governance (AIGE)** to create a robust framework for users, policymakers, and AI technology providers. This initiative supports the implementation of Malaysia's National AI Roadmap 2021 – 2025 and promotes responsible AI practices in line with the seven (7) principles outlined in the guidelines. It is expected to enhance the existing legislation, including the Cybersecurity Act 2024 and the recently amended Personal Data Protection Act 2010.⁶
- The **BNM Regulatory Sandbox**, operationalized in February 2024, has enabled financial institutions to test AI-driven use cases, overcoming regulatory barriers while offering BNM insights into the opportunities and risks of these innovations⁷. It has already supported the trials for digital remittance, e-KYC, Buy-Now-Pay-Later, and digital insurance models, digital marketplaces, and innovative business models, including both digital insurance and digital takaful businesses.

6. [Launch of AIGE Guidelines: Promoting Responsible and Ethical AI Governance in Malaysia](#), Malaysiakini, September 2024

7. [Policy Document on Fintech Regulatory Sandbox Framework](#), Bank Negara Malaysia, February 2024

Trusted AI: Move from risk to opportunity



KPMG Trusted AI framework

KPMG's Trusted AI is a strategic approach that encompasses frameworks, controls, processes and tools to ensure AI systems are being designed and deployed in a trustworthy and ethical manner so that companies can drive value. We recognize that responsible AI deployment presents complex business, regulatory, and technical challenges, and we are committed to helping clients navigate and implement these practices effectively.



KPMG's approach to transformation

Prioritizing when, where and how much to invest your AI transformation in the future can be a complex decision. At KPMG, we have helped insurers around the globe in transforming their businesses by optimizing the use of technology and data.

Leveraging various technology alliances, KPMG professionals help insurers integrate cutting-edge tech solutions into their operating models, utilizing these innovations to drive efficiency, scalability, and growth on both local and global levels.



Strategize and Plan

The strategy begins with an assessment of people, process, data and technologies and lays the journey to adopt and scale AI capabilities, including how to embed into the AI portfolio.

- Digital transformation strategy
- AI strategy
- AI readiness assessment
- AI implementation support



Ideate and Incubate

From ideating to functional proofs of concept in our MVP garage, we help clients crystallize their AI strategy, incubate solutions and develop a prioritized roadmap of AI use cases that address specific pain points and capitalize on growth opportunities.

- AI value case assessment
- Digital roadmap
- AI use case PoC



Implement and Activate

We offer comprehensive services that range from establishing a data strategy for your organization to implementing AI technologies, ensuring reliable data quality from start to finish to guarantee your AI solution fulfills its potential.

- Enterprise data strategy
- Data platform design & implementation
- Data & analytics design & Implementation
- AI tool design & implementation



Future of Work

We help client to leverage AI tools to automate common tasks, allowing them to focus on key priorities. We also help design workforce strategies for thriving in an AI-driven environment.

- IT operating model
- Change management



Trusted AI

From strategy and design through to implementation and ongoing operations, our Trusted AI practice is geared to handle the associated risks posed by generative AI, including trust, compliance, security, privacy and ethical concerns.

- AI risk assessment



Connect with us

Reach out to KPMG's team of professionals to discover how your organization can effectively leverage on AI to unlock sustainable growth.



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