twimbit

Twimbit AI Radar APAC

Roundup of innovative enterprise deployments and announcements

#5 **Malaysia Edition**

Table of Contents

Summary

Twimbit AI Radar APAC is a monthly series highlighting innovative AI deployments and announcements across various industries in the APAC region. This **Malaysia edition** focuses on exploring use cases specific to **Malaysia**, spanning industries such as financial services, agriculture, and even aviation.

Company(s)	Deployment/Initiative
retailetics	Retailetics' ezyCart enhances retail shopping with AI-powered features like in-cart payment, personalized promotions, and real-time data collection, optimizing customer experiences.
MEDICINE	M3dicine's Stethee Pro uses AI to improve cardiac and respiratory diagnostics with biometric analysis, remote healthcare capabilities, and seamless integration.
qmed.asia	Qmed Asia's DR. MATA leverages AI and neural networks for fast diabetic retinopathy diagnosis, enhancing healthcare access and efficiency across Malaysia.
AmBank Group	AmBank's Voice AI automates banking interactions with NLP and ML, offering conversational services that improve customer experiences and efficiency.
IBPO GROUP	IBPO Group's ANIKA is an AI-powered chatbot automating financial tasks like loan checks and savings advice, boosting engagement and productivity.

Introduction: Malaysia AI Market Landscape

Malaysia is rapidly advancing its digital economy, with AI innovations playing a pivotal role in this transformation. Projections indicate that by 2030, AI could contribute approximately USD 115 billion to Malaysia's productive capacity, underscoring its significant impact on the nation's GDP.

The Malaysian government has demonstrated a strong commitment to AI development through strategic initiatives. In December 2024, Prime Minister Datuk

Seri Anwar Ibrahim inaugurated the National AI Office (NAIO), aiming to position Malaysia as a regional leader in AI technology and applications.

Additionally, the establishment of the Malaysia Artificial Intelligence Consortium (MAIC) fosters collaboration among academia, government, and industry to drive AI excellence and innovation.

Global technology companies have recognized Malaysia's potential as an AI hub, leading to substantial investments. Notably, Google announced a USD 2 billion investment to develop a new data center and Google Cloud region in Selangor, expected to create 26,500 jobs and contribute over USD 3 billion to Malaysia's GDP by 2030.

Similarly, YTL Power, in partnership with NVIDIA, is investing USD 4.3 billion to build Malaysia's fastest supercomputers, further enhancing the nation's AI infrastructure.

These developments are transforming key sectors such as manufacturing, healthcare, finance, and public services. For instance, the New Industrial Master Plan 2030 (NIMP 2030) targets the establishment of 3,000 smart factories, integrating AI to boost productivity and innovation.

In healthcare, AI applications are improving diagnostics and patient care, while in finance, AI enhances risk assessment and customer service.

To delve deeper into these advancements, the Twimbit AI Radar: Malaysia Edition highlights the latest AI use cases across various industries, showcasing innovations that are shaping the country's future. This edition focuses on sectors including manufacturing, healthcare, and finance, providing a comprehensive view of how Malaysia is leveraging AI to accelerate its digital ambitions.

EzyCart: Revolutionizing Retail with AI-Powered Shopping Carts

Keep Track of Everything
Price, Promotions, List, Purchases & Budgets
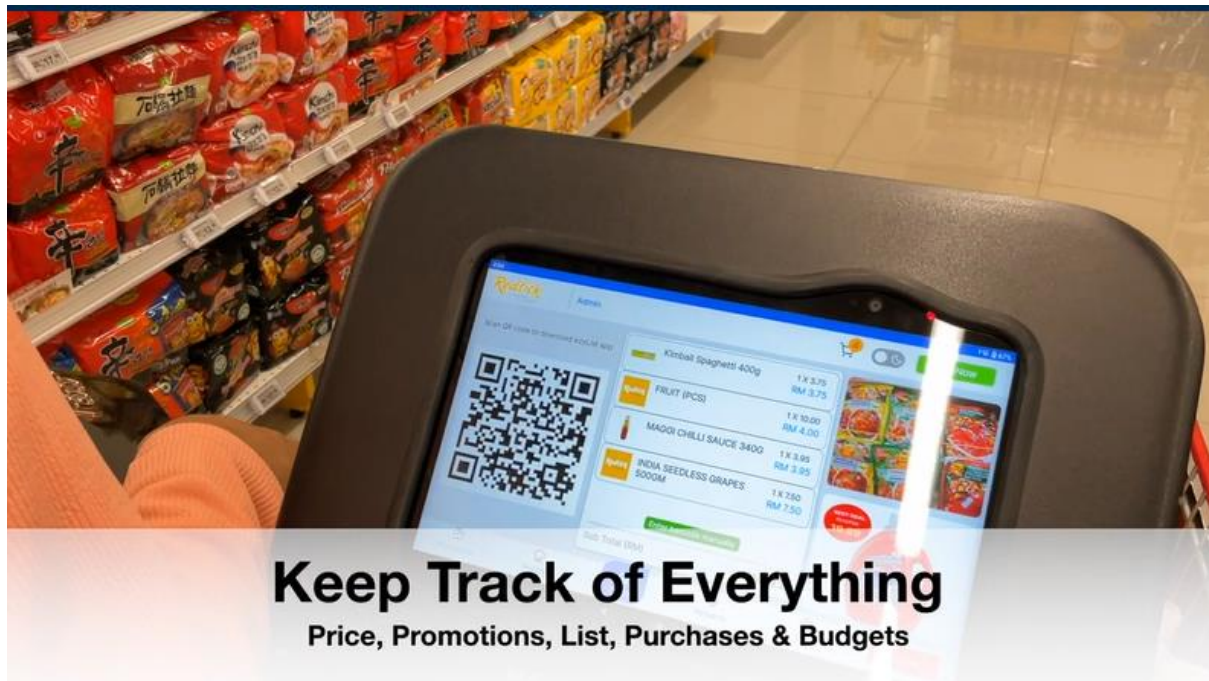
Retailetics, in collaboration with NanoMalaysia, has developed **ezyCart**, an AI-powered smart shopping cart designed to elevate the in-store retail experience. Equipped with cutting-edge AI technologies and innovative features, ezyCart enhances operational efficiency, personalizes customer engagement, and provides actionable insights for retailers.

Key Features and AI Technologies

1. **Vision-AI and Sensor Fusion**: Advanced image processing and object recognition for accurate item tracking.

2. **Three-Point Product Validation System**: Barcode scanning, weight validation, and object recognition to prevent theft and ensure accuracy.

3. **Real-Time Data Analytics**: Collection and analysis of consumer shopping patterns for inventory optimization.

4. **In-Cart Payment System**: Enables cashless transactions directly from the cart, reducing checkout times.

5. **E-Wallet Integration**: Seamless payments and digital receipts for enhanced convenience.

6. **Interactive User Interface**: Personalized shopping experience through an intuitive touchscreen dashboard.

7. **Antibacterial Nanotechnology**: Provides hygienic cart surfaces, addressing health concerns in the post-pandemic era.

How is it ranked?

⚙ **Strategic Innovation** ●●●●○

Commentary

The ezyCart platform exemplifies Level 4: **Strategic Innovation** on the AI Maturity Framework. It significantly transforms core retail processes by streamlining operations, enhancing customer satisfaction, and providing valuable insights for retailers.

The **Three-Point Product Validation System** and **cashless in-cart payment** system reduce friction in the shopping experience, making it faster and more personalized. Retailers gain critical data-driven insights to optimize inventory and design targeted promotions, ensuring better customer engagement and operational efficiency.

With letters of intent from four major retail chains and ongoing international negotiations, ezyCart demonstrates its ability to scale and adapt to diverse markets. However, while transformative within the retail sector, it has yet to reach **Level 5: Industry-Wide Disruption**, as its impact remains focused on optimizing existing retail processes rather than creating entirely new business models.

Stethee Pro: Revolutionizing Cardiac and Respiratory Diagnostics

Developed by **M3dicine**, **Stethee Pro** is an AI-enabled stethoscope system that enhances diagnostic precision by combining advanced amplification technology with AI-powered analysis. Designed to improve accessibility and accuracy in healthcare, Stethee Pro is transforming how heart and lung health is monitored and diagnosed.

1. **Data Capture**: Uses advanced sensors to capture heart and lung sounds with a push-button operation.

2. **AI Analysis with Aida AI Engine**: Creates personalized biometric signatures and identifies potential heart and lung diseases through advanced analysis.

3. **Bluetooth Connectivity**: Transmits recordings to the Stethee app on iOS and Android devices for real-time analysis.

4. **Geo-Tagging and Environmental Data**: Tracks environmental factors like humidity and temperature, providing a comprehensive context for health assessments.

5. **Integration Capabilities**: Fits seamlessly into healthcare workflows, enabling data sharing and remote consultations.

How is it ranked?

⚙ **Strategic Innovation** ●●●●○

Commentary

Stethee Pro exemplifies **Level 4: Strategic Innovation** by significantly enhancing diagnostic accuracy and accessibility while integrating seamlessly into modern healthcare systems.

- **Enhanced Diagnostic Precision**: Filters ambient noise and amplifies relevant sounds, improving the reliability of cardiac and respiratory examinations.

- **Accessibility in Remote Healthcare**: Simplifies diagnostics in rural and underserved areas, allowing instant sharing of results with specialists worldwide.

- **Integration and Scalability**: Supports existing workflows, ensuring effortless adoption by healthcare providers.

- **Personalized Monitoring**: Biometric signatures allow continuous tracking of patient health, facilitating early detection of potential issues.

While Stethee Pro transforms the diagnostic process and improves care delivery, it does not yet disrupt the medical industry at large, as its innovations enhance rather than redefine healthcare frameworks.

DR. MATA: Transforming Diabetic Retinopathy Care with AI

DR. MATA (Diabetic Retinopathy Inference with Multi Artificial Neural Network Technology Automation) is an innovative AI-powered diagnostic tool developed through a partnership between **Malaysia's Ministry of Health** and **Qmed Asia**. This initiative aims to revolutionize diabetic retinopathy detection and management by providing rapid, accurate diagnostics and enhancing accessibility in underserved communities.

1. **AI-Driven Retinal Analysis**: Uses deep learning and artificial neural networks to detect early signs of diabetic retinopathy, including microaneurysms, hemorrhages, and exudates.

2. **Real-Time Diagnostics**: Delivers diagnostic results within 30 seconds with 83% accuracy, comparable to trained ophthalmologists in early-stage detection.

3. **Integrated Referral and Guidelines**: Includes referral systems and Clinical Practice Guidelines (CPG) for streamlined case management.

4. **Universal Compatibility**: Adapts to existing fundus cameras without additional hardware requirements.

How is it ranked?

⚙ **Strategic Innovation** ●●●●○

Commentary

DR. MATA exemplifies **Level 4: Strategic Innovation**, transforming diabetic retinopathy care by integrating advanced AI technologies into Malaysia's healthcare infrastructure.

- **Accessibility**: Extends specialized diagnostic tools to underserved rural areas, ensuring equitable healthcare access. This scalable solution addresses Malaysia's high diabetes prevalence while reducing the burden on tertiary care centers.

- **Operational Efficiency**: Automates repetitive diagnostic tasks, allowing clinicians to focus on personalized patient care. Integrated workflows for referrals and follow-ups streamline case management.

- **Public Health Impact**: Identifies diabetic retinopathy at early stages, preventing progression to blindness. As a result, it reduces healthcare costs associated with advanced complications.

- **Scalability**: Compatible with multiple fundus camera models, enabling seamless integration into healthcare facilities without additional costs.

While DR. MATA significantly enhances healthcare delivery and equity, its transformative impact is primarily focused on improving existing systems rather than disrupting the global healthcare industry, which keeps it at Level 4.

AmBank's Voice AI Automation: Transforming Banking in Malaysia

AmBank, in collaboration with **AI Rudder**, has integrated Voice AI automation into its operations, marking a transformative step in Malaysian banking. This initiative enhances customer experiences, streamlines operations, and reinforces the bank's position as a leader in digital transformation.

1. **Voice AI Implementation**: Enables natural voice-based interactions, allowing customers to:

     o   Check balances and transaction history.

     o   Schedule appointments with bank representatives.

     o   Resolve basic inquiries and disputes.

2. **Natural Language Processing (NLP)**: Powers the system to understand diverse customer queries, handle accents and language variations, and provide conversational responses.

3. **Machine Learning (ML)**: Continuously improves response accuracy and personalizes interactions based on user preferences and past behaviors.

4. **Collaboration with AI Rudder**: Ensures the deployment aligns with AmBank's strategic vision and future-proofing goals.

5. **24/7 Accessibility**: Allows round-the-clock banking services, ensuring uninterrupted support for customers.

How is it ranked?

⚙ **Operational Transformation** ●●●○○

Commentary

AmBank's Voice AI Automation achieves **Level 3: Operational Transformation** on the AI Maturity Framework by significantly optimizing banking workflows and enhancing customer interaction capabilities.

- **Enhanced Efficiency**: Automates routine tasks, such as balance inquiries and transaction updates, freeing human agents to focus on high-value tasks like financial advisory and issue resolution.

- **Improved Customer Experience**: Offers personalized, conversational banking journeys that adapt to individual preferences and overcome language barriers, fostering inclusivity.

- **Data Insights**: Provides valuable datasets on customer behavior and pain points, enabling data-driven service enhancements.

- **Cost Savings**: Reduces labor costs by automating repetitive processes while maintaining service quality.

While the initiative represents a significant step in operational efficiency and customer service, it primarily focuses on optimizing existing banking processes rather than fundamentally disrupting the financial sector. This places it at **Level 3** on the framework.

ANIKA: Revolutionizing Financial Consulting with AI

IBPO Group Berhad deployed **ANIKA**, an AI-powered virtual financial consultant chatbot, to enhance customer engagement, operational efficiency, and personalized service delivery in the financial sector. Integrated with advanced AI capabilities and a secure network, ANIKA is driving significant transformation in customer interactions and financial advisory.

Key Features and Technologies

1. **24/7 Availability**: Offers round-the-clock access to financial services, including bank loan eligibility checks and savings potential assessments.

2. **Personalized Financial Solutions**: Provides tailored recommendations based on user profiles, ensuring relevance and accuracy.

3. **Automation of Routine Tasks**: Streamlines repetitive processes such as savings calculations and loan eligibility checks, freeing human consultants for more complex advisory roles.

4. **Secure Operations**: Operates within TIME dotCom's secure network to ensure data privacy and compliance.

5. **Scalable Customer Support**: Handles multiple inquiries simultaneously, reducing wait times and improving service delivery.

How is it ranked?

⚙ **Operational Transformation** ●●●○○

Commentary

ANIKA achieves **Level 3: Operational Transformation** on the AI Maturity Framework due to its significant impact on customer interactions and operational workflows.

- **Enhanced Customer Engagement**: Instant responses and personalized interactions foster stronger customer relationships, potentially increasing engagement rates by up to 80%.

- **Operational Efficiency**: Automates routine inquiries, reducing response times from hours or days to seconds and allowing human consultants to focus on complex tasks.

- **Cost Savings**: Minimizes the need for extensive customer service staff, lowering operational costs while maintaining service quality.

- **Secure Data Management**: Ensures customer data integrity through a robust and compliant operational framework.

While ANIKA optimizes existing financial service workflows and enhances customer experiences, it primarily focuses on improving current systems rather than disrupting the industry. This positions it at **Level 3** rather than a higher level on the framework.

Key Takeaway

Charting Malaysia's Path to AI Excellence

The **Malaysia AI Radar** showcases the breadth of AI adoption across industries, from retail innovation and financial automation to transformative healthcare diagnostics. While many deployments currently align with **Level 3 (Operational Transformation)** or **Level 4 (Strategic Innovation)** on the AI Maturity Framework, the highlighted use cases underscore a growing momentum toward operational excellence and strategic breakthroughs.

Malaysia's AI evolution reflects a focused effort to address industry-specific challenges while capitalizing on the transformative potential of AI. These advancements demonstrate that impactful AI adoption is not about implementing technology for its own sake but about tailoring solutions to drive meaningful outcomes, whether in efficiency, customer engagement, or societal impact.

To fully unlock AI's potential, organizations must prioritize:

1. **Building Scalable Foundations**: Robust infrastructure to support AI workloads is essential for seamless integration and sustainable growth.

2. **Developing Homegrown Talent**: A well-trained workforce is critical to innovating with AI, ensuring that Malaysia's AI journey remains competitive and self-reliant.

3. **Fostering Ecosystem Collaboration**: Partnerships between government, industry leaders, and academia can catalyze innovation and extend AI's benefits across sectors.

Looking ahead, the **Malaysia AI Radar** will continue to spotlight emerging use cases and trends, offering a roadmap for organizations seeking to leverage AI as a competitive advantage. By embracing these insights and investing strategically, Malaysia has the opportunity to solidify its position as a regional powerhouse in AI and a beacon of digital innovation on the global stage.

AI Maturity Framework Introduction

The AI maturity framework used in this report offers a structured approach to evaluating the impact of artificial intelligence across industries in Malaysia. It categorizes the deployment of AI solutions based on their transformative potential, ranging from basic automation to industry-wide disruption.

Level	Description	Impact
Level 1: Basic Automation	Minimal impact; routine automation of repetitive tasks.	Streamlined operations with low disruption.
Level 2: Incremental Improvements	Modest impact with improvements in isolated areas.	Small gains in efficiency and performance.
Level 3: Operational Transformation	Significant improvements in workflows or resource management.	Noticeable impact on daily operations.
Level 4: Strategic Innovation	AI transforms core processes, delivering major efficiency gains.	High-level impact on core business functions.
Level 5: Industry-Wide Disruption	Disruption of industries or creation of new business models.	Major market changes, reshaping entire sectors.

This framework helps understand how AI deployments are evolving, enabling companies to assess their readiness for digital transformation and the scale of change they can expect from AI adoption.