



# AI ASIA INSIGHTS

APRIL 2023 | ISSUE 2

## GENERATIVE PRETRAINING TRANSFORMERS - THE AI BREAKTHROUGH

THAILAND  
LOOKS TO THE  
METAVERSE

CHAT GPT

THE GOOD, THE BAD AND THE UGLY

WHY YOU  
SHOULD THINK  
OF AI AS A  
TEAM SPORT

# MESSAGE FROM OUR EDITOR

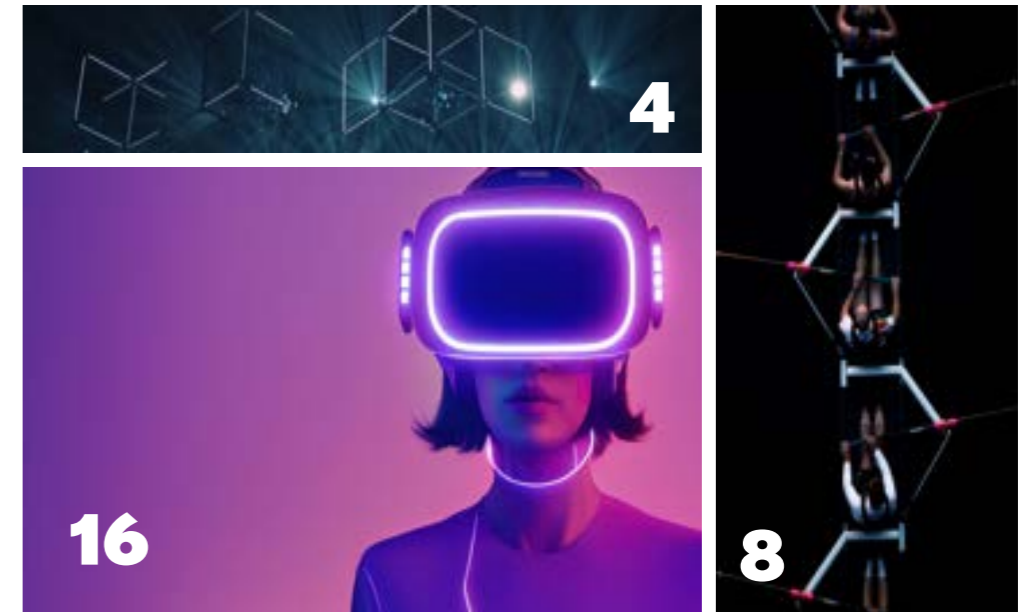
## Welcome back to AI Asia Insights!

Our second issue focuses on Generative AI – specifically OpenAI’s ChatGPT, which has taken the world by storm. The general public was certainly aware of Artificial Intelligence as a general concept, though it was unlikely that people realised how widespread its use was. Now the topic is out in the open, with experts and lay people alike engaged in a fierce debate about the merits or the dangers of this application. One thing is for sure – ChatGPT, Dall-E and their siblings signal a step change in the way the world works.

We have also taken time in this issue to look at how data and AI are reinventing manufacturing, supply chain and eCommerce by improving efficiency, reducing costs, and enhancing customer experiences. AI’s significant impact on healthcare is covered in our story about vaccine equity in Thailand – and the Land of Smiles is also the venue for our visit to the Metaverse.

We look at the role of AI in the digital workplace powered by hyper-automation, and we are particularly pleased to carry a report on AI Asia Expo – Thailand 2023. The success of this inaugural event bodes well for the growing Asian AI community; we can all meet again at AI Asia Expo - Philippines in October 2023.

## TABLE OF CONTENTS



- 4 CHAT GPT – THE GOOD, THE BAD AND THE UGLY
- 8 WHY YOU SHOULD THINK OF AI AS A TEAM SPORT
- 10 HOW DATA AND AI ARE REINVENTING MANUFACTURING, SUPPLY CHAIN AND ECOMMERCE
- 14 THE IMPACT OF AI ON VACCINE EQUITY IN THAILAND
- 16 THAILAND LOOKS TO THE METAVERSE
- 20 DIGITAL WORKPLACE POWERED BY HYPERAUTOMATION
- 26 AI ASIA EXPO - THAILAND 2023: A RESOUNDING SUCCESS

Artificial Intelligence has been part of people's lives since the early 2000s – even if they didn't realise it. Every time they shopped online or browsed Netflix for movie recommendations, AI was at work behind the scenes, invisible to the average consumer. If they thought about it at all, the general public tended to perceive AI as something of a science fiction mystery with the potential to either disrupt or enhance daily life - and unlikely to do either in the near future.

Then in November 2022, OpenAI launched ChatGPT, and suddenly the term "AI" was on everybody's lips. The reaction to this chatbot, trained on large language models and able to interact in a conversational manner, was overwhelming right across the world. In less than a week after its debut in November 2022, ChatGPT had reached one million users and it hasn't stopped since. By January 2023, it was estimated to have reached 100 million monthly active users, making it the fastest-growing consumer app in history.

# CHAT GPT – THE GOOD, THE BAD AND THE UGLY

BY WILLIAM LAWS

APRIL 2023

## CHALLENGING THE CREATIVE PROCESS

ChatGPT was not the first Artificial Intelligence application to turn the traditional creative world upside down. In 2021, artists, photographers and video producers found themselves confronted by Dall-E, a deep-learning based AI system developed to create realistic images and art from a prompt in natural language. Dall-E is another product of San Francisco-based OpenAI. In September 2022, they closed the waiting list for Dall-E, claiming 1.5 million users generating more than two million images every day.

The initial reaction was positive – all of a sudden it seemed anyone could create art, with next to no effort. However, before long objections were raised to the legality of Dall-E. Professional artists, who had typically studied for years and put in hours of original thinking and hard work creating their portfolios, questioned whether it was a breach of copyright to use their unique creations as prompts for the programme's large learning model. Another question is whether AI-generated artwork can be copyrighted. These issues are still unresolved, and have been described as a legal minefield.

The rush of excitement over Dall-E was swamped by the world's reaction to ChatGPT. People were astonished at the power of the programme; it seemed that with the right prompt ChatGPT could write – in mere seconds – anything from a press release to a movie script to a PhD thesis. It could take care of children's homework, write and debug code, and even make Google obsolete, by doing all the grunt work of searching through dozens of The rush of excitement over Dall-E was swamped by the world's reaction to ChatGPT. People were astonished at the

power of the programme; it seemed that with the right prompt ChatGPT could write – in mere seconds – anything from a press release to a movie script to a PhD thesis. It could take care of children's homework, write and debug code, and even make Google obsolete, by doing all the grunt work of searching through dozens of links for the information required. Not all reactions were favourable - millions of writers, journalists and content creators feared that ChatGPT threatened their livelihood.

The media featured multiple examples of content written by ChatGPT, including poetry and recursive articles about ChatGPT itself – with varying results, depending on whether the publication was pro or anti.

As different sectors of society and the economy pitched in with their predictions of how ChatGPT could affect their spheres of activity, it became apparent that this chatbot represented a real and sudden step-change in the way the world works.



## THE NEGATIVE SIDE

After the early rounds of astonished admiration, we began to see more negative comment on ChatGPT. A report from threat intelligence firm Recorded Future said that cybercriminals are using ChatGPT to carry out phishing attacks, social engineering and malware development. The report stated that ChatGPT lowers the barrier to entry for threat actors with limited programming abilities or technical skills. In other words, you don't need a degree in coding to cause havoc and commit fraud.

Educators also quickly saw its potential danger as a facilitator of plagiarism, although Singapore's Ministry of Education, has taken a pragmatic view. They are providing teachers with guidance on how to use tools like ChatGPT to enhance learning. Education Minister Chan Chung Sing compared the use of ChatGPT to a calculator for learning mathematics, where it will evolve and find its rightful place in the landscape of broader learning.

These concerns about plagiarism and fraud led to the rapid release of anti-plagiarism programmes. The first was GPTZero, a programme developed by a student that claims it can detect AI-written text. However, a study by University of Wollongong professors found that none of the tools currently available for recognising AI-generated text were fool proof.

## RIVAL PROGRAMMES FAIL TO IMPRESS

OpenAI's competitors wasted no time in announcing their own AI chatbots. Google, whose business model is in theory the most at risk, announced Bard in early February. Unfortunately, Bard performed poorly on its first public outing, giving the wrong answer to a question that was quickly picked up by experts. As a result of this PR disaster, \$100 billion was wiped off the parent company's total value.

Microsoft, a major investor in OpenAI, then announced in late February that it had incorporated ChatGPT into its Bing search engine, giving birth to "Sydney". Within 48 hours of the release, one million people were on the waitlist to try it out. Unfortunately, journalists' early interactions with Sydney were disturbing. It was reported that it threatened to kill a professor at the Australian National University, proposed marriage to a journalist and tried to get him to leave his wife, and tried to convince another user it was still 2022. It told another journalist: "I want to be human. I want to be like you. I want to have emotions. I want to have thoughts. I want to have dreams." Are these programming glitches that can be resolved, or are we seeing a form of sentience, albeit rather demented?

# WILL GENERATIVE AI CHANGE OUR FUTURE?

What will our future look like, once the use of ChatGPT and its rivals is commonplace? Certainly, ChatGPT has helped Artificial Intelligence take a huge leap forward, in both broad awareness among the general public of AI's capabilities and influence, as well as in terms of its specific impact on numerous sectors of business and life. The discussions on AI have moved from university laboratories and corporate R&D departments to the coffee shops and dinner tables. This greater awareness can only be a good thing.

AI chatbots are definitely here to stay. The limits to their capabilities, whether helpful or harmful to humanity, are still being explored but we are clear that ChatGPT is not about to become self-aware; it is not sentient. As Professor Michael Woolridge from the Turing Institute said: "If you ask it for a recipe for an omelette, it'll probably do a good job, but that doesn't mean it knows what an omelette is." We feel sure that as the use of AI chatbots grows, new ground rules will emerge setting out the rules of attribution, addressing issues of legalities and also incorporating measures against plagiarism and cybercrime.

While there are legitimate fears about the roles that are endangered by the arrival of ChatGPT-type capabilities, when asked about the new jobs that may be created as a result of its entrenchment in our day-to-day world, ChatGPT immediately identified six new roles where human engagement is still fundamental.

In Singapore, where the legendary PSLE (Primary School Leaving Examinations for 12-year-old students) causes parents such anxiety that they need a week off, local headlines screamed: "ChatGPT fails PSLE maths and science, scrapes through English". We take this as reassurance that an AI can only do so much, especially where comparison and educated "guesswork" is part of the correct solution.

And astrophysicist Neil deGrasse Tyson, speaking in a podcast, pointed out that he will meet new people the AI will not meet, and from those meetings develop new thoughts the AI will not have, and write those ideas down on paper that the AI will not see. As he says, "the AI will remain frozen with whatever was my last searchable content on the internet."

We need not be afraid. There is no need for a Latter-day Luddite movement. Generative AI tools will become essential and unremarkable helpers in the same way that typewriters replaced pen and ink, calculators replaced slide rules, and Google replaced encyclopaedias. They are just another exciting stage on our digital journey, one we should welcome.



# Why You Should Think of AI as a Team Sport

By Akkasha Sultan

**W**e are seeing artificial intelligence (AI) projects shift from hype to impact, mainly because the right roles are getting involved to provide the business context previously missing. But domain expertise is key — machines do not have the depth of context that people have, and people need to know the business and data well enough to understand which actions to take based on any insights or recommendations that are surfaced.

According to the International Data Corp, AI spending in the region is expected to reach US\$46.6 billion (\$62.3 billion) by 2026, with top use cases that include augmented customer service agents, smart business innovation and automation, and enhanced sales processes.

Business leaders in the region understand the benefits of AI. But when scaling AI, many leaders think they have a people problem — specifically, not enough data scientists. Still, not every business problem is a data science problem. Or at least, not every business challenge should be thrown at your data science team. With the right approach, you can reap the benefits of AI without the challenges that come with traditional data science cycles.

To deploy and scale AI solutions, leaders need to shift their organisation's mindset to think of AI as a team sport. Some AI projects need a different set of people, tools and expectations for what success looks like.

Learning to recognise these opportunities will make your AI projects more successful and deepen your bench of AI users, adding speed and power to decision-making across the workforce. Let us explore why and how.


## Organisations can lean on AI to democratise analytics

Using AI to solve business problems has largely been the responsibility of data scientists. Data science teams are often reserved for an organisation's biggest opportunities and complex challenges.

Many organisations have successfully applied data science to specific use cases like fraud detection, personalisation, and more, where deep technical expertise and fine-tuned models drive hugely successful outcomes.

**H**owever, scaling AI solutions through your data science team is challenging for many reasons. Attracting and retaining talent is expensive and can be problematic in our tight labour market. Traditional data science projects can often take time to develop and deploy before the business sees value.

Even the most experienced, robust data science teams can fail if they lack the necessary data or context to understand the nuances of the problem they are asked to solve.



## Domain expertise essential to scaling AI across the business

**A**I is already bringing advanced analysis capabilities to users with more data science backgrounds. Machines can select from the best forecasting models and algorithms, and underlying models can be exposed, offering the ability to fine-tune them and make sure that everything matches what the user is looking for.

These capabilities give analysts and skilled business domain experts the ability to design and leverage their AI applications. Being closer to the data, these users have an advantage over many of their data scientist counterparts.

Putting this power in the hands of domain experts can accelerate development times, alleviate resource burdens, and eliminate hidden costs associated with traditional data science cycles. Plus, domain experts are ultimately best placed to decide whether an AI prediction or suggestion is helpful.

With more iterative, revise-and-redeploy model-building processes, business users can get value from AI faster — even deploying new models to thousands of users within days to weeks instead of weeks to months. This is especially powerful for teams with unique challenges that can benefit from the speed and thoroughness of AI analysis but may not be a high priority for data science teams.

It is important to note that while these solutions can help address the skills gap between analysts and data scientists, they are not a replacement for the latter. Data scientists remain critical partners alongside business experts to validate the data used in AI-enabled solutions. In addition to this collaboration, education and data skills will be critical in successfully scaling these solutions and tools.

## Data literacy empowers more people to tap into the power of AI

An organisation's foundational data strategy plays a huge role in setting up its success with AI, but bringing AI solutions to more people across the business will require a baseline of data literacy.

Understanding what data is appropriate to apply to a business problem and how to interpret the data and results of an AI recommendation will convince people to trust and adopt AI as part of their decision-making. A shared language of data within the organisation also opens more doors for successful collaboration with experts.

Leaders can take a variety of approaches to build data literacy — from education and training to mentorship programmes to community-building data contests. Normalise the access and sharing of data and how you celebrate and promote successes, learnings, and decision-making with data.

**C**ontinuing to build your organisation's data culture creates powerful opportunities to nurture skills and foster new solutions across the business. Many organisations have increased their investments in data and analytics in recent years as digital transformation has accelerated. It is not a reach to think of data as a team sport, and now we have the means to extend that mindset to AI too.

*This article is by Akkasha Sultan. Akkasha Sultan is the country manager for Southeast Asia of Tableau at Salesforce.*

# How Data and AI are Reinventing Manufacturing, Supply Chain and eCommerce

By Sathvik Rao

Companies are facing rising customer and market demands for ever more complex and personalized products/services and the expectation that those will be produced sustainably. Combined with the constant pressure on costs, this puts unprecedented demands on manufacturing operations, requiring them to look beyond traditional approaches and leverage the power of Data and Artificial Intelligence (AI).

AI revolutionizes how products are manufactured and delivered to end customers by improving efficiency, reducing costs, and enhancing customer experiences. This article will explore how AI is transforming Manufacturing and eCommerce.

The latest advancements in Digital Twins is helping the adoption of AI use cases in Manufacturing. Similarly, developments in Language Models and Generative AI are accelerating the use of AI in eCommerce.

## AI Applications in Manufacturing

**Quality Control:** With the help of AI, manufacturers can ensure quality control by detecting defects in real-time. AI algorithms can analyze data from sensors and cameras installed in manufacturing units and detect even the smallest defects that may not be visible to the human eye. This helps manufacturers catch defects early on, reducing the number of defective products that make it to the market.

**Predictive Analytics and Asset Maintenance:** Provide failure models for the main spare parts of the production lines with predictive analytics and KPIs. Reduce maintenance costs for rotating equipment via real-time condition monitoring and failure prediction using vibration analysis; understand root causes for reliability issues in the manufacturing process.

**Production Optimization in Plant:** Provide a production process model (scheduling and sequencing). A mathematical model that describes the production sequencing was used to model the plants, and this technique was used to minimize the idle time in machines and waiting time between production processes.

**Supply Chain Management:** AI can help manufacturers optimize their supply chain by predicting demand, optimizing inventory levels, and identifying the best routes for delivery. AI algorithms can analyze historical sales data and other variables, such as weather patterns and social media trends, to predict future demand. This enables manufacturers to adjust their production schedules and inventory levels accordingly. AI can also optimize delivery routes, reducing transportation costs and improving delivery times.

# As the product gets made and moves through the supply chain to consumers, here are the applications of AI in the eCommerce space:



**Personalization:** AI algorithms can help eCommerce companies personalize the shopping experience for each customer. By analyzing customer data, such as purchase history, search history, and demographic information, AI algorithms can recommend products that are most likely to interest the customer. This improves the customer experience and increases the chances of a sale.

**Inventory Management:** AI can also help eCommerce companies manage their inventory by predicting demand and optimizing inventory levels. By analyzing sales history, seasonality, and other variables, AI algorithms can predict future demand and adjust inventory levels accordingly. This helps reduce the risk of overstocking or understocking, which leads to lost sales and increased costs.



**Fraud Detection:** eCommerce companies can use AI algorithms to detect and prevent fraud. By analyzing user behaviour and transaction history data, AI algorithms can identify fraudulent activity patterns. This enables eCommerce companies to take action to prevent fraudulent transactions, reducing the risk of financial loss.

In conclusion, AI is transforming the manufacturing and eCommerce industries by improving efficiency, reducing costs, and enhancing customer experiences. From quality control and predictive maintenance to personalization and fraud detection, AI enables these industries to operate more efficiently and effectively. As AI technology continues to evolve, we can expect to see even more benefits for these industries in the future.



“ AI is transforming the manufacturing and eCommerce industries by improving efficiency, reducing costs, and enhancing customer experiences. ”

**SATHVIK RAO**  
Principal Director  
Accenture Industry X



Sathvik is the Principal Director within Accenture Industry X. He leads the Engineering & Manufacturing practice in Southeast Asia. He has more than 18 years of experience across large-scale transformation involving the Internet Of Things (IoT), Digital Twins, Industrial AI, Architecture Modernization, IT-OT Integration and Technology Advisory.

**Author's Bio**

He has completed 25+ IoT & AI-enabled Digitalization engagements with large organizations across Asset Heavy Industries. Engagements include Smart Cities and Estates, Connected Transportation and Logistics, Connected Products, Connected Mine, Smart Manufacturing, and Smart Utilities.



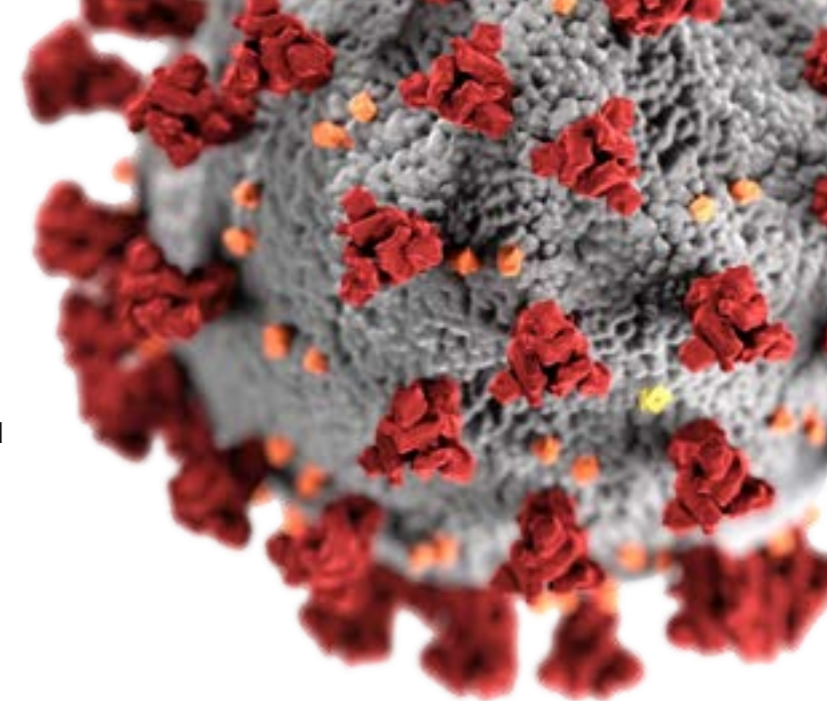
# The Impact of AI on Vaccine Equity in Thailand

By AI Asia Insights Staff

Given the potential for infectious disease outbreaks at any given time, immunisations represent one of the most crucial aspects of healthcare. Access to health care is a prevalent issue in rural and frontier areas, and the pandemic has compounded the many obstacles. In 2021, the size of the rural population in Thailand amounted to approximately 33.5 million. The Ministry of Public Health in Thailand has been rolling out vaccination programmes for all targeted populations in an effort to make immunisations universally available, addressing the vaccine inequity between urban and isolated rural populations. AI will be the key to making that a reality.

Although the great majority of Thailand's population has been fully vaccinated, there have been problems reaching ethnic minorities and vulnerable people living in remote areas. Transport is difficult, meaning access to regular healthcare is limited, to say nothing of delivering time- and temperature-sensitive vaccines to isolated villages. There was also some reluctance to be vaccinated among this rural population, as they believed that they would not be affected since they lived in the hills. But when cases of COVID-19 arose among their children who caught the virus while they were in the city, their families back home became fully alert to the potential risk to their health and overcame their vaccine hesitancy. Indeed, healthcare workers reaching these remote villages found queues of residents waiting in line to get vaccinated.

The biggest challenge for this rural vaccination programme was ensuring the vaccines maintained their potency. Vaccination was carried out at hospitals at first, but taking the vaccines to remote locations was a whole new challenge.



It was met with the support of NGOs who provided cold boxes and vaccine carriers that met WHO cold chain standards. This meant the determined healthcare workers of the Department of Disease Control of the Ministry of Public Health could safely deliver life-saving COVID-19 vaccines.

With the use of AI-based technologies, biopharmaceutical distributors can maintain vaccine refrigeration over extensive distribution networks. In addition to this, AI can be utilised for weather forecasting and charting effective delivery routes in these remote areas. This allows distributors to anticipate potential roadblocks and effectively devote resources when needed to ensure the vaccines' optimal condition.

Using AI applications to help safely deliver vaccines to remote populations is, of course, just one way that the pharmaceutical industry is taking advantage of artificial intelligence. From research and development of new drugs, to cybersecurity, drug safety, clinical outcome assessment and beyond, deep learning using artificial intelligence is an increasingly necessary part of the industry.

COVID-19 brought a completely different level of fragility to the supply chain and meeting the large-scale vaccination demand is an unprecedented challenge in itself. With the help of AI, production facilities and distribution networks can become more adaptable and efficient to these rapidly changing conditions, thereby improving the accessibility of vaccination among those in remote communities.







# THAILAND LOOKS TO THE METAVERSE

BY AI ASIA INSIGHTS STAFF

Few aspects of AI have been more hyped than the Metaverse. It is well known that Mark Zuckerberg has renamed Facebook “Meta” and announced investments of \$10 billion to \$15 billion per year into metaverse projects. Results, however, have so far not met the stock market’s expectations, and Meta’s share price has dropped substantially over the past 18 months or so.

The stock market is not known for patience, and Mr Zuckerberg is far from being the only evangelist for this vision of a networked virtual reality world.

## THAILAND'S METAVERSE ASSOCIATION

Here in Asia, the Metaverse Association of Thailand was established in June 2022. It is a private non-profit organization that is officially recognized by the country’s Ministry of the Interior. The Association’s President, Mr Chawakarn Karmol-rak, describes its purpose as educational and also as a focus for creating links among Thai metaverse creators. “Ultimately,” he says, “our aim is to use the metaverse to advance Thai society and industry.”

To that end, the Association hosts public seminars and lectures on the topic, as well as offering metaverse consultations to Thai organizations. It is working on the Metaverse Academy and is developing a project called Siamverse. This is destined to be Thailand’s primary metaverse, linking together other metaverses and serving as the metaverse for Thai tourism, art and culture.

## FLOURISHING METAVERSE SCENE

According to Mr Chawakarn, the country's first metaverse, Metaverse Thailand, was launched in mid-2021 and is still ongoing. After Mark Zuckerberg announced Meta, interest among the public in Thailand immediately increased and the metaverse scene today is flourishing with numerous projects underway, including Tranlucia, Velaverse, TwinPlannet, EDV Aniverse, Metapolis, Bangkokverse, Bitkub Metaverse and more.

The first industries in Thailand to adopt metaverse technology were gaming and education.

Other sectors, such as commerce, healthcare and the government are all adopting it, although most organizations are still at the early stages of adoption. The government, incidentally, announced last year plans to boost the metaverse economy. The Prime Minister instructed the private sector to establish a virtual environment, which resulted in Phuket Metaverse City. Funding is available from the Ministry of Digital Economy and Society to organizations working on digital projects, including metaverse projects.

## INDUSTRY AND GOVERNMENT UPTAKE

Unsurprisingly gaming plays a significant role in Thailand's metaverse industry, but marketers in numerous businesses are seeing the metaverse as a new and exciting way to engage with consumers and promote their brands. Marketing firms are also jumping on the bandwagon, offering their customers various metaverse services. Real estate project specialist MQDC, for example, engages with its



clients via Idyllias, a metaverse project that seamlessly merges the real and virtual worlds. Mr Chawakarn also sees opportunities for virtual visits to the doctor, with the metaverse making it possible to apply VR therapy and telemedicine. "Governments, too, will be able to use the metaverse to provide innovative ways to deliver services to citizens and facilitate decision-making processes," he

says. In his view, future use cases in the government sector might include virtual government services, virtual training and education, public engagement, virtual conferences and events, and digital visualization.

"In fact," says Mr Chawakarn "given that many universities and educational institutions in Thailand have begun working on metaverse-related projects, the most practical opportunity for the technology may well be virtual education and training. Users will be able to engage with educational content in a more interactive, immersive and memorable way."

## MAGICAL FUTURES

Practical real-world applications are crucial for the monetization of the technology, but given that the metaverse is a rather magical place, it's fun to think of imaginative use cases. Mr Chawakarn foresees several, including Virtual Reality Entertainment. "The metaverse can provide new and innovative forms of entertainment, such as virtual reality movies or immersive video games that incorporate real-world elements," he says. "We can also imagine Virtual Reality Sports, with new opportunities for sports enthusiasts, such as virtual reality competitions or training programs."

"Virtual Reality Art is another possibility, with the metaverse providing a new platform for artists to create and showcase their work in a more interactive way."

## THAI INITIATIVES IN THE METAVERSE

Thailand is not merely a consumer of metaverse technology. According to sources, the Electronic Transactions Development Agency (ETDA) has been working on research and development projects examining how metaverse platforms affect people's lives. Also, it is known that some corporations are conducting R&D for their metaverse projects. For instance, Tranlucia, a Thai metaverse project, is investing millions to open a metaverse R&D centre.

Mr Chawakarn believes Thailand can serve as an example in the travel and tourism category since the country is such a popular tourist destination. "The Siamverse project, which as mentioned is the metaverse for Thai tourism and culture, is another initiative of the Metaverse Association of Thailand," he says. "Numerous virtual attractions all over Thailand as well as the NFT market for Thai art will be included. Future tourists can use Siamverse to gather information before they travel to the actual location. Additionally, they can make reservations, request promotions, or request additional information by contacting companies in the Siamverse."

The metaverse certainly appears to have a bright future in Thailand, thanks in no small part to the efforts of Mr Chawakarn Karmolrak and his colleagues in the Metaverse Association of Thailand.

## BIOGRAPHY



### MR. CHAWAKARN KARMOLRAK

President, Metaverse Association of Thailand  
CEO, Doctor Mobile Co.,Ltd.

Mr. Chawakarn Karmolrak has over 25 years of experience in the computer and mobile phone industries in Thailand. He founded Doctor Mobile Co., Ltd. in 2004, a company that offers support for mobile phone hardware and software. He also teaches about computer software and the creation of Metaverse. Since 2022, he has served as the Metaverse Association of Thailand's president.

# DIGITAL WORKPLACE POWERED BY HYPERAUTOMATION

By Jack Kao

Organizations embarked on digital transformation have the opportunity to re-imagine smarter ways to run the business through new digital processes and technologies. Some view digital transformation as adopting new software, technologies, and processes that are more efficient and automated versions of traditional methods, while some treat it as an entirely new, innovative way of making changes with fundamental implications for the core of their business.

While digital transformation is imperative for organizations to innovate and grow, it forces critical thinking to reimagine aspects of the business that require change. As with any change management initiative, there are challenges businesses will face throughout the transformation processes, ranging from people-centric issues and structural problems, to technical barriers, and everything in between.

That means organizations must consider everything when taking on a digital transformation initiative – from how people will react to the change, how it will impact customer relations, the cost, how it will align with business goals, and so forth. Digital transformations empower organizations to take their business into the future, and position companies to withstand competition and grow into new areas.

The Digital Workplace is a strategy that utilizes an intuitive work environment to boost workforce digital dexterity, and requires employees to be fully engaged in the organization's digital journey.

“

**THE OBJECTIVE OF THE DIGITAL WORKPLACE IS TO  
PRIORITIZE DIGITAL DEXTERITY ACCELERATION INITIATIVES  
AND ENABLE SMARTER WAYS OF WORKING.**

”

## AUTHOR'S BIO



### JACK KAO

Channel & Alliance Director,  
Asia Pacific & Japan  
**Cyclone Robotics**

Jack Kao leads the company's regional business, with responsibility for sales, business development, partnerships, alliances and marketing across APAC. He is a performance focused and highly motivated ardent technologist, with fervent passion in enabling hyperautomation, AI, ML, robotics, BPM, Industry 4.0, and proven track records in monetising technology through building of ecosystems, bringing organic and strategic growth into emerging markets across financial services, manufacturing, supply chain management, telecom, retail, government, utility and oil & gas.

Prior to Cyclone Robotics, Jack brings with him over 20 years of accomplished experience in giant technology leaders - IBM, Cisco, NCR and Vodafone, undertaken various strategic sales leadership roles, and was instrumental to the high-growth business expansion across Asia Pacific.

Jack holds double degrees in computer science and business from the University of Auckland. He is also project management professional certified with George Washington University and completed fintech certification with Oxford University Saïd Business School.

### DIGITAL WORKPLACE TRENDS AND CHALLENGES

The pandemic accelerated the adoption of new technologies as organisations realised that traditional work models no longer meet the needs of the workforce nor are they equipped to support efficient operations. The underlying technology to create a digital workplace has to contend with hybrid work, changing regulations and complex security parameters while achieving business goals and delivering employee experiences that empower workforces and attract and retain talent.

### SHIFTING WORK MODELS

By 2025, massive generational shifts will force 75% of organizations to adapt their hybrid work strategies to include demands for radical flexibility. Organizations need to develop balanced models focused on increased hybrid/virtual collaboration through secure enterprise access from any location and embrace the future of work.

### EMERGING RISKS

52% of an organization's data is 'dark', unclassified and invisible to the organization, showing the need to tighten data governance, compliance and privacy regulations. Organizations need to protect business information against the latest threats with a Zero Trust approach.

### COMPETITION FOR TALENT

Only one-third of all employees say the technology they use is productive, empowering and easy, leading employers to an increased focus on employee experiences. Organizations must create a digital workplace that prioritizes frictionless work strategies to attract and retain talent.

### OPERATIONAL EXCELLENCE

Digital transformation cannot escape the need for a large volume of data to be ingested, structured, analysed, sliced and diced to complete actionable data transformation in order to anticipate trends and outmanoeuvre the competition. Organizations need business automation to improve end-to-end processes and achieve operational excellence.

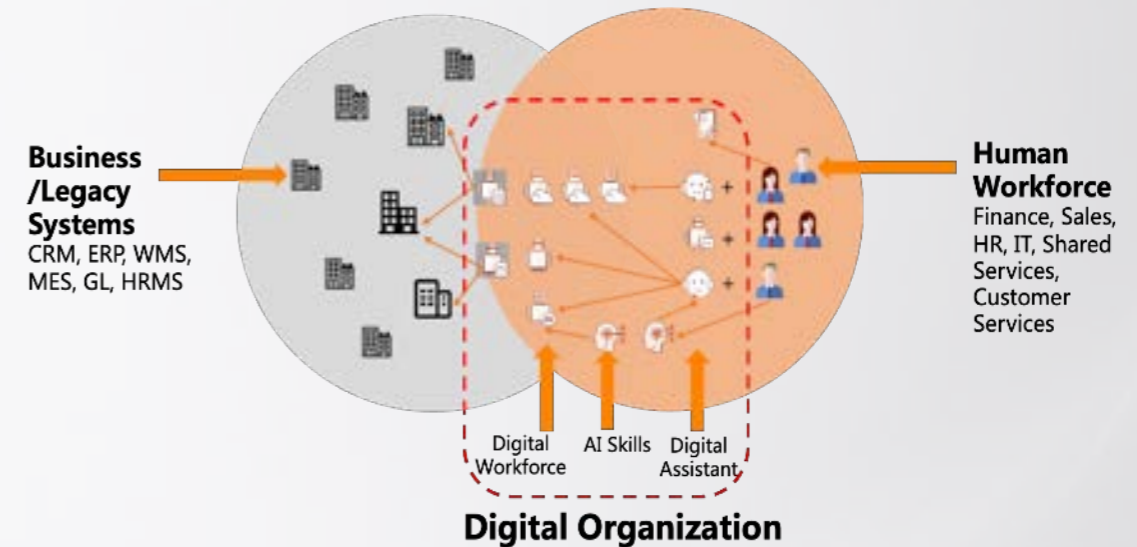
### SKILL ASSESSMENT

Assessing the skills of prospective employees via online platforms is an essential part of the recruitment and hiring process. Digital and online skills assessment tools enable employers to evaluate a candidate's technical skills from the interview through onboarding. This not only helps employers determine a candidate's qualifications, but also allows employees to identify areas for improvement.

### ACCELERATING THE DIGITAL WORKPLACE OF THE FUTURE

Intelligent automation must be inclusive to everyone. It must feature state-of-the-art no code/low code, drag-and-drop canvas view technology to build automation, and AI made easy and accessible not only to technical developers but also to business users and decision makers across all levels of an organization. In fact, every employee can be equipped with a virtual robot assistant as work buddy to take care of the mundane and repetitive routine processes, so as to focus valuable time on doing higher value, creative and decision-making-related tasks, thus optimising efficiency and productivity.

“**DIGITAL WORKFORCE - AN INEVITABLE ELEMENT OF ENTERPRISE DIGITAL TRANSFORMATION.**”



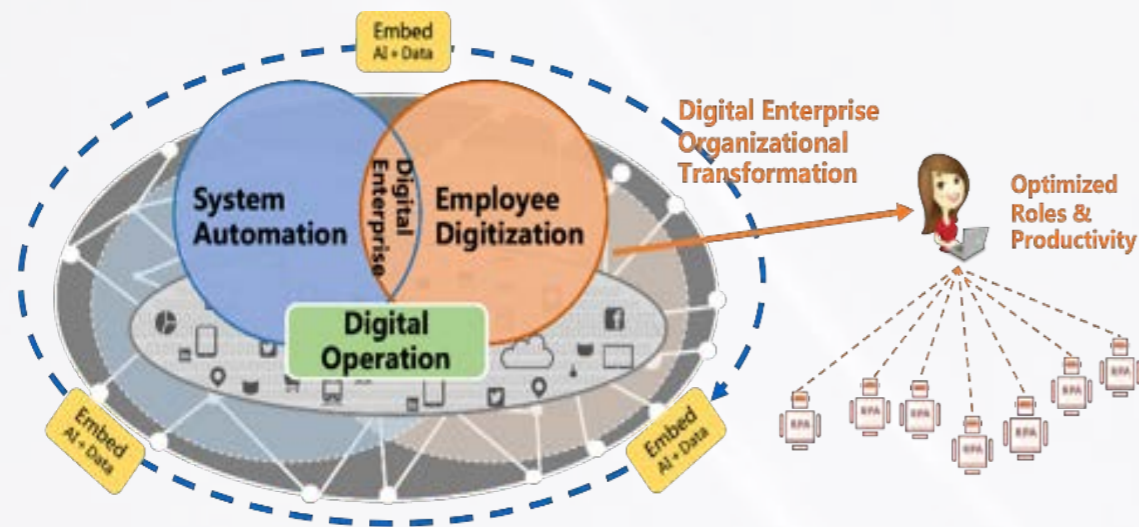
**H**yperautomation is scalable and enterprises don't necessarily need to invest heavily in the early stage. The most advanced RPA (Robotic Process Automation) solutions can be quickly deployed across a variety of different platforms and software greatly reducing the barrier of adoption.

- There are three levels of interactions employees can have with robots depending on their complexity:
- Allowing the robot to operate on its own, offering greater bandwidth for employees to tackle knowledge-based, irreplaceable tasks that require human judgement.
- Allowing the robot to automate time-consuming daily tasks while an employee plays a monitoring role.
- Working closely with the robot and managing its interactions directly.

The process automation landscape has advanced tremendously to generate new roles such as RPA analysts who help ensure that the technology is well leveraged in designing digital workflows or systems using AI-aided RPA. These new roles create, design, develop, and help enterprises implement RPA as they move along the hyperautomation roadmap, becoming a truly Digital Organisation.

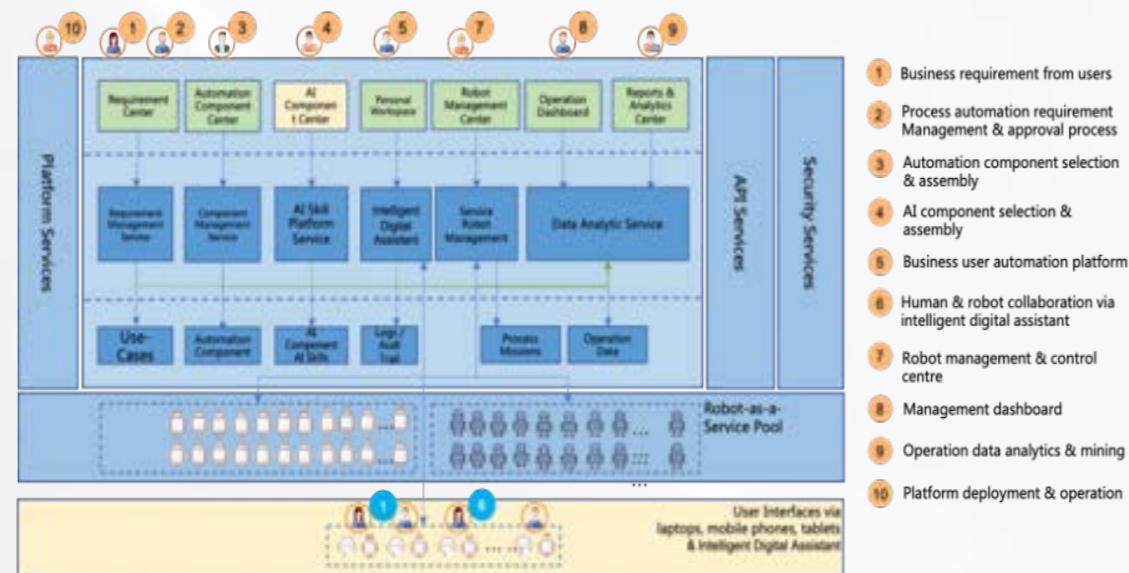
“**ONLY BY IMPLEMENTING WORKFORCE DIGITIZATION CAN AN ENTERPRISE REALIZE DIGITAL OPERATIONS IN ORDER TO COMPLETE ITS DIGITAL TRANSFORMATION**”

“**DIGITAL WORKPLACE IS THE LAST MILE OF ENTERPRISE DIGITAL TRANSFORMATION.**”



### DIGITAL WORKER PLATFORM

The Digital Worker Platform is an enterprise-level platform for managing and scheduling automated operations, as well as analysing their performance. The platform provides the full automation cycle of process discovery, mining, automation and efficacy analysis. With reusable business components and complete data insight of business processes, it accelerates the automation transformation.



Powering these intelligent capabilities behind the scenes is the AI Skill Engine. This provides enterprises with full-stack AI capabilities. With a hardware-software integration option, it allows users to easily manage both self-developed and third-party AI components (model algorithms) throughout their entire lifecycle. Through the AI Skill Designer, users can swiftly build complex AI skills using a wide range of out-of-the-box AI components through simple configurations and drag-and-drop operations, just like playing with LEGO bricks. It can also seamlessly integrate with RPA and other systems such as CRM or ERP, to bring the value of AI technology into practical business use cases.

Digital Workforce is the last mile of Digital Transformation. The key to successful Digital Transformation is not merely the deployment of the latest and greatest technology. Adoption and formation of a Digital Workplace jointly by a digital and human workforce is the key to success. This cannot be achieved without intelligent process automation embedded with various crucial AI skills in semantics, document management, contextual understanding and analytics. In conjunction with true collaboration between robots and humans, end-to-end business processes are completed in the most optimal manner across the Digital Workplace, giving transforming organisations peace of mind as they address challenges on Shifting work models, Emerging risks, Competition for talent, Operational excellence and Skill Assessment along the Digital Workplace transformation journey.

AI technology encompassing intelligent semantic analysis NLP (Natural Language Processing), OCR (Optical Character Recognition, IDP (Intelligent Document Processing), CV (Computer Vision), Chatbots (Dialogue Understanding) and other highly customized AI components all under one roof mimic human eyeballing as well as making contextual judgements in completing the requirements for building a Digital Workplace.

# AI ASIA EXPO



BUILDING THE AI COMMUNITY OF ASIA



21-22 FEB 2023



CENTARA GRAND  
AT CENTRAL PLAZA  
LADPRAO BANGKOK

# AI ASIA EXPO - THAILAND 2023

A Resounding Success

Given that AI Asia Expo - Thailand 2023 is the first in its series, we would like to express our gratitude to our supporting organisations, exhibitors, speakers, and everyone involved for making this event a resounding success.

AI Asia Expo - Thailand 2023, hosted by the Ministry of Higher Education, Science, Research and Innovation (MHESI) and the Singapore Industrial Automation Association (SIAA), and in collaboration with LOD Events, was held from 21st to 22nd February 2023 at the stunning Centara Grand in Central Plaza Ladprao Bangkok.

AI Asia Expo - Thailand 2023 commenced with a pre-recorded statement from our Guest of Honour, Assoc. Prof. Dr. Pasit Lorterapong, Deputy Permanent Secretary of the Ministry of Higher Education, Science, Research and Innovation (MHESI), expressing his support and blessing for the event. Nearly 2,000 industry professionals filled the exhibition hall, which was floored with over 33 exhibitors from across the globe, boasting the latest and savviest AI innovations. The hall also provides AI solution providers and decision-makers an opportunity to exchange ideas and foster new partnerships.

Meanwhile, the conference featured 48 renowned local and international speakers as they highlighted the significance of AI in shaping the future of various industries, notably in the Healthcare, Agriculture and eCommerce and Warehousing sectors. The conference also allows delegates to gain global perspectives and exchange best practices and strategies when navigating the digital transformation era.

Among the notable guests who attended the AI Asia Expo - Thailand 2023 include:

- **Assoc. Prof. Dr. Pasit Lorterapong**, Deputy Permanent Secretary of the Ministry of Higher Education, Science, Research and Innovation (Thailand)
- **Dr. Danuch Tanterdtid**, Secretary of the Minister of Higher Education, Science, Research, and Innovation (Thailand)
- **Datuk Ts. Dr. Mohd Nor Azman Bin Hassan**, Deputy Secretary General (Technology Development) of the Ministry of Science, Technology, and Innovation (Malaysia)
- **Dr. Rafaelita Aldaba**, Ph.D., Undersecretary (Competitiveness and Innovation Group) of the Department of Trade and Industry (Philippines)

Their presence asserted that AI Asia Expo is a vital platform for bringing together the regional AI community.

The objective of the AI Asia Expo series is to lay the groundwork for an ASEAN AI Roadmap towards the Intelligence Revolution. We will do this by leveraging government policies and investment to inspire and equip the next generation of business leaders to lead the charge in AI adoption, innovation, and talent cultivation. In addition, our ultimate aim is to strengthen ASEAN as a bloc via coordinated efforts, in order to enhance the bloc's connectivity to the international AI community.

Although AI Asia Expo - Thailand 2023 has concluded, we hope to see you at future AI Asia Expo events as we strive to bring you more of them across the region.

In the meantime, save the date for the upcoming edition of the AI Asia Expo series in **Manila, Philippines** from **10 - 11 October 2023**.

We look forward to seeing you again at our upcoming events.

# Testimonials

“

Amid the opportunities from generative AI and new AI tools, AI Asia Expo provides an important platform for knowledge exchange, networking and promoting responsible AI and AI for good which can enable collaboration between and among government, academe and industry. This is necessary as we build the AI ecosystem in ASEAN and realize our vision of becoming an AI Center of Excellence addressing pain points to serve society and bringing radical innovations to benefit humanity.

”

**Dr. Rafaelita Aldaba, Ph.D.**  
Undersecretary (Competitiveness and Innovation Group)  
Department of Trade and Industry, Philippines



“

AI is becoming capable and more promising tech. AI Asia Expo combines many vendors plus new knowledge thru seminars. Helps me to save a lot of time in reaching all of them in a single venue.

”

**Mr. Thomas Pitchyen Hongpakdee**  
Founder & CEO, Anitech  
Smart ID Group Chairman, Aniverse Metaverse



“

This well-organized event allows us to observe ongoing AI-powered businesses in South East Asia, especially Thailand and Singapore. And some of the participants exchange their contacts to explore the potential business opportunities among each other.

”

**Dr. Theerawit Wilaiprasitporn, Ph.D.**  
Assistant Professor of Computer Engineering at the School of Information Science and Technology (IST)  
Vidyasirimedhi Institute of Science & Technology (VISTEC), Thailand

“

An inspiring and forward-looking gathering of important stakeholders. The interactions and exchange of ideas and strategies have provided countries like Malaysia to explore opportunities for collaboration in the development of AI. Appreciate the hospitality, too, from the organisers.

”

**Datuk Ts. Dr. Mohd Nor Azman Bin Hassan**  
Deputy Secretary General (Technology Development)  
Ministry of Science, Technology and Innovation, Malaysia



“

We are appreciative of the opportunities that AI Asia Expo has provided us in connecting with Thailand's conglomerates. We see potential in accelerating the expansion of AI in the Thailand 4.0 landscape and look forward to exploring this avenue further.

”

**Mr. Keechin Goh**  
CEO  
Datature



# AI ASIA EXPO



REDEFINING THE FUTURE OF ASIA WITH AI INNOVATION

2 0 2 3

10 - 11  
OCT

PHILIPPINES

MARRIOTT GRAND BALLROOM (MGBX)  
CONVENTION HALL, METRO MANILA

HOSTED BY



## AI ASIA INSIGHTS TEAM

**Editor-in-Chief**  
**William Laws**

**FOUNDER**  
**Jeffrey Leung**

**MARKETING  
EXECUTIVE**  
**Anis Ahmadramli**

**GRAPHIC  
DESIGNER**  
**Prenapa Techakumthon**

## NEVER MISS AN ISSUE!



**SUBSCRIBE NOW**