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AI: 10

GET INSIGHTS ON AI UNDER 10 MINUTES

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DECISION INTELLIGENCE: ESSENTIAL FOR DIGITAL TRANSFORMATION

WHAT'S HOT

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R&D AND
COMMERCIALISATION

BMW GROUP SCALING ARTIFICIAL INTELLIGENCE FOR DATA PRIVACY IN PRODUCTION — WITH INNOVATIVE ANONYMISATION ALGORITHMS

The BMW Group is publishing an anonymisation solution based on artificial intelligence (AI) that can anonymise objects in photos and videos. Building on the BMW labelling tool Lite, these algorithms (github.com/BMW-InnovationLab) enable targeted protection of relevant information: The user-friendly software tool uses AI to block out or blur objects or people. The granularity and degree of anonymisation can be intuitively adjusted.

“AI applications supports us with quality assurance, such as inspection of parts and components, as well as development of our autonomous, smart logistics robots. The AI anonymisation algorithms now published also ensure optimal data privacy and information protection,” explains Markus Grüneisl, head of Production System, Digitalisation at the BMW Group. “Making the anonymisation solution intuitive to operate was an important aspect of development for us, to ensure it can easily be used for a wide range of applications.”

The BMW Group uses artificial intelligence for object detection in production, since it offers a particularly high level of robustness – even under highly variable boundary conditions. AI-based image processing contributes in this way to maintaining premium quality. The recently released anonymisation solution also relies on artificial intelligence. AI automatically classifies image areas according to their features, so any areas that need to be made unrecognisable can be blocked out – for example, when processing photos from production. Different modes of anonymisation can be selected: Respective areas in photos or videos can be blurred, blacked out or pixelated.

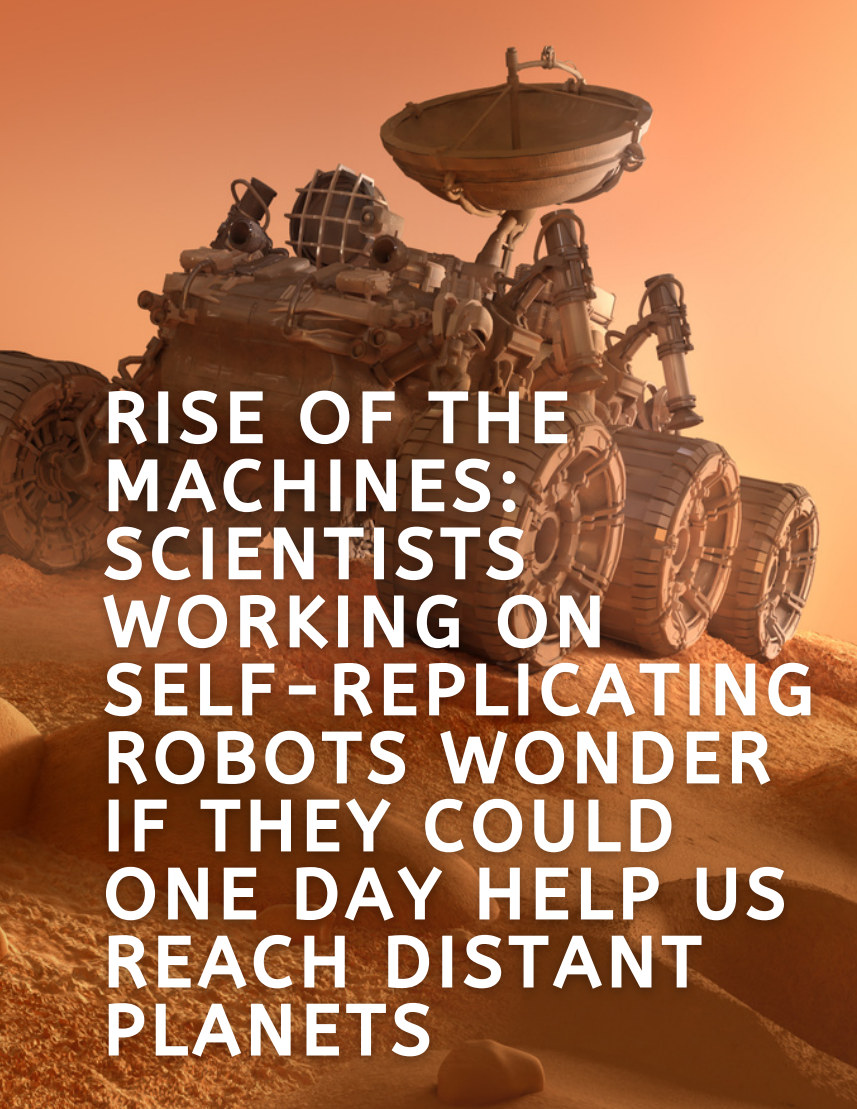
The main technology used is the BMW labelling tool Lite, which allows users to label photos and train the AI with just one click. Each label serves as a digital tag that describes the information contained in the photo.

With no-code AI, production staff can create their own artificial intelligence solutions to support them in their individual processes. The new modular anonymisation algorithms allow photos to be processed automatically. In the BMW production system, for instance, areas containing people are deliberately made unrecognisable. Thanks to this AI-based anonymisation solution, there are no limitations on the use of image processing systems.

The published algorithms are freely available to software developers around the world – so they can use the algorithms and view, modify and further develop the source code. The BMW Group will also benefit from these further developments. A special feature of this now freely available software package is its simple and uncomplicated application based on the plug-and-play principle. The user does not require any programming skills, specific hardware or additional software.

The BMW Group uses a variety of applications from the field of artificial intelligence (AI) in production and logistics. AI technology reduces the strain on employees, by relieving them of particularly monotonous or tiring control tasks. ■

Source: *Source: AutomotiveWorld*



RISE OF THE MACHINES: SCIENTISTS WORKING ON SELF-REPLICATING ROBOTS WONDER IF THEY COULD ONE DAY HELP US REACH DISTANT PLANETS

Hidden deep in robotics labs around the world, a new generation of intelligent machines is learning to breed and evolve. Just like humans, these robots are able to "give birth" to new versions of themselves, with each one better than the last. They are precise, efficient and creative - and scientists say they could someday help save humanity. It might sound like a sci-fi novel, but robot evolution is an area that has been explored in earnest ever since mathematician John von Neumann showed how a machine could replicate itself in 1949. Now, British engineers are leading global efforts to make it a reality.

Researchers at the universities of York, Edinburgh Napier and the West of England, as well as Vrije Universiteit Amsterdam, have spent four years working on the first fully autonomous system to design and build robot colonies. They envision such robots being sent into space to explore distant planets and construct extraterrestrial habitats for humans to live in.

"I think, a good metaphor for what we're doing is actually we're 'breeding' robots," says Alan Winfield, professor of robot ethics at University of the West of England. "We typically breed robots to do a particular function well, so it might be search and rescue or exploration." The idea is that two robots known to be suited to a particular environment would combine their "genes" - or in this case, their computer code - to produce a 3D-printed robot child that has the best features of both parents.

"The system will basically mix the DNA of two successful parent robots to create the design for a new child robot, then print out all the parts, and assemble it completely by itself without any human in the loop at all," says Emma Hart, chair in natural computation at Edinburgh Napier University. As part of the Autonomous Robot Evolution (ARE) project, the team has created a fully autonomous system called RoboFab that does just that. Each of the robots it produces has a digital clone that undergoes rapid evolution in a simulated world, while its physical counterpart is tested in real environments.

New generations of robots are then 3D printed after combining the most successful features of a virtual "mother" and physical "father," as well as from two virtual parents or two physical parents.

But there are big challenges. Right now, about six robots can be printed each day, featuring basic pre-made sensors wired into a rigid "skeleton." The machine's arms sometimes struggle to connect some of the sensors to the batteries, with the wiring becoming tangled and requiring human intervention. Rapid advances in 3D printing, automated assembly, materials science and batteries could soon solve these issues and help create machines far superior to any existing Mars rover. ■

Source: Source: Kingston Whig Standard

BILL SEEKS DATA ON HOW SITES MONITOR HATE

More than 40% of Americans have experienced some kind of online hate or harassment, with many of those instances taking place on large social media sites, according to a report from the Anti-Defamation League. A new state bill wants to hold large social media companies to account for how they police that kind of harmful content. Introduced by California Assembly Member Jesse Gabriel, D-Woodland Hills (Los Angeles County), AB587 is directed at social media giants like Facebook and others with gross revenue in excess of \$100 million annually.

If signed into law, the legislation would require social media companies to make public their policies on how they monitor hate, disinformation, extremism, harassment and foreign interference on their sites. The bill also would force those companies to disclose whether they use human or artificial intelligence to monitor instances of harmful content, and to provide data on the effectiveness of their efforts to stop it.

"Californians are becoming increasingly alarmed about the role of social media in promoting hate, disinformation, conspiracy theories and extreme political polarization," Gabriel said in a statement. "It's long past time for these companies to provide real transparency into their content moderation practices."

Facebook, Twitter and Google, which owns YouTube, did not respond to emailed requests for comment about the bill. The goal of the legislation "is to create consistency and a mechanism to help the public better understand how content moderation is operating on these platforms," said Lauren Krapf, national policy counsel at the Anti-Defamation League.

SOURCE: THE SAN FRANCISCO CHRONICLE



PULLING FACES CAN TEACH US FRESH BOUNDARIES OF AI

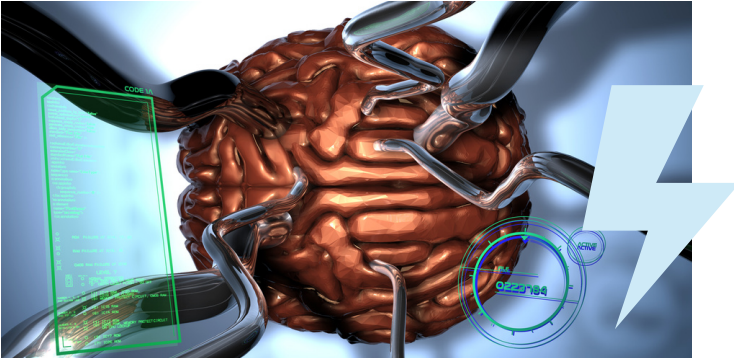
Scientists are inviting people to pull faces at their webcam and smartphone to see a controversial technology called artificial intelligence emotion recognition. Researchers from Cambridge University and UCL have built a website, Emojify, to help people understand how computers can scan facial expressions to detect emotion.

Dr Alexa Hagerty, Cambridge researcher, said the technology, which is already used in parts of the world, is "powerful" but "flawed". Users are invited to play a game, pulling faces to try to get the emotion recognition system to recognise happiness, sadness, fear, surprise, disgust and anger. AI emotion recognition is used in China for police interrogation and monitoring school behaviour. The researchers say they hope to start conversations about the technology and its social impacts. Dr Hagerty said: "Many people are surprised to learn that emotion recognition technology exists and

Dr Alexa Hagerty plays on Emojify to demonstrate the AI technology is already in use. Our project gives people a chance to experience these systems for themselves and get a better idea of how powerful they are, but also how flawed."■

SOURCE: STANDARD.CO.UK/

SCIENTISTS CONNECT HUMAN BRAIN TO COMPUTER WIRELESSLY FOR FIRST TIME EVER



The first wireless commands to a computer have been demonstrated in a breakthrough for people with paralysis. The system is able to transmit brain signals at “single-neuron resolution and in full broadband fidelity”, say researchers at Brown University in the US.

A clinical trial of the BrainGate technology involved a small transmitter that connects to a person’s brain motor cortex. Trial participants with paralysis used the system to control a tablet computer, the journal IEEE Transactions on Biomedical Engineering reports. The participants were able to achieve similar typing speeds and point-and-click accuracy as they could with wired systems.

John Simeral, an assistant professor of engineering at Brown University: “We’ve demonstrated that this wireless system is functionally equivalent to the wired systems that have been the gold standard. “The signals are recorded and transmitted with appropriately similar fidelity, which means we can use the same decoding algorithms we used with wired equipment. “The only difference is that people no longer need to be physically tethered to our equipment, which opens up new possibilities in terms of how the system can be used.”

It marks the latest advance in the rapidly growing field of neural interface technologies, which has attracted the likes of Elon Musk and Facebook. ■

SOURCE: INDEPENDENT.CO.UK

LG Electronics joined hands with South Korea’s top telecom company KT to interlink their artificial intelligence voice assistant hub platforms for cooperation in the smart home platform market. They have already combined their research and development capabilities for the creation of an AI model that could prevent the spread of infectious diseases.

KT AND LG SUCCEED IN INTERLINKING AI VOICE ASSISTANT SERVICE HUB PLATFORMS

In a joint statement on April 6, KT and LG said they have successfully verified the interlinking of their AI service hub platforms using a smart home management system called “Smart Mirror,” a digital mirror that also works as a semi-transparent display showcased in 2020. The smart display was applied to LG’s refrigerator models. “Because LG’s Smart Mirror is a versatile platform that can be applied to any surface including home appliances, it will become a convenient and effective smart home hub,” KT’s PR manager Kim Jung-jun told Aju Business Daily.

“Through a commercialized service, customers will be able to control home appliances and use AI voice assistant services with Smart Mirror connected to a home internet of things (IoT) network,” Kim said, adding users can control and manage IoT smart home devices while voice assistant features manage schedules.

According to the Korea Association of Smart Home, an association of smart home service operators, South Korea’s smart home market would reach 31 trillion won (\$27.5 billion) in 2025. Some 2.8 million people use KT’s GiGA Genie voice assistant speakers. ThinQ was a key feature of LG’s flagship smartphones. ■

SOURCE: AJU NEWS





NEURAL NETWORKS LEARN TO DECIPHER THE 'LANGUAGE' OF CANCER AND ALZHEIMER'S

The artificial intelligence technology present in the algorithms used by computer giants are able to decipher the 'biological language' of oncological and neurodegenerative diseases, including Alzheimer's, suggests a study published Thursday in the journal Proceedings of the National Academy of Sciences (PNAS).

The authors of the work relied on machine learning technology similar to that used by Netflix or Facebook to predict user behavior and recommend based on watching a series or adding a new contact to the friends list.

The secret of proteins

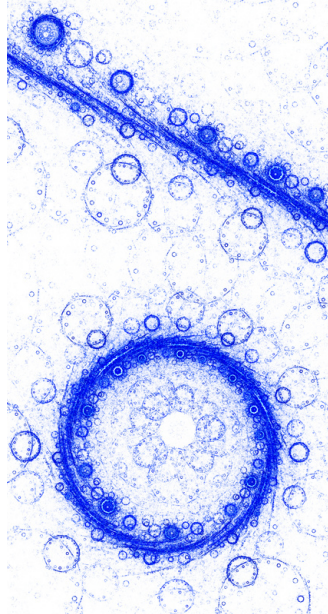
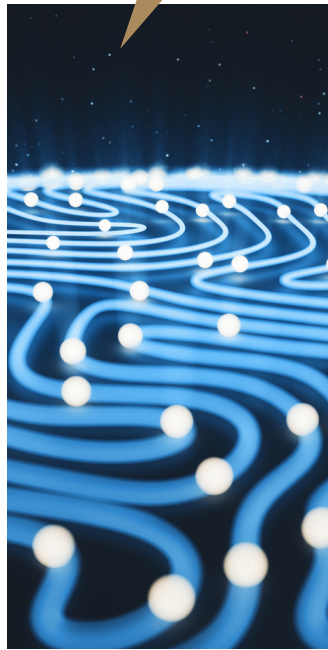
Proteins are a type of molecule that fulfill key functions in cells and are indispensable for the structure, functioning and regulation of body organs and tissues. Their responsibilities include, for example, the production of antibodies. In this way, the goal of the researchers was to teach the system to recognize when the behavior of proteins within the body leads to the development of diseases.

'Pirate language'

"We have specifically asked the program to learn the language of the shape change of biomolecular condensates—drops of proteins found in cells—that scientists really need to understand in order to crack (pirate) the language of biological functioning and breakdown that cause cancer and neurodegenerative diseases such as Alzheimer's," she continued.

The authors of the work hope that this technology will be able to make discoveries in this field beyond what the human brain can understand without the help of machine learning, allowing in the future to correct within cells the 'grammatical errors' that cause diseases. ■

Source: CE NoticiasFinancieras



LEARNING DIGITAL CODING? STUDENTS IN FUTURE MAY STUDY GENETIC CODING TOO

Giving the opening address at SGInnovate's virtual career showcase New Frontier: Build Your Deep Tech Future yesterday, Education Minister Lawrence Wong said deep tech such as genetic coding is at the forefront of new innovations.

Deep tech encompasses innovations such as artificial intelligence, gene editing and blockchain.

Referring to the three fundamental kernels of human existence - the atom, the bit and the gene - Mr Wong said both the atom, which represents physics, and the bit, which represents computing, have already driven their own revolutions.

"Now, we are entering a life science revolution," he said. "So, in the future, I expect students to study not just digital code, but also genetic code."

He noted that the deep tech scene, while relatively new in Singapore, has already made an impact, such as with the digital health passport co-developed by Accredify and SGInnovate, and the saliva sample test kit for Covid-19 developed by start-up Lucence.

Deep tech also had a significant role in the recent development of mRNA Covid-19 vaccines and TraceTogether.

"As SGInnovate works closely with deep-tech companies to help them source for talent, we are in a good position to witness the intersection of demand and supply of talent within the ecosystem," said Ms Juliana Lim, executive director for talent networking at SGInnovate. ■

Source: The Straits Times

DECISION INTELLIGENCE: ESSENTIAL FOR DIGITAL TRANSFORMATION



Decision intelligence focuses on making more accurate and more efficient decisions based on the knowledge of how actions lead to outcomes.

If you've ever been faced with decision fatigue over what to wear in the morning or gotten frustrated with a group's lack of consensus over where to eat for lunch, you understand how crucial time can be in decision-making. Decision intelligence, a crucial field of data analytics, aims to reduce the time to decision and help eliminate the uncertainty organizations can be making changes.

Decision intelligence is officially on the hype cycle. Gartner proclaims it a top data and analytics trend for 2021, but we predict it will move quickly from trend to established principle. Here's what you need to know.

What is decision intelligence?

This discipline focuses on making more accurate and more efficient decisions based on the knowledge of how actions lead to outcomes. Machines can process information the way we do, but they can handle much more significant amounts of inputs than the human brain. Machine learning algorithms take existing data and provide value through insights that shorten the time to decide and reduce the risk of making the wrong decision.

Decision intelligence brings machine intelligence into the world of business needs. Nowhere is this type of processing more important and more valuable than increasing decision ROI just by accelerating the time to a decision. With enterprise-level decisions, this process could take weeks or months, not even considering the uncertainty principle. AI can change that for the better.

How does it work?

Decision intelligence works through five steps, much like the human decision-making model does. Humans are often unaware of the specific process they go through even to make "gut" decisions, but the process is one of distinction because it's very human.

Decision Intelligence: Essential for Digital Transformation

- **Observe:** Models collect relevant information from a variety of sources, including historical data, transactional, etc.
- **Investigate:** Sifting through information, models begin to see a picture of potential outcomes.
- **Model:** Generalizing outcomes allows models to pursue alternate options based on existing capabilities.
- **Contextualize:** This step offers a range of executable actions and considers the complexity of the situation.
- **Execute:** The decision is chosen. The action is taken.

These decisions models use one of three types:

- **Human decisions:** Machines merely visualize and provide insight. Decision-making rests solely with humans.
- **Machine decisions:** Machines make decisions independently and can't always explain why
- **Hybrid decisions:** Both humans and machines work together to come to an outcome. Machines, in this case, can recommend or take action depending on the task.

Why use it?

Decision intelligence has several benefits for businesses using these models. The biggest one is simply reducing the time it takes for a business to come to a decision.

Besides, businesses also reduce risk, balancing the need for speedy decision-making with making the right decision. Machines process information quickly and can process more of it at a time, helping reduce the risk of unforeseen outcomes without slowing down the process itself.

Moreover, machines can also help reduce decision-making biases humans run into in their decision-making.

Who is using it?

There are several industries making use of decision intelligence to reduce the time to decision and the risk. They've optimized gargantuan operations and evolved as a result.

- **Finance:** Back in 2018, Fiserv made waves offering Mastercard Decision Intelligence, designed to improve fraud detection and reduce false declines. The process allowed financial services better control over deciding whether transactions remained fraudulent and helped improve customer trust.
- **Telecoms:** Decision intelligence not only optimizes control and maintenance of distributed, large-scale systems, but it can even drive marketing efforts. Verizon found that home routers could handle higher speeds, leading the company to increase its advertised speeds. The result was a surge in sales.



Decision Intelligence: Essential for Digital Transformation

- **Transport:** According to IBM, a trucking company was able to reduce millions of unnecessary miles through decision intelligence and improve driver retention. Driving and training are two of transport's biggest ongoing expenses, so this equaled millions of dollars in ROI.
- **Energy:** In another IBM partnership, Red Eléctrica de España demonstrated a proof of concept, developing sophisticated supply and demand forecasting models and saving potentially hundreds of hours of effort in maintenance.
- **Media and entertainment:** Some of the most salient examples of decision intelligence is the recommendation engine. Netflix algorithms analyze customer behavior to make combing through thousands of choices easier, keeping CLV high and customers on the platform.

More industries are coming to the same conclusions. With easier decision-making, even enterprise-level movements lose bulk and reduce risk. Companies can pivot quickly to meet demand and become better insulated against disruptions.

Like all tech-focused initiatives, having the right talent to understand decision frameworks and deploy AI models is crucial. That's not the only requirement, however. A greater understanding of technology across the board, from c-suite to teams, ensures that an organization can implement decision intelligence without sabotage. If teams don't trust the machine, these decisions will never work.

How companies can get started in decision intelligence

Companies also need a deep understanding of decision frameworks in terms of business value. IT teams running these models must understand organizational objectives and implement best practices for decision-making.

Companies also need technology that optimizes decision-making, allows iteration, and offers the flexibility to scale up or down. Organizations could see a bigger budget for technology, but with the right process in place, the ROI is worth it. ■

Source: RTInsights



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Social Enterprise and Socio-Economic Wellbeing of Women Participants in Peninsular Malaysia (1 Year)



Dr. Noor Raihani Binti Zainol



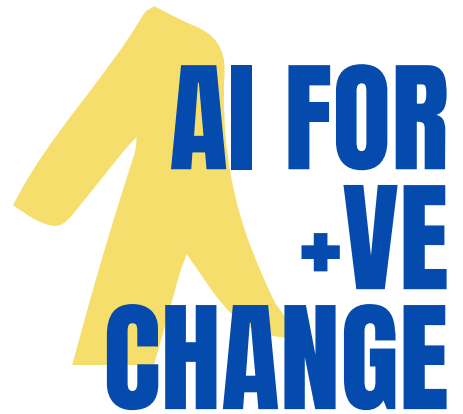
Faculty of Entrepreneurship and Business



Universiti Malaysia Kelantan (UMK)

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LEGEND: Research Title Researcher Faculty University



An AI-based platform to recognise, track and monitor the strategic roles and impact carried out by top female achievers.

- MyFinB ”

For partnering opportunities, please email: ceai@myfinb.com

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Semantic Extraction Algorithms for Traffic Density Analysis



Dr. Chai Soo See



Faculty of Computer Science and Information Technology



Universiti Malaysia Sarawak (UNIMAS)

”

LEGEND: Research Title Researcher Faculty University



RoboAdvisor to analyse road patterns and traffic conditions to predict scenarios of negative events and recommend preparatory, proactive steps in dealing with them via automated SOPs.

- MyFinB ”

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WHERE INNOVATORS & DISRUPTORS
MEET TO CHALLENGE LIMITS

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'The AI World Summit: Where Innovators & Disruptors Meet to Challenge Limits' brings together the global AI community from a range of businesses, science and tech to go beyond the buzz and hype, discuss the most burning AI issues, share their developments, successes, challenges, and the resultant impact on their businesses.



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- 1 Ethics & Artificial Intelligence
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- 7 Board Effectiveness Reviews Using AI
- 8 Healthcare & AI
- 9 AI & Governments
- 10 Supply Chain & AI
- 11 SDG Measurement Using AI
- 12 AI's Role in Governance, Risk & Compliance (GRC)
- 13 Diversity & Board Performance
- 14 The Future of Education
- 15 The Future of Cooperatives

THREE WAYS YOU CAN BUILD & OWN AI WITHOUT CODING

➔ You have an idea



Yes - this idea must originate from a pressing need, pain point or an opportunity that is associated with your current operations and/or industry dynamics.

There must be a ready demand for that idea to be transformed into a system - otherwise it has to be incubated or "cook" to be ready for the market.

BUILD INNOVATION WITH US

MyFinB is an award-winning, high growth AI start-up with core operations in KL/SG and serving more than 30 markets globally.

We specialise in Artificial Intelligence and Natural Language Generation & Understanding (NLGU). Our AI-powered solutions translates structured data (financial statements, bank statements, incorporation info) and unstructured data (publications, social media, journals and video images) into decisioning reports.

MyFinB uses its proprietary NLGU and Cognitive Analytics capabilities to serve 10 core segments: Financial institutions, Enterprises / SMEs, Accounting and Auditing Firms / Consultants, Government Agencies, Credit bureaus, Stock Exchanges, Insurers, Trade Associations and Business chambers, Universities and Investment Promotion Agencies.

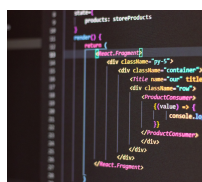
We manage a "digital factory" model where we help organisations build in-house capabilities via the Digital AI Labs (DIAL) programme. DIAL is a scheme of arrangement that helps organisations build and own A.I. expert systems – to solve a specific issue with a commercial goal in mind.

MyFinB's DIAL Programme offers a unique AI-as-a-Service (AlaaS) platform to overcome the barriers of adopting AI Systems. DIAL targets people without the knowledge of coding and programming to build their own expert systems for their organisations.

“NOW EVERYONE CAN BUILD AND OWN AI WITHOUT CODING.”

TO FIND OUT MORE, PLEASE EMAIL: CEAI@MYFINB.COM

➔ From idea to system prototype and business plan



We design algorithms and build the business case around the system with our vast expertise in any discipline.

8 core deliverables will be rendered:

1. Mock-up Reports
2. Technological Blueprint
3. Roadmap
4. Prototype
5. Case Studies
6. 1-min Demo Video
7. Press Release
8. Pitch Deck

➔ We both



jointly own the IP in accordance to a pre-agreed ratio where MyFinB funds the full capex while you cover the costs of the prototype

We commercialise and launch them to the market based on the pre-agreed specifications and after the full system development is completed by MyFinB. Roles and responsibilities would have been detailed out, and a long-term partnership is forged.



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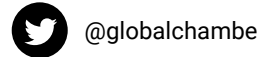
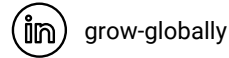
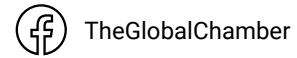
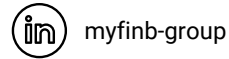
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It is the ONLY organization in the world with hundreds of locations that helps executives grow their company through warm connections and a variety of virtual services.

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