

MALAYSIAN courts may take a big step into the future by using artificial intelligence (AI) as a tool in judicial decision-making.

This would improve efficiency in court, speed up processes and increase access to justice.

But first, let's be clear: a computer won't be deciding if someone is guilty or innocent, and their punishment. Such matters will still rest in the hands of a human judge, who can weigh the various factors in a case.

The usage of AI here, if approved, will serve as a quick reference for the Sessions Court judges and magistrates when deciding the sentencing in a case.

It is basically an extensive database of past cases and their sentences for judges to refer to when considering an appropriate punishment.

From such data, the AI tool will provide a recommended sentence based on statistics for the judge to decide on.

Courts in Sabah and Sarawak started using AI technology in court sentencing, known as AICOS, in January 2020.

It is being used in the two states to recommend sentencing in drug possession cases, an offence under Section 12 (2) of the Dangerous Drugs Act 1952.

As for Peninsular Malaysia, plans on using AI are still in the pipeline and being developed, based on the latest information gathered by *Sunday Star*.

Before any decision is made, the Malaysian judiciary will consult all stakeholders first about rolling out such sentencing guidelines using AI technology.

It was reported that the trials using the AI system in Kuala Lumpur and Shah Alam ended in April.

The tests reportedly involved court hearings for about 20 types of offences, including rape, theft and traffic offences like under-aged driving.

## **Not wrong to be guided by AI**

In the meantime, courts in Sabah and Sarawak have embraced the AI system in hearings for drug possession cases.

Sabah lawyer Roger Chin says it is part of the procedure for courts in the state to announce during proceedings when the AI will be used and referred to.

He explains that the judge can refer to the system which will show the results of what happens in the majority of similar cases and provide statistics from the data collected.

"For example, it takes into account the circumstances of a case, like the accused in a case having two children and aged only 24.

"The system then shows statistics, like 80% of such cases with similar circumstances are given a fine and imprisonment within a certain range.

"As such, the judge can see what happened in the majority of similar cases and the punishments meted out," Chin illustrates.

With such results, judges are able to avoid

# Justice backed by AI

An artificial intelligence (AI) system to be used as a sentencing guideline in courts within Peninsular Malaysia is in the works, while it's now applied in Sabah and Sarawak. Before it proceeds, a lot of deliberation and consultation is needed.

## HOW ARE OTHER COUNTRIES USING ARTIFICIAL INTELLIGENCE (AI) IN COURT?

### CHINA

- ▶ AI technologies are used in judicial reform.
- ▶ This includes “internet courts”, enabled by big data, cloud computing and video recognition.
- ▶ Advanced AI robotics are used as judges to settle certain civil cases.

### INDIA

- ▶ A tool called Supace (Supreme Court Portal for Assistance in Court Efficiency) was launched last year.
- ▶ It identifies judicial processes that require automation and then boosts efficiency by summing up the processes.
- ▶ Another AI system, called Suvas (Supreme Court Vidhik Anuvaad Software), translates judicial documents from English to nine vernacular languages — Marathi, Hindi, Kannada, Tamil, Telugu, Punjabi, Gujarati, Malayalam and Bengali — and the other way around.

### CANADA

- ▶ AI technology is used in strata property disputes and motor vehicle claims within a certain value.
- ▶ In British Columbia, the Civil Resolutions Tribunal uses a form of AI called an ‘expert system’ which guides a user through the elements of a claim.

### BRITAIN

- ▶ In 2019, a ‘robot mediator’ was used to settle a dispute in the court system.
- ▶ The online tool, which uses AI algorithms, settled the three-month dispute in **less than an hour**.
- ▶ The dispute involved unpaid fees claimed by a trainer from a client regarding personal counseling sessions.

### ESTONIA

- ▶ AI judges are used to streamline government services and clear backlog of cases.
- ▶ It settles small claim disputes like contract claims under 7,000 euros (RM32,603).

Sources: LexisNexis Canada, University of New South Wales, others

The Star graphics

handing down widely varying sentences compared with other cases elsewhere.

“It is a guide for the judge. But the judge can choose to depart from the results or not,” Chin adds.

On claims that more junior judges will rely more heavily on the AI than their own judgment, he says there is nothing wrong with that, should it be their choice.

“It is better than putting their gut feeling or personal bias into a decision,” he points out.

He says so far, there hasn't been much opposition by lawyers in the state over the system as they were consulted about the usage of AI beforehand.

In Kuching, lawyer from Sarawak, Simon Siah says after the accused is found guilty or has pleaded guilty and following mitigation, the magistrate will refer to the AI.

“The AI will give suggestions on the prob-

ability of certain sentences for the particular offence. It will show the percentage of whether previous case law are more inclined to imprisonment or a fine.

“It will also show how long such imprisonments are imposed or the amount of fines,” he says, adding that the magistrate, after referring to the AI, will look again at the facts of the case and determine the sentence.

The magistrate at the end will still have the discretion not to follow the AI's results.

“In a way, it's a positive move because the judge can have records of what the sentencing trend is. But the data has to be updated more frequently,” Siah adds.

### Only as guidelines, please

While it has some concerns, the Malaysian Bar is open to the suggestion of using AI in criminal sentencing in Peninsular Malaysia.

“This is provided that there is no compromise to access to justice and that sufficient safeguards are put in place.

“The interests of all parties must be taken into account,” says Malaysian Bar president Karen Cheah Yee Lynn.

Ultimately, the use of AI in criminal sentencing should only remain as a guideline, and the discretion should always lie with the magistrates and judges, she stresses.

She says the Bar lauds the adoption of technology by the courts, describing the advantages of AI as plenty.

“But we must also be aware of the shortcomings,” she says, adding that the AI system may not take into account the “human elements” in deciding punishments.

Cheah says the rationale behind AI usage is that there is currently a disparity among sentences meted out by different courts across the country.

"It allows for more efficient and accurate analyses of documents that saves time and resources.

"AI is predictive and consistent and is – if implemented properly – untainted by human bias," she says.

Be that as it may, the Bar is concerned that it may not take into account the "human" elements that factor into the criminal sentencing procedure, Cheah says:

Magistrates and judges are tasked with studying the case in its own context, balancing the interests of parties in reaching their decisions.

"AI, on the other hand, lacks that subjective element – while the outcome of a sentence may be consistent, this does not necessarily mean that it is fair or just," she says.

She says the Bar has had its reservations because of the high-stakes social and ethical consequences of automated AI decision-making.

However, Cheah believes there are ways to resolve these concerns.

"Firstly, there needs to be a close consultative process between AI developers and the users of its system. This should include legal practitioners and civil organisations.

"Secondly, continuous improvements to the AI system must be made to ensure that any faults and errors are remedied quickly to improve the algorithm," she says.

## **Make it available to public**

While the software is in use, members of the public and lawyers can't access it at present.

Moving forward, this should change, suggests Bar Council intellectual property committee co-chairperson Foong Cheng Leong.

He says lawyers and the accused have the right to know so that they can prepare and argue against any sentence that does not fit the current scenario.

"For example, a theft of baby milk powder to feed a starving child against a theft of a mobile phone for online sale should be sentenced differently.

"An AI system may not be able to differentiate the permutations in an offence," Foong says.

He says the use of AI is good in ensuring consistency in sentencing.

"Its recommendations are not binding on the sitting judge too, as per the current practice," he says.

And that is good, as it takes human skills to sentence a person, including considering various factors like public interest, he says.

However, such a system is not available to members of the public and the lawyers yet, Foong adds.

Should AI usage be allowed, the Criminal Procedure Code (CPC), which governs provisions relating to sentencing, should be amended to recognise the use of the technology.

"Such amendments to the CPC should also allow lawyers or accused to access the sentencing system to know what are the recommended sentences before they go to court," Foong says.



# 'AI can predict outcomes, but not exercise judgment'

NO matter how intelligent machines will be, the human element is still needed when it comes to decisions involving law and judgments.

But in the long run, using artificial intelligence (AI) in our justice system will help improve the quality of judgements and avoid lengthy and expensive litigation processes.

That's the view of the National Tech Association of Malaysia (Pikom) about sentencing guidelines using AI technology in Malaysia.

While Sabah and Sarawak are using it now in courts, plans are still in the pipeline for the system to be applied in

Peninsular Malaysia.

"AI is used to assist us in better decision-making, as it amplifies our capacity and detects flaws at the same time.

"However, it also has no element of emotion or compassion which can only come from a person. At the end of the day, there is a massive difference between judgment and prediction.

"What AI systems can do is predict how judges might act, they don't exercise judgment," says the association whose members comprise the information and communications technology industry in Malaysia.

As such, Pikom believes a lot of consideration will still need to be looked into before deciding on a ruling.

From a technology point of view, Pikom says AI-based systems have always been used to resemble a certain degree of human intelligence, in finding, reasoning, predicting, inferencing and recommending.

"To do this, an enormous amount of data is managed, and these data are based on

records put into the system.

"If data is incomplete or biased then the prediction can be inaccurate," it points out.

Stating that AI is a tool to plough through data to see patterns and references, Pikom says on its own, AI is useless without the continuous supply of data. It requires to provide the right information based on algorithms.

"In similar circumstances, if the same tasks were performed by humans, one cannot guarantee the timeline that it will take and the results derived from it may be questionable.

"The only issue here is understanding, awareness and the safe use of AI in line with court matters," it says.

Looking to the future, Pikom believes AI will be used to a certain extent, and it will be added as an acceptable system to assess cases and assist in the judges' decision-making.

"Issues relating to ethicality, data collection processes and analytics will be another matter for the authorities to deliberate.

"At the same time, judges will continue to practice discretion and apply compassion in their role to see fairness in sentencing," it says.

Technically speaking, Pikom says it is

relatively easy to use such AI technology in our courts.

“AI requires secure cloud infrastructure that can host AI applications, data and storage.

“Secured systems usually carry an infrastructure that is supposed to be glitch-free.

“However, upgrading the security systems and consistent maintenance of the infrastructure would also be an important element to avoid glitches,” it says.

In July last year, the judiciary issued a statement that the AI system will be tested in the Kuala Lumpur Sessions and Magistrates Courts, as well as the Shah Alam Magistrates Court in Selangor.

It said the use of sentencing guidelines using AI technology had been developed and used in the Magistrates and Sessions Courts in Sabah and Sarawak since February 2020.

“The Malaysian judiciary is always committed to ensuring the best delivery of justice for all parties, without compromising the principles of judicial freedom.

“As such, it is hoped that such an initiative will improve the quality of judgements and strengthen the judiciary as a whole,” the statement read.