

# OPINION

THE STRAITS TIMES					
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The Straits Times says

## Building trust to move forward

The latest trust survey by public relations firm Edelman shows Singaporeans place a fair bit of trust in key institutions here – government, business, media and non-governmental organisations (NGOs). At 68 per cent, this is much higher than the global average of 56 per cent, which falls in the neutral zone of 50 to 59 per cent. Of the 27 countries surveyed, only the populations of a third of them trust their institutions, while those of eight countries are neutral, and those of 10 distrust them. Of the four institutions measured, only business is trusted globally at 61 per cent. The others fall in the neutral zone, with NGOs at 57 per cent, government at 53 per cent and media at 51 per cent. This trust deficit in traditional insti-

tutions has to do with the advent of the digital age that has changed how trust and confidence are applied, whether to institutions, groups, individuals – even to technology, digital tokens, apps and to information, banking and transactions online.

Instead of trust being inherent or flowing up to institutions, it now flows horizontally to peers sharing opinions on social networks and platforms such as Facebook or Tripadvisor. People rely more on friends, family and “a person like me”. Individuals as social influencers often have more sway than institutions. Such distributed trust can be good. It can, for example, open possibilities for people left out by banks to tap credit. A Kenyan small loans provider, for instance, looks

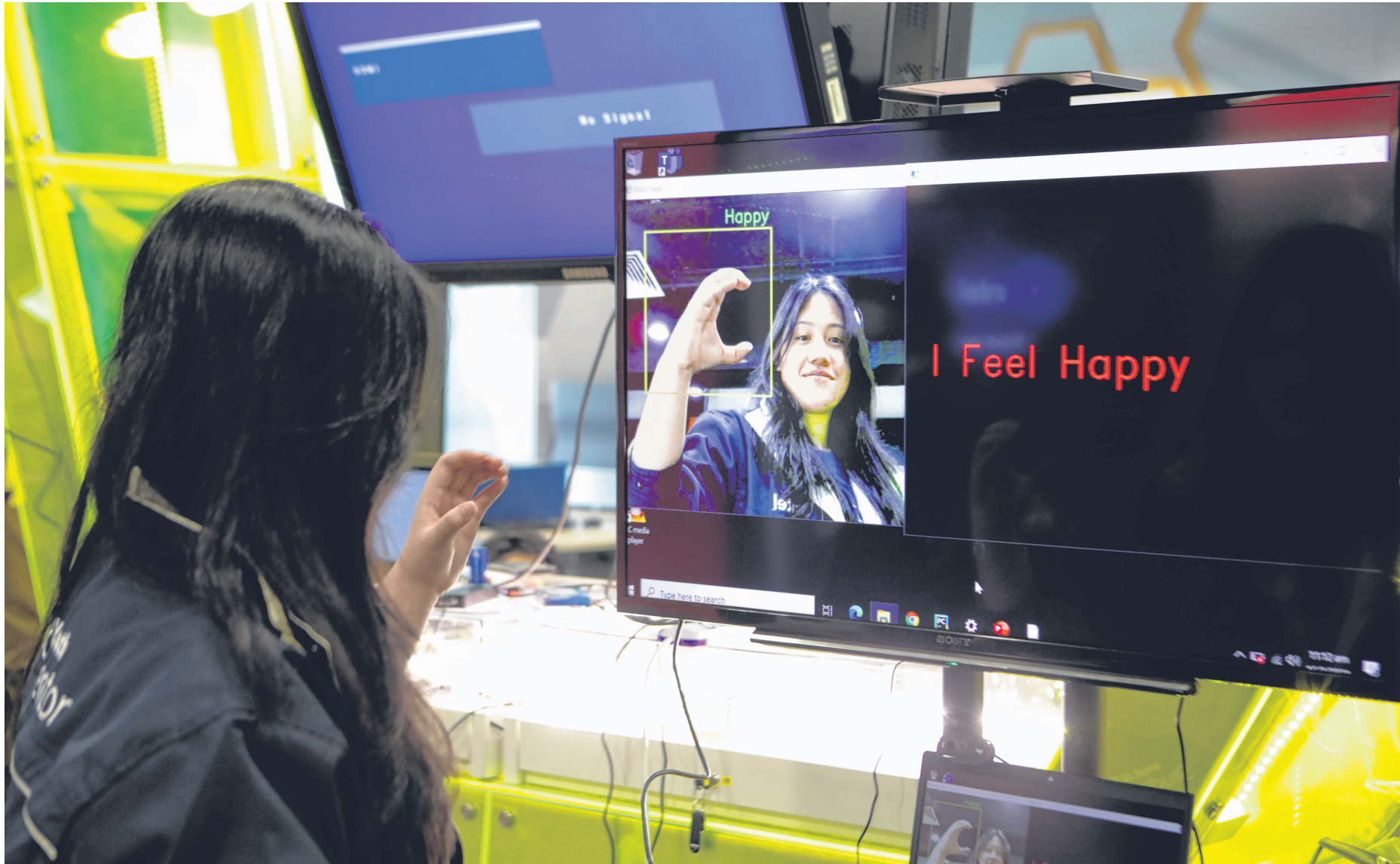
at data of a person’s interaction with contacts on his phone to assess creditworthiness.

Still, the collection and use of personal data raise issues of ethics and trust. Other digital age problems such as data and security breaches, as well as disinformation, fake news and deep fake videos, which lead to questions of what is true or false, also impact trust negatively. Edelman’s 2019 survey showed 73 per cent of respondents worry about fake news used as a weapon to undermine their society. But the fact that social interaction, transactions and business have migrated to the digital realm suggests there is a significant level of trust and confidence in the systems, processes, accuracy of information and secureness

of data, just as there is in the people and agencies that operate this new ecosystem.

A deficit of trust, if not overcome, will prevent societies coming together, especially when concerted action is needed to face challenges, such as against the Covid-19 pandemic. Strengthening trust remains crucial. This can be done by promoting transparency, having regulations that protect data and building more secure systems. Blockchain technology, which renders data immutable, is one such system. That many societies stayed intact through the pandemic and its pain suggests there has been cohesion and confidence in their leaders, institutions and fellow citizens. Countries should build on these gains.

A Higher Nitec student at ITE College West demonstrating her smart artificial intelligence (AI) sign language software in a showcase of social impact AI projects last week. Singapore has already started to push AI as part of its core economic strategy for the Future Economy, says the writer. PHOTO: LIANHE ZAOBAO



## Singapore, the AI capital of the world?

The success of locally founded, billion-dollar-valued company PatSnap points the way forward for the Republic’s place in the Future Economy

Zaid Hamzah

For The Straits Times

A Singapore-founded company, PatSnap, last week joined the ranks of global technology unicorns when it raised US\$300 million (\$404 million) in its latest funding round.

A unicorn is a term used in the technology investment circle to refer to companies with a valuation of US\$1 billion or more. With the fresh funding round, PatSnap’s valuation now tops that magic number, with tech investment giants SoftBank Vision Fund 2 and Tencent Investment among those backing the company.

Described by Bloomberg as “Singapore’s PatSnap” and hailed by the National University of Singapore (NUS) as its first

incubated company with unicorn status, 13-year-old PatSnap today is an international company with more than 700 employees across Singapore, the United Kingdom, Canada and China.

To me, what is more significant than the news about its US\$1 billion valuation is the fact that PatSnap is an artificial intelligence (AI) company that uses this exciting arm of computer science to help organisations improve their innovation performance.

PatSnap’s flagship research and development and intellectual property intelligence platforms use AI technologies such as machine learning, computer vision and language processing.

PatSnap provides innovators with access to market, technology, competitive intelligence and patent insights to take their products from idea to commercialisation.

### AI AS THE NEXT FRONTIER

AI is radically changing industries. It is the next frontier for global competition. The United States and China are the leading global players in this.

According to data from the World Intellectual Property Organisation – which is led by a Singaporean, Mr Daren Tang – Asia is the hub for global AI patent filings, with China the global leader from Asia.

How can a tiny nation like Singapore play in this space?

### PLAYING TO OUR STRENGTHS

AI is all about software, unlike manufacturing or pharmaceuticals which involve physical production requiring land and physical resources.

AI is an intangible asset, a new factor of production.

In order to create commercial and economic value, AI must be useful in terms of enhancing decision-making, raising productivity, lowering costs, or improving the quality of products or services.

As a small, resourceless nation, Singapore can play to its strategic strength by focusing on

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Economists have agreed for decades that knowledge and intellectual capital are the next major value drivers in the Future Economy.

A nation’s ability to extract commercial and economic value is less dependent on the size of its natural resources than its ability to

yield economic returns through intellectual capital value extraction.

To produce more intellectual capital that can drive economic value creation, we need more innovators, researchers and those who can commercialise technologies.

But when it comes to producing more intellectual capital, small countries like Singapore are not likely to be able to produce data scientists and machine learning engineers in the same quantity as the US and China, the world’s two largest economies.

On a per capita basis and in terms of commercial and economic yields, however, Singapore might be No. 1.

But the more important question is how to create economic value by promoting AI innovation, and upskilling the workforce to be AI innovators.

This is where economic and commercial modelling is one of the key issues to be addressed.

Think about Singapore Airlines – Singapore’s iconic global service brand. It is not about acquiring the latest Boeing or Airbus aircraft that any nation with money can buy, but about what one can make out of its service assets.

Think about how we converted Singapore’s water scarcity into an innovation opportunity – Singapore today is regarded as among the global players in advanced water technology.

Now reflect back on PatSnap – how it started as an NUS-incubated company and became a global unicorn in AI-driven intelligence platforms for innovation management.

As Professor Freddy Boey, NUS’ deputy president (innovation & enterprise) has said, PatSnap is a success story for NUS, which has been a partner in PatSnap’s growth from its start.

From planting the seeds of entrepreneurship, supporting it with early funding, connecting it to partners and incubation support, NUS has played a part in helping PatSnap grow from an idea into a global brand.

### FUTURE DIRECTIONS

Beyond being a leading intellectual property hub in Asia, Singapore is a trusted centre. We don’t take sides in the global superpower economic rivalry. We try to be useful to everyone – to be a service centre for anyone, any company and any country.

As our political leaders have emphasised, we can become the strategic global Asian node for talent, intellectual property and risk capital to drive intellectual capital creation.

Against the context of the rise of intellectual capital as a strategic economic value driver, Singapore has a premium country brand that might not be easily replicated by other countries.

If the future under Industrial Revolution 4.0 is going to be a future driven by data and AI, then that is where we must head.

Singapore’s next major economic space will have to be in the field of data and AI. This is where the potential of Singapore as an AI service innovation hub can make a critical difference to our global positioning.

Singapore has already started to push AI as part of its core economic strategy for the Future Economy.

Consider one example from the Intellectual Property Office of Singapore (Ipos). In May last year, Ipos launched its pilot programme to accelerate grants of patent applications in all technology fields (including AI) to just six months.

The programme – the SG Patent Fast Track – is the world’s fastest application-to-grant process of its kind. The grant of patents in most countries typically takes two years or more.

This service competitiveness can define our future economic strategy.

This is where the PatSnap AI story is a good template for the future. PatSnap is both an AI company and an AI enabler for others.

We need to have more PatSnaps.

The fact that PatSnap founder Jeffrey Tiong hails from the state of Sabah, Malaysia, is something that I must share with readers. And don’t forget Grab chief executive Anthony Tan, a Malaysian who grew Grab in Singapore and turned it into a unicorn.

To become an intellectual capital economy that thrives on innovation, we need the innovators and the entrepreneurs from the world to create AI assets from Singapore.

With an open economy that attracts global talent, Singapore can be that small yet high-value AI capital of the world.

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