

Committee on the Future Economy report

Strategy 4: Build strong digital capabilities

S'pore growth depends on strong digital capabilities

Irene Tham
Tech Editor

Singapore's economy must be built on strong digital capabilities to continue to grow in the long term.

This is one of seven broad recommendations outlined in the Committee on the Future Economy (CFE) report released yesterday.

The report comes after one year of consulting with 9,000 stakeholders, including trade associations, public agencies, unions, companies, academics and students.

The committee said that small and medium-sized enterprises across all sectors – which form the bulk of companies here – must automate for productivity gains.

"Building on our smart nation vision, we can tap the economic opportunities offered by the digital economy," the committee said in its report.

The 30-member committee said that national initiatives such as the National Trade Platform and the National Payments Council could accelerate the pace of adoption.

The National Trade Platform is a new trade management system to enable electronic data sharing among businesses, and between businesses and the Government. The National Payments Council is a new body to promote common e-payment standards.

Minister in the Prime Minister's Office Chan Chun Sing said during a press conference yesterday that data can help Singapore transcend its resource limitations.

"Digitalisation offers businesses, including the smaller ones, an effective means to reach out to global markets and ride on the Singapore brand of trust and efficiency," he said.

Beyond automation, companies

also need to develop capabilities in data analytics to turn the wealth of data in their possession into an asset.

"Data will be an increasingly important source of comparative advantage and we need to improve our ability to use it productively in the economy," the report noted.

The committee recommended that the Government create a dedicated programme office to help companies turn their data into an asset.

Among other things, the office can co-develop flagship data science projects with companies to inspire others to do the same.

The committee cited ride-hailing app makers Uber and Grab as examples of new businesses that came out from data science projects.

Specifically, the apps match commuters with drivers, and accurately predict how soon a ride will be available. They also allow commuters heading towards the same direction to share rides.

To train data scientists for this purpose, the committee suggested that the Government build joint laboratories with companies. Such partnerships can also promote innovation.

Recognising that cyber security underpins the data science projects, economic growth and national security, the committee also recommended that full-time national servicemen be trained to develop niche skills in cyber security.

"Singapore should also attract and anchor vanguard technology firms in niche cyber security segments where we can develop global leadership, and facilitate partnerships with users as well as local solution providers to create best-in-class solutions," the report said.

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9,000

Number of stakeholders, including trade associations, public agencies, unions, companies, academics and students, who were consulted in the CFE report.



Ms Lim, a data scientist at NCS, helps clients look at how they can use business analytics and data science in their businesses. ST PHOTO: KEVIN LIM

Data 'can help us make smarter decisions'

Nur Asyiqin Mohamad Salleh

Ms Lim Yi-Min graduated with a degree in engineering, but found a career – and the future – in data instead.

"Data is all around us, and it is growing like never before," said the 24-year-old data scientist at infocomm services provider NCS.

"I believe data science allows us to unlock the value of data.

"We can uncover meaningful insights we might not even expect. We can understand the world better and, eventually, make smarter decisions."

The Committee on the Future Economy's report, released yesterday, shone the spotlight on data.

Collecting and making sense of it will become even more crucial in future, the committee noted.

"We should recognise, treat and develop data in ways similar to how we would treat more conventional assets such as property and human capital," said the report.

"We should also develop our own abilities to make the best use of data."

Already, it has helped crack real-world problems.

Last year, engineers and data scientists from the Defence Science and Technology Agency and the Government Technology Agency of Singapore waded deep into data to identify the "rogue train" behind a series of extensive train disruptions on the Circle Line.

They studied train logs and incident reports and found that the faults occurred when a particular train – which was discovered to emit erroneous signals – was running.

More, however, can be done. Businesses stand to gain from learning to make sense of data, for one thing.

Among the committee's recommendations was the establishment of a dedicated programme office by the Government to help companies make the most of data.

Ms Lim's job involves helping clients look at how they can use business analytics and data science in their businesses.

Her interest in data and new technologies was sparked by

Singapore's push towards becoming a Smart Nation, using technology to improve people's lives.

But when she graduated in 2015, data was still an alien field to her.

She signed up for the company-led training programme by what was then known as the Infocomm Development Authority of Singapore, and started three months of intensive training at analytics company SAS.

This, said Ms Lim, provided a good foundation to jump-start her career in data science.

Data is where the future lies, she noted: "I believe it is a powerful strategy... We can find solutions to make society better."

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Digital connectivity allows Singapore to transcend geography: Chun Sing

The digital age has thrown up a resource that allows Singapore to overcome its limited resources, and that is data, said Minister in the Prime Minister's Office Chan Chun Sing.

Speaking at a media conference on the launch of the Committee on the Future Economy (CFE) report yesterday, Mr Chan said that with new technology, connectivity is no

longer restricted to air, land and sea. "Now, we are able to use digital connectivity or digital capabilities to transcend our geography."

Businesses, big and small, can

reach out and expand to far-flung places of the world, he added.

This heightened ability brings tremendous opportunities, said Mr Chan, who co-chaired the CFE subcommittee that examined the future of connectivity.

Besides data, Mr Chan also highlighted the trust in Brand Singapore as another factor that the country can leverage to position itself for the future.

While Singapore's rivals may

come up with similar plans, Mr Chan said Singapore has "every opportunity to succeed" if it plays to its strengths.

Besides being trusted as a reliable partner, Singapore's other strengths are its ability to execute plans well, and bring together the Government, businesses, trade associations and labour unions to carry out initiatives, he said.

"This is something that will not change because this is something

that has put us in good stead over the years, and we should not go slow," he added.

He also said local businesses, workers and the labour movement have to build up their capabilities to be competitive on the international stage.

"We need to continuously adapt... so that we build new capabilities," he added.

Royston Sim

Correspondent's Take

Seeing the big picture with data mining



Irene Tham

Tech Editor

The call to turn the wealth of data in companies' possession into an asset is loud and clear.

For retailers and mall operators, their wealth could be found in footfall data and shoppers' spending information.

For telcos, it could be the websites that consumers regularly visit to buy goods.

Analyse that, and retailers and mall operators can better plan promotions to target the right crowd. Telcos, too, can better profile their broadband users to allow marketers to target the right segment of consumers.

The most prominent success in data mining is found in Uber and

Grab, whose ride-hailing mobile services have changed the transport sector.

The Committee on the Future Economy (CFE), given the task of coming up with a blueprint for economic growth, cited Uber and Grab to show how data can be used to break new ground. Their apps make use of data such as commuters and drivers' locations

to accurately predict how soon a ride will be available. The apps also efficiently match demand for rides with supply, and optimise routes by allowing commuters heading in the

same direction to share rides.

The CFE, which released its report yesterday, recommended that the Government create a dedicated programme office to help companies mine their data.

The objective: Co-develop flagship data science projects with the private sector to solve real-world problems, which can in turn inspire others to do the same.

Only then can Singapore companies be ready to tap new growth opportunities amid global uncertainties.

If data is the new "oil" of the 21st

century, then Singapore has placed its bets in the right place. The only question is: Do we have enough data scientists to take us there?

Singapore is reportedly expected to find itself short of a total of 30,000 technology specialists – including some 11,000 software developers – by this year.

The CFE rightly pointed out that training is key to see the plan reach fruition. It suggested that the Government build joint laboratories with companies to develop data analytics capabilities.

The committee also

recommended that full-time national servicemen be trained to develop niche skills in cyber security so that they are ready to plug the skills gap when they enter the workforce.

If the proposal is accepted, it will be a strategic move. It sends a signal that cyber security is to economic growth what national service training is to national security.

Data must be protected to instil trust, which is key to the Singapore brand in the future economy.

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