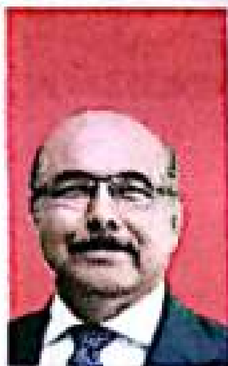

DATUK DR JOHN ANTONY XAVIER

DIGITAL ECONOMY

NO STOPPING TECHNOLOGY

Technology will disrupt the bulk of brick-and-mortar businesses in five to 10 years

JOHN Kotter, a Harvard professor, considers that: "The rate of change is not going to slow down anytime soon. Competition in most industries will probably speed up even more in the next few decades." One factor speeding up competition is technology.

In his 2017 book, *Hit Refresh*, Satya Nadella, the chief executive officer of Microsoft, opines: "Artificial intelligence, mixed reality and quantum computing are going to be game changers...(They) will be more profound in (their) impact on the economy than those revolutions that came before."

True, the digital economy is remaking industries and competition, just as the industrial revolution did in the 18th and 19th centuries. The Luddites then, who went about destroying machinery that they said had cannibalised their jobs, could not stem the inexorable march of technology. Those of their ilk are even more unlikely to stanch the onslaught of technology disruption that has once again begun.

Michael Porter in his 1981 classic, *Competitive Strategy*, argues that industry conditions, and how businesses exploit them to their favour, determine the ability of a business to secure superior returns above that of the competition. Porter's ideas remain entrenched among the business and academic communities despite a new business paradigm of making competition irrelevant. Espoused by Chan Kim and Renee Mauborgne in their 2005 book, *Blue Ocean Strategy*, and expanded in their latest 2017 how-to book, *Blue Ocean Shift*, the blue-ocean paradigm exhorts businesses to foster non-disruptive technology innovation which will provide consumers greater value at a relatively lower cost. Businesses can then make a packet out of such innovation.

Whatever one's position across this ideological divide, the fact remains that technology bears a significant influence on industry dynamics and competition within.

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Technology greatly promotes operational efficiency. That is crucial to bringing costs down. Big data analytics, artificial intelligence and crowdsourcing can tap into the wisdom of the crowd to help customise a product to suit even the unarticulated needs of consumers. Such innovation will boost customer experience.

Ikea's business model of selling reasonably priced, completely-knocked-down flat-bed furniture and Apple's iOS technology owe their premier competitive position to technology which helps keep competition at bay.

Henry Ford once said: "Competition is the keen cutting-edge of business, always shaving away at costs."

Cost control will always remain a key feature of competition. However, it is not the only one. Take the transportation industry. Just as railways altered the transportation industry some 200 years ago, driverless cars of Google, Tesla, Apple and Amazon can wreak a similar sea-change on the industry yet again. Today, ride-hailing firms, such as Uber and Grab, pose an existential threat to taxis, just as Airbnb is giving the hotel industry a run for its money.

Such innovations have the potential to either intensify or dampen competition in the marketplace. They restrict new entrants and entrap consumers to a company's line of products. As such, they reduce consumers' bargaining power over prices, product features and after-sales service. Apple's iOS technology keeps its customers hooked on to its products as these easily interface with the other gadgets in its ecosystem.

On the flip side, technology offers consumers varied choices. That will strengthen their capacity to vote with their feet and make them a force to be reckoned with in the marketplace.

Supplier power in an industry will only diminish as technology enables businesses to source supplies from a larger swathe of the global supply chain. Ikea, for example, sources its materials from more than 1,800 suppliers scattered across 50 countries, with the help of an automated supply and inventory management.

Technology will disrupt the bulk of brick-and-mortar businesses in five to 10 years. Some 20-50 billion "connected things" will surface by 2020. Any company can and should go digital. It only takes putting technology into their products such as placing a computer in the wheels – read autonomous cars.

Companies that are in a hurry to be in the digital paradigm, have invested heavily in digital technology. They have also forged strategic partnerships with other digital-technology companies.

Brandenburger and Nalebuff popularised a relationship that today's generation Z would categorise as "frenemy". In their 1996 book, *Coopetition*, they argue that competitors come together when their interests coincide to create greater value to society. Improved networking technology has accelerated this frenemy process. Microsoft now partners with many of its competitors in the tech industry – Apple, Google, Samsung and Dell.

Jack Welch, the former CEO and chairman of General Electric, has this brutal advice to give: "Number one, cash is king... number two, communicate... number three, buy or bury the competition."

Accordingly, to beat the competition, companies have acquired other digital-technology companies. Stonking technology deals include Microsoft's purchase of LinkedIn in 2016 (to compete with Salesforce, another software giant), Google's purchase of Waze and YouTube, and Facebook's purchase of WhatsApp.

Harnessing automation is crucial for our SMEs. It will ginger up our economy as SMEs constitute 97 per cent of all businesses, contribute more than one-third of the national output and about one-fifth of our exports. No longer should SMEs view technology as merely driving efficiency. Rather, it should be harnessed to create bolder business models. SMEs will have to work hard to turn their fledgling technology-adoption potential to reality if they are not to go the way Kodak went. Gratingly, Kodak failed to capitalise on the very digital photography that it had invented.

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