

Why Bangladesh should invest in artificial intelligence



IN the 1970s, American sociologist and economic historian Immanuel Wallerstein (1930-2019) proposed an approach to view the global economic system as an interplay between three groups of countries: core, semi-periphery, and periphery countries. The core countries possess the highest levels of skills and knowledge and the largest amount of capital. The semi-periphery countries serve this group with lower-skill, labour-intensive production and raw materials. The periphery countries, in turn, service both groups with even lower skill levels and more labour-intensive production methods. The approach later came to be known as the World Systems Theory.

The system is dynamic: a country may move up or down the hierarchy depending on its technology, capital, or knowledge. Such movements involve fundamental shifts in a country's social and economic systems—e.g. production, distribution, learning, and skill level. For example, India was once an agriculture-based economic powerhouse, and the European traders clamoured to import its products. But as Europe became industrialised, the importers soon became exporters, and India's agriculture and home-based small industries drastically declined. The money extracted from India fuelled the First Industrial Revolution (late 18th century), funded research and development, and expanded the Western countries' knowledge base. Yale, a highly regarded American university, benefitted from Elihu Yale's (1649-1721) donations, who earned a fortune from the slave trade in India.

The second (late 19th century) and the third (mid-20th century) industrial revolutions

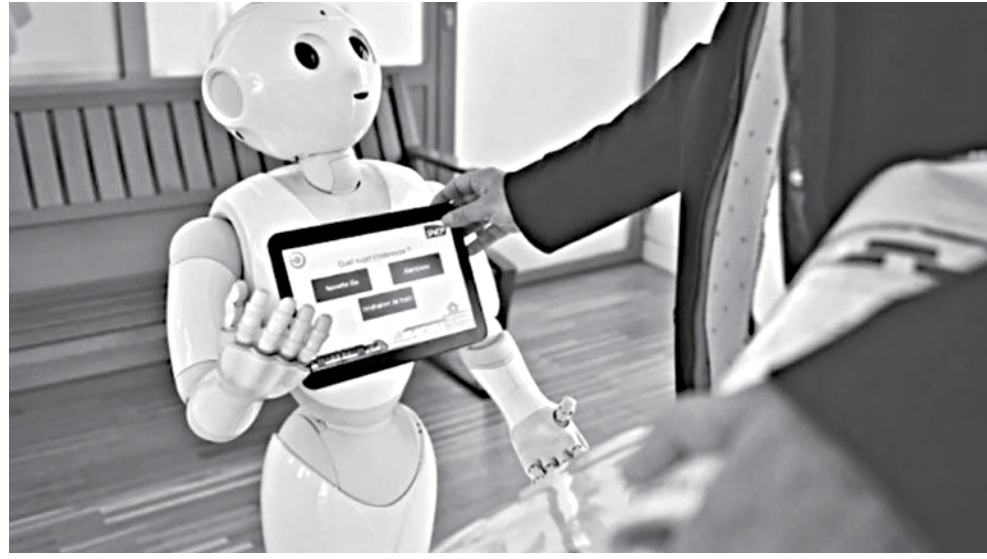
soon followed on the back of the first. Both revolutions caused the status of countries to remain generally static; the core countries stayed ahead of the others primarily because of their control on capital, besides knowledge and skill.

The world is now going through the Fourth Industrial Revolution (4IR). According to Klaus Schwab, founder and executive chairman of the World Economic Forum (WEF), the 4IR has transformed the world with an entirely new production, management, and governance system. It can potentially alter Wallerstein's World Systems Theory, because skill and innovation will determine a society's place in the future, reducing dependence on capital. It thus opens new opportunities for the non-core emerging economies to move up Wallerstein's ladder. Schwab added that artificial intelligence (AI) would be a crucial driver of the 4IR. A good thing about AI is that emerging economies can also benefit from this technology without cost-prohibitive investments. The International Finance Corporation (IFC) highlights the same point with ideas and case studies in emerging economies under its thought leadership programme. Below are some of such case studies.

AI for emerging economies

Any effective poverty alleviation initiative needs data to identify vulnerable groups. However, the unavailability of quality data often leads to poorly designed interventions—such as incorrect identification of a vulnerable group—and their eventual failure. AI can analyse satellite images to extract relevant information, such as distance from the nearest water sources or the urban market, crop status, and other relevant variables for detecting vulnerability.

Bengaluru, in Southern India, is experimenting with a system to monitor real-time camera feeds to control traffic lights.



In the age of 4IR, investing in artificial intelligence (AI) would be the right move for Bangladesh to accelerate its economic growth.

FILE PHOTO: AFP

In Rwanda, commercial drones are flying medical supplies, such as blood, to remote locations faster than road transport. AI can correlate data from mobile phones with financial affordability, education level, and health status. Such data will allow mobile applications to deliver microlending, tailored education, disease diagnosis, and medication advice. With Natural Language Processing (NLP) tools, AI can cross literacy barriers and communicate directly with an individual in any language.

Options for Bangladesh

MIT professors Erik Brynjolfsson and Andrew McAfee believe that technology will create abundance, but not everyone will benefit equally. Those with talent will be more likely to secure the high-skilled, high-pay jobs, leaving the low-skilled, low-pay ones

for the rest. The 4IR's impact on societies will be determined not by technologies, but by the choices one makes. What choice will Bangladesh make?

So far, Bangladesh's economy has been heavily dependent on low-cost products, such as garments—earning more than 80 percent of total annual exports, according to BGMEA—and remittance from low-skilled migrant workers—over USD 24 billion in 2020-21, according to Bangladesh Bank. Should it continue providing low-cost production and labour? Or can it train its abundant young population and make use of the opportunities presented by the 4IR?

How Bangladesh can benefit from 4IR

A Brac study, titled "Youths of Bangladesh: Agents of Change," offers some interesting insights. Bangladeshi youths are not yet

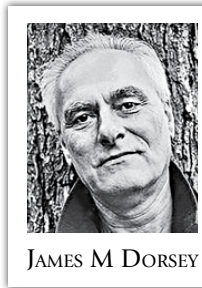
prepared to take the opportunities provided by the 21st century (i.e. 4IR), and their potential remains vastly unrealised. It has just about one-third of its 163 million (World Bank's 2019 estimate) people are between 15 and 35 years. With the right skills and investment, these youths could become game-changers.

Bangladesh adopted its AI strategy in March 2020, although there is no visible follow-up yet. China adopted its AI development plan in July 2017. Within merely four years, the sheer scale of China's drive towards AI implementation is mind-boggling, as the think tank New America reported in "From Riding a Wave to Full Steam Ahead." China's government entities, universities, research institutes, local bodies, and corporations are spearheading its AI vision of becoming the global leader by 2030. A *Forbes* article already views China as the world's first AI superpower.

But Bangladesh is not China. The two countries' social, political, and economic systems are vastly different. Bangladesh must find a path to reap the benefits of AI technology. Given its focus on science and technology, Bangladesh can start by setting up a few dedicated AI research institutes and attracting top talents to work for them. It can initiate AI-based research programmes targeting local problems such as Bangla NLP, manufacturing process automation, farming support, tailored education, or healthcare service to remote populations. Low-cost production base and unskilled labour would soon become redundant, just like horses no longer pull carts or carry coal from the mines. The only way to remain relevant is to adopt technology for faster and more equitable growth. Bangladesh cannot afford to miss the opportunity that 4IR offers.

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Reducing Middle East tensions can lessen sectarianism and open doors for women



TWO separate developments involving improved relations between Sunni and Shia Muslims and women's sporting rights demonstrate major shifts in how rivalry for the leadership of the Muslim world and

competition to define Islam in the 21st century are playing out in a world where the Middle Eastern states can no longer depend on the United States coming to their defence.

The developments fit into a regional effort by conservative, status-quo states like Saudi Arabia, the United Arab Emirates (UAE), and Egypt and proponents of different forms of political Islam (Iran, Turkey, and Qatar) to manage—rather than resolve—their differences in a bid to ensure that they do not spin out of control. The efforts have had the greatest success with the lifting of a 3.5-year Saudi-UAE-Egyptian-led diplomatic and economic boycott of Qatar in January this year.

The reconciliation moves also signal the pressure on Middle Eastern players in what amounts to a battle for the soul of Islam to change perceptions of the region as being wracked by civil wars, sectarian tensions, extremism, jihadism, and autocracy. Altering that perception is key to the successful implementation of plans to diversify oil and gas export dependent economies in the Gulf, develop resource-poor countries in the region, tackle an economic crisis in Turkey, and enable Iran to cope with the crippling US sanctions.

Finally, these developments are also the harbinger of the next phase in the competition for religious soft power and leadership of the Muslim world. In a break with the past decade, lofty declarations extolling Islam's embrace of tolerance, pluralism, and respect for others' rights that are not followed up by deeds no longer cut ice. Similarly, the proponents of socially conservative expressions of political

Islam need to be seen as adopting degrees of moderation that so far have been the preserve of their rivals, who prefer the geopolitical status-quo ante.

That next phase of the battle is being shaped not only by doubts among the US allies in the Middle East about the United States' reliability as a security guarantor—reinforced by America's withdrawal from Afghanistan—but it is also being informed by a realisation that neither China nor Russia

President Kais Saied.

A newly published survey of Tunisian public opinion showed 45 percent of those polled blaming Rachid Ghannouchi, the leader of the Islamist Ennahada party, for the country's crisis, and 66 percent saying they had no confidence in the party.

The Middle East's rivalries and shifting sands lend added significance to a planned visit in the coming weeks to Najaf, an Iraqi citadel of Shia Muslim learning and home to



Pope Francis meets with Iraq's top Shia cleric, Grand Ayatollah Ali al-Sistani, in Najaf, Iraq, on March 6, 2021.

FILE PHOTO: REUTERS

can (or will) attempt to replace the US defence umbrella in the Gulf.

The battles' shifting playing field is further being determined by setbacks suffered by political Islam, starting with the 2013 military coup that toppled Mohamed Morsi, a Muslim Brother and Egypt's first and only democratically elected president, and brutally decimated the Muslim Brotherhood. More recently, political Islamists suffered a stunning electoral defeat in Morocco and witnessed the autocratic takeover of power in Tunisia by

91-year-old Shia religious authority, Grand Ayatollah Ali al-Sistani, by Ahmed el-Tayeb, the grand imam of al-Azhar, Sunni Islam's foremost historic educational institution. The visit takes place against the backdrop of Iraqi-mediated talks between Saudi Arabia and Iran, the two major centres of Islam's two main strands, that are aimed at dialling down tensions between them which reverberate throughout the Muslim world. The talks are likely to help the two regional powers manage rather than resolve their differences.

The rivalry was long marked by the Saudi-inspired, religiously-cloaked anti-Shia rhetoric and violence in a limited number of cases, and the Iranian concerns about the country's Sunni minority and its opting for a strategy centred on Shia Muslim proxies in third countries and support for the regime of Syrian President Bashar al-Assad.

Implicit in Saudi and Iranian sectarianism was the perception of the Shia minorities in Saudi Arabia and other Sunni majority countries, and Sunnis in Iran and Iraq after the 2003 toppling of Saddam Hussein, as fifth wheels of the other.

Imam el-Tayeb's visit, a signal of improvement in long-strained Egyptian-Iraqi relations—as well as a possible later meeting between the Sunni cleric, a Shia cleric other than Ayatollah al-Sistani as he is too old and fragile to travel, and Pope Francis—are intended to put sectarianism on the backburner. Ayatollah al-Sistani met with the Pope during his visit to Iraq in March.

The visit takes on added significance in the wake of this week's suicide bombing of a Hazara Shia mosque in the northern Afghan city of Kunduz that killed at least 50 people and wounded 100 others. The South Asian affiliate of the Islamic State, Islamic State-Khorasan, claimed responsibility for the attack—the worst since the Taliban came to power in August. It was likely designed to fuel tension between the Sunni Muslim group and the Hazaras, who account for 20 percent of the Afghan population.

Imam el-Tayeb's travel to Najaf is likely to be followed by a visit by Mohamed al-Issa, secretary-general of the Saudi-dominated Muslim World League (MWL). The MWL was long a prime vehicle for the propagation of anti-Shia Saudi ultra-conservatism. Since coming to office, Crown Prince Mohammed bin Salman has recast the MWL as a tool to project his vaguely defined notion of a state-controlled "moderate" Islam that is tolerant and pluralistic.

In a similar vein, hard-line Iranian President Ebrahim Raisi took many by surprise by

allowing women into Tehran's Azadi Stadium to attend this month's World Cup qualifier between Iran and South Korea. Iran is the only country to ban women from attending men's sporting events. It was unclear whether the move was a one-off measure or signalled a loosening or lifting of the ban. Raisi was believed to see it as a way to rally domestic support and improve the Islamic republic's image as much in China and Russia as in the West. No doubt, Raisi will have noted that China and Russia have joined the United States, Europe, and others in pressuring the Taliban in Afghanistan to recognise women's rights.

To be sure, women in Iran enjoy education rights and populate universities. They can occupy senior positions in business and government even if Iran remains a patriarchal society. However, the ban on women in stadiums, coupled with the *chador*—the head-to-foot covering of women—has come to dominate the perception of Iran's gender policies. Allowing women to attend the World Cup qualifier suggests a degree of flexibility on President Raisi's part. During his presidential campaign, he argued that granting women access to stadiums would not solve their problems. It also demonstrates that the government, with hardliners in control of all branches, can shave off sharp edges of its Islamic rule far easier than reformists like Raisi's predecessor, Hassan Rouhani, were able to do.

The question is whether that is President Raisi's intention. He may be testing the waters with this month's football match; only time will tell.

It may be too big a leap in the immediate future but, like Imam el-Tayeb's visit to Najaf, it indicates that the dialling down of regional tensions puts a greater premium on soft power, which in turn builds up pressure for less harsh expressions of religion.

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QUOTABLE Quote



HELEN KELLER (1880 - 1968) American author

Character cannot be developed in ease and quiet. Only through experience of trial and suffering can the soul be strengthened, ambition inspired, and success achieved.

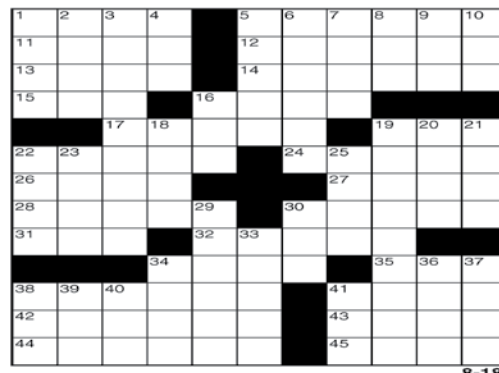
CROSSWORD BY THOMAS JOSEPH

ACROSS

- 1 Hyphen's kin
- 5 Drum kit parts
- 11 Canyon sound
- 12 Maine national park
- 13 Potential prince
- 14 Fit in
- 15 Evergreen shrub
- 16 Wickedness
- 17 Musical set in Argentina
- 19 Storage spot
- 22 Be of one mind
- 24 Likely
- 26 Clock part
- 27 "Beetle Bailey" dog
- 28 Warning sound
- 30 John of music
- 31 Cardi B specialty
- 32 Even a little

DOWN

- 34 Smell
- 35 First woman
- 38 James of "127 Hours"
- 41 Litmus reddener
- 42 1960s cartoon feline
- 43 Strong wind
- 44 Wins every game of
- 45 Store sign
- 29 Zany
- 30 Stirrup setting
- 33 Horn sounds
- 34 Formerly
- 36 Despicable
- 37 Blissful place
- 38 Army bases: Abbr.
- 39 Join the crew
- 40 King Kong, e.g.
- 41 In the past



YESTERDAY'S ANSWERS

P O K E R M A U D E
A P I N G A N N E X
C E N T R A L T I M E
E N D A L L T A R
D E L A N O S E N T
D E I G N O D D S
S E E D S
F E E L T E A R S
A N N E I N D E E D
I D A I M A F A R
L I M I T E D T I M E
E V E N T A R L E S
D E L A Y A Y E N S

BEETLE BAILEY



BY MORT WALKER



BABY BLUES



BY KIRKMAN & SCOTT



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