

## The explosion of digital uncertainty

**R**ecent advances in Generative Artificial Intelligence (AI) have captured the imagination of the public, businesses and governments alike. The Government of India has also, very recently, released a comprehensive report on the opportunities afforded by this current wave of AI. Leaders of the IT industry in India are almost certain that this wave of AI will lead to fundamental changes in the skills landscape, and implicitly, in terms of underlying threats and dangers.

### Scant understanding of the implications

Concurrently, there is an exponential explosion of digital uncertainty. Few are able to fully comprehend the nature of the new threat, the likes of which have not been witnessed in past decades, if not centuries. Few also realise the grave implications of what it means to have our lives and our economies run on what may be described as fertile digital topsoil. Even fewer realise the kind of intrinsic problems that result from this.

It is oft-repeated that digital infrastructure is built on layers upon layers of omniscient machine intelligence, human coded software abstractions, and dependable hardware components. Each of the layers interconnect through complex and deeply embedded protocols. The narrow aperture of understanding of such aspects means that the vast majority of people are ignorant of the implications. Even less understood is that complexity of this kind begets vulnerabilities.

While cyber has, no doubt, attracted a measure of attention, there is little – or true – understanding of the nature of today's cognitive warfare. Cognitive warfare truly ranks alongside other elements of modern warfare such as the domains of maritime, air and space. Cognitive warfare puts a premium on sophisticated techniques that are aimed at destabilising institutions, especially governments, and manipulation, among other aspects, of the news media by powerful non-state actors. It entails the art of using technological tools to alter the cognition of human targets, who are often unaware of such attempts.

The end result could be a loss of trust apart from breaches of confidentiality and loss of governance capabilities. Even more dangerous is that it could alter a population's behaviour using sophisticated psychological techniques of manipulation.

Given the maze of emerging technologies, both businesses and governments today confront an Armageddon of sorts. The methods employed are highly insidious. For example, today, with almost a third of companies in the more advanced countries of the world investing more in intangible assets than the physical one, they are putting themselves directly at risk from AI. Another estimate is that with over 50% of the



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market value of the top 500 companies sitting in intangibles, they too are deeply vulnerable. As firms, large and small, spend billions of dollars to migrate to the Cloud, and more and more sensors constantly send out sensitive information, the risks go up in geometrical progression. All this portends a dark, rather than a brave, new world order that we hope to inhabit.

Hence, digital uncertainty is morphing into radical uncertainty and rather rapidly. Today, government and government agencies are spending significant resources to undo the impact of misinformation and disinformation, but this may not be enough. There is not enough understanding of how the very nature of information is being manipulated and the extent to which AI drives many of these drastic transformations. All this contributes to what can only be referred to as 'truth decay'.

### The emergence of AGI

If AI is the grave threat that the world is currently contemplating, we are only witnessing the tip of the iceberg. As growing numbers of people – cognitively and psychologically – become dependent on digital networks, AI is able to influence many critical aspects of their thinking and functioning. What is simultaneously exhilarating and terrifying is the fact that many advances in AI are now being birthed by the machine itself. Sooner rather than later, we will witness the emergence of Artificial General Intelligence (AGI) – Artificial Intelligence that is equal and/or superior to human intelligence, which will penetrate whole new sectors and replace human judgement, intuition and creativity.

The impending dawn of AGI is far more disruptive and dangerous than anything else that we have encountered thus far. There is real fear that it could alter the very fabric of nation-states, and tear apart real and imagined communities across the globe. Social and economic inequalities will rise exponentially. Social anarchy will rule the streets as we see happening in some of the cities closest to the epicentre of technological innovation. It has an inherent capacity to flood a country with fake content masquerading as truth, and for imitating known voices with false ones that sound eerily familiar. This could lead to a breakdown of the concept of trust – of what is said, read, or heard – and could lead to overturning the trust pyramid with catastrophic consequences.

AGI will enable highly autonomous systems that outperform humans in many areas, including economically (valuable) work, education, social welfare and the like. AGI systems will have the potential to be able to make decisions that are unpredictable and uncontrollable which could have unintended consequences, often with harmful outcomes. It is difficult to comprehend at this point its many manifestations, but job

displacements and economic displacements would be initial symptoms of what could become a tsunami of almost all human-related activity. Digital data could in turn become converted into digital intelligence, enlarging the scope for disruption and the reining in of entire sectors. It would enhance inequalities and exacerbate social disparities, and worsen economic disparities.

Hence, AGI could prove to be as radical a game-changer in the world of the 21st century as the Industrial Revolution was in the 18th century. It is almost certain to lead to material shifts in the geo-political balance of power, and in a way never comprehended previously. The spectre of digital colonisation looms large with AGI-based power centres being based in a few specific locations.

Consequently, AGI-driven disruption could precipitate the dawn of the age of digital colonialism. This would lead to a new form of exploitation, viz., data exploitation. In its most egregious form, it would entail export of raw data and import of value-added products that use this data. In short, AGI-based concentration of power would have eerie similarities to the old East India Company syndrome.

We could possibly be at the cusp of an 'Oppenheimer Moment', when the world is at a crossroads in the science of computing, communicating and engineering, and the ethics of a new technology whose power and potential we do not fully comprehend. Reining in, or even halting, the development of the most advanced forms of AGI, or disallowing unfettered experimentation with the technology may not be easy, but the alternative is that it has the potential to shape the nature of the world in a manner well beyond what can be anticipated. Today, AGI seems to imitate forms of reasoning with a power to approximate the way humans think. This is a new kind of arms race, but of a different kind, and it has just begun. It, perhaps, calls for more intimate collaboration between states and the technology sector, which is easier said than done.

### The Hamas-Israel conflict

A final word. AI can be exploited and manipulated skilfully in certain situations, as was possibly the case in the current Hamas-Israeli conflict, sometimes referred to as the Yom Kippur War 2023. Israel's massive intelligence failure is attributed by some experts to an overindulgence of AI by it, which was skilfully exploited by Hamas. AI depends essentially on data and algorithms, and Hamas appears to have used subterfuges to conceal its real intentions by distorting the flow of information flowing into Israeli AI systems. Hamas, some experts claim, was thus able to blindside Israeli intelligence and the Israeli High Command. The lesson to be learnt is that an over-dependence on AI and a belief in its invincibility could prove to be as catastrophic as 'locking the gates after the horse has bolted'.

Artificial Intelligence is the new threat that the world is contemplating now; but this is only the beginning



## The BRI at 10, some hits, many misses

The Third Belt and Road Forum for International Cooperation that was convened in Beijing, China (October 17-18) has put the spotlight back on Chinese President Xi Jinping's signature initiative.

Early debates in China reveal the intent behind the Belt and Road Initiative (BRI). Academic Xue Li likened the BRI to China's Marshall Plan, stating that it was a gateway for China to transition from a regional power with global influence to a global power with comprehensive strength. Academic Wang Yiwei argued that the BRI was an ascendant China's bid to reboot globalisation and rectify its shortcomings. A rising China also felt the need to develop new transport and trade arteries as alternatives, since rivals could put the squeeze on the Strait of Malacca – the jugular vein for China's economy.

Beijing was also putting its money where its mouth was with the establishment of the Asian Infrastructure Investment Bank with a \$100 billion war chest, challenging other lending institutions. In the assessment of scholar Ju Jiejin, the AIIB would enable Mr. Xi to harvest early gains of the BRI. At the onset, Mr. Xi was pitching for the use of local currency in trade, thus in effect elbowing out the dollar. In this way, he began building an economic order centered on China

### As a Xi vehicle

The BRI, which was launched shortly after Mr. Xi got the top job, also served as a vehicle for him to brand himself as a global statesman and project China's power and influence overseas. Domestically, the initiative entered the Communist Party of China's constitution in 2017, and got top billing in the 14th Five-Year Plan announced in 2021. The Chinese government's white paper on BRI released this month ("The Belt and Road Initiative: A Key Pillar of the Global Community of Shared Future") revealed that over



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200 BRI cooperation pacts had been inked with over 150 nations. The document also stated that total two-way investment between China and partner countries from 2013 to 2022 touched \$380 billion. As Mr. Xi himself put it, the BRI would provide more public goods to the entire world, highlighting the massive infrastructure deficit.

According to the World Bank, 675 million people are without electricity globally, around 2.3 billion lack potable water, and 450 million live beyond the coverage of a broadband signal. The lending institution calculates that bridging the infrastructure gap will need capital infusion of \$1.5 trillion annually through 2030, which is approximately 4.5% of the GDP of low- and middle-income countries. Under China's Marshall Plan, motorways, power plants, ports, railway networks, and digital infrastructure have been built.

### The ugly reality

But the tale of Chinese munificence is marred by some unsavoury ground realities. A report from the ISEAS-Yusof Ishak Institute on the BRI has highlighted issues related to ecological damage, displacement of people, disputes over payouts and labour unrest. The findings detail case studies of Indonesia, where things came to a head over anxieties related to Chinese labourers filling up positions earmarked for locals.

In Laos, the glistening super-fast trains and impressive dam projects over the Mekong River cannot hide the woes of those left high and dry due to lack of compensation, or others on whom droughts due to dam-construction projects have wreaked havoc. AidData estimates that Laos owes China around \$12.2 billion – about 65% of its GDP.

The China-Pakistan Economic Corridor (CPEC) was conceived over the framework that ties between the two nations were deeper than the ocean, sweeter than honey and higher than the

Himalayas. Yet, a Pakistani legislative report unearthed that while China cornered 91% of Gwadar port's revenue, Pakistan pocketed just 9%. These issues have tarnished the reputation of brand BRI, especially its tagline of 'win-win cooperation' as there are perceptions that it is a win for China twice over at the cost of other stakeholders.

### Global alternatives

After much hand-wringing, efforts are being taken to counter the BRI. In the Donald Trump era, the United States and Japan initiated the "United States-Japan infrastructure investment alternatives in the Indo-Pacific region". The Joe Biden administration announced the 'Build Back Better World' (B3W) initiative that seems to have been reorganised as the Partnership for Global Infrastructure and Investment, which aims to channelise private capital into climate change and energy security, health care and health security, digital technology, and gender equity.

Here, it must be noted that India has steadfastly opposed CPEC over issues related to sovereignty and had raised concerns over issues of unsustainable debt. Yet, like Cassandra's warnings, they could not convince hearts and minds in the thrall of China's narrative.

The G-20 Delhi summit posited yet another alternative in the form of the India-Middle East-Europe Corridor (IMEC) that seeks to link India, West Asia, and Europe through railways and shipping lines. In addition to the trade connectivity, electricity and digital infrastructure as well as a pipeline for clean hydrogen export have been envisioned. It is too early to assess the alternatives, but all eyes will be on the future of BRI as it completes a decade. At a time when Beijing is grappling with economic worries related to debt and unemployment, it remains to be seen how it will reinvigorate the "project of the century".