

Augmented reality: An early taste of the metaverse



LISBON: When Facebook unveiled a mock-up last week of the "metaverse" — supposedly the internet of the future — it showed people transported to a psychedelic world of flying fish and friendly robots. But while even Facebook CEO Mark Zuckerberg acknowledges these kinds of experiences could be many years away, some enthusiasts argue that a more modest version of the metaverse is already here.

"We're in the early stages of the metaverse, in some ways," Peggy Johnson, CEO of Magic Leap, said at the Web Summit in Lisbon on Tuesday. Magic Leap makes augmented reality (AR) headsets, which have already been used by surgeons preparing to separate a pair of conjoined twins, and by factory supervisors carrying out site in-

spection. In both cases, information popped up before the users' eyes about what they were seeing. It might not feel quite as immersive — or as kooky — as the virtual reality (VR) experiences that Zuckerberg wants to eventually bring to people's homes. But it nonetheless blurs the divide between the physical world and the digital one, a key idea behind the metaverse. "With VR, you put on a device, and then you're in another world," Johnson said. "With AR, you put on a device, you're still in your world, but we're augmenting it with digital content." So far, many people's experiences of AR have been limited to playing Pokemon Go or experimenting with image filters that transplant a comical pair of ears onto someone's face. But it is in healthcare that the true po-

tential of AR is starting to be realised, Johnson said.

"You can call in experts who can look at the same thing as you are, from another part of the world," she said. "During surgery, you can lay down digital lines where perhaps the incision is going to occur." Founded in 2010, Magic Leap's initial mission to bring AR to the masses generated huge hype and nearly \$2.3 billion in venture funding. Early promo material imagined it being used to bring a killer whale into a gymnasium full of schoolchildren. But when Magic Leap's first headset was finally revealed in 2018, there was widespread disappointment; the product was too bulky and expensive to catch on among the general public. The company was forced to lay off around half its

staff last year. Restaurant reviews and forgotten names Johnson, a former Microsoft executive, took over as CEO in August 2020 and pivoted towards developing the goggles for use by professionals. The Florida-based company last month announced that it has raised another \$500 million in funding, with a new headset, the Magic Leap 2, set to be released in 2022.

The updated version is more lightweight, but it is still set to be used mostly by people accustomed to wearing goggles at work — like surgeons performing delicate work, or defence industry specialists. Google Glass, a pair of "smart glasses" that failed to take off when they launched in 2014, has similarly re-emerged as a product aimed at professional users. —AFP

PTA, TikTok agree to establish mechanism for provision of lawful content

ISLAMABAD: Pakistan Telecommunication Authority (PTA) has agreed to establish a mechanism with TikTok to ensure that all content uploaded on the platform is lawful and safe for society. The Chinese video-sharing platform was banned in the country, on the directives of courts, for uploading objectionable content which is not acceptable in Pakistani society. To discuss the matter, TikTok Head of Public Policy Helena Lersch met chairman of Pakistan Telecommunication Authority (PTA) retired Maj Gen Amir Azeem Bajwa at the PTA headquarters. TikTok has sought a long-term meaningful engagement with the regulator in relation to content moderation in line with local laws and societal norms. Ms Lersch highlighted initiatives taken by TikTok for ensuring provision of safe, productive, informative and legitimate content to Pakistani users. The PTA was informed that TikTok was the world's leading short-form video platform and it followed the most stringent guidelines. As many as 81.5 million videos were removed globally during the quarter April to June. This included removal of 9.85 million videos that were uploaded from Pakistan, which is also the second highest in terms of numbers in the world. The TikTok team presented a copy of its Global Community Guidelines Enforcement Report for the quarter April - June 2021. The automated system placed by the platform to detect, block and remove inauthentic accounts and engagement had helped improve speed and response to the evolving threats, the team pointed out, adding future strategy and investment in Pakistan was also shared with the PTA. The PTA chairman acknowledged efforts highlighted by TikTok and assured the team that engagement with it will continue. TikTok was also banned earlier several times for allowing its content creators to upload videos that violated laws and sentiments of



China could have 1,000 nuclear warheads by 2030, says Pentagon

China is expanding its nuclear arsenal faster than anticipated, narrowing the gap with the United States, says Pentagon



US blacklists Israeli maker of Pegasus spyware

NEW YORK: United States authorities put the Israeli maker of the Pegasus spyware which was at the centre of a scandal over surveillance of journalists and officials on a blacklist of restricted companies. The company, NSO, was engulfed in controversy over reports that tens of thousands of human rights activists, journalists, politicians and business executives worldwide were listed as potential targets of its Pegasus software. Smartphones infected with Pegasus are essentially turned into pocket spying devices, allowing the user to read the target's messages, look through their photos, track their location and even turn on their camera without them knowing. "These tools have [...] enabled foreign governments to conduct transnational repression, which is the practice of authoritarian governments targeting dissidents, journalists and activists outside of their sovereign borders to silence dissent," the US Commerce Department said in a statement. NSO fired back at the decision, saying its "technologies support US national security interests and policies by preventing terrorism and crime". "We will advocate for this decision to be reversed," a NSO spokesperson told AFP, adding its compliance controls have resulted in "multiple terminations of contacts with government agencies that misused our products".

Washington also targeted Israeli company Candiru, as well as Singapore-based Computer Security Initiative Consultancy PTE (COSEINC) and Russian firm Positive Technologies that were accused of trafficking in hacking tools. The companies' addition to the so-called "entity list" means exports to them from US organisations are restricted — and it is now far harder for American researchers to sell them information or technology. In a statement, Positive Technologies said the listing would have "little or no effect on our business" and did not come as a surprise.

"We sincerely believe that geopolitics should not be an obstacle to the technological development of society, and we will continue to do what we do best — to ensure cybersecurity on a global scale," it said on its website. COSEINC did not respond to a request for comment from AFP.

Critics say the widespread availability of software like Pegasus now allows even cash-strapped authoritarian governments to effectively acquire their own highly invasive surveillance powers. "NSO Group's spyware is a tool of repression, which has been used around the world to violate human rights," Danna Ingleton, deputy director of Amnesty Tech, said in a statement. "This dangerous industry is out of control, and this must spell the end of the impunity spyware companies have so far enjoyed," Ingleton added. A key problem is that companies that supply spyware are left to judge what is an appropriate use of their technology and whether buyers can be trusted to honor



WASHINGTON: Beijing is expanding its nuclear arsenal faster than anticipated, narrowing the gap with the United States, the Pentagon said, adding that China could have 1,000 deliverable nuclear warheads by 2030.

In a report, Pentagon said Wednesday that China could have 700 deliverable nuclear warheads by 2027, and could top 1,000 by 2030 — an arsenal two-and-a-half times the size of what the Pentagon predicted only a year ago, according to the report. The People's Republic of China (PRC) "is investing in, and expanding, the number of its land-, sea-, and air-based nuclear delivery platforms and building the infrastructure necessary to support this major expansion of its nuclear forces. The assessment came in the US Department of Defense's annual report to Congress on Chinese military developments. Like the United States and Russia, the two leading nuclear powers, China is building a "nuclear triad," with capabilities to deliver nuclear weapons from land-based ballistic missiles, from missiles launched from the air, and from submarines, it said.

The report said China is likely not seeking a capability to launch an unprovoked nuclear strike on a nuclear-armed adversary — primarily the United States —

but wanted to deter attacks from others by maintaining a credible threat of nuclear retaliation. A year ago, the Pentagon's China report said the country had about 200 deliverable warheads and would double that by 2030.

Independent researchers have in recent months published satellite photographs of new nuclear missile silos in western China. The acceleration "is very concerning to us," a US defense official said. It "raises questions about their intentions," the official said, calling for more transparency from Beijing over its nuclear force development.

- Main US rival - The Pentagon has declared China its principal security concern for the future, as Beijing undertakes to build the People's Liberation Army into "world-class forces" by 2049, according to its official plan.

China is expanding its air, space and sea forces with the aim of projecting its power globally, much as the United States military has for decades. The rivalry has increased concerns about a possible clash between the US and China, especially over Taiwan, which China claims as its territory but which is closely supported by the United States. The new US report said China's swift military modernization aims to have the capabil-

ity by 2027 to overcome any pushback to an effort to reclaim Taiwan, by pressure or military force. By 2027, the report says, China aims to have "the capabilities to counter the US military in the Indo-Pacific region, and compel Taiwan's leadership to the negotiation table on Beijing's terms." The report confirmed news stories in recent months saying that in October 2020 Pentagon officials were forced to quell real concerns in Beijing that the United States, driven by domestic political tensions related to the presidential election, intended to instigate a conflict with China in the South China Sea.

Underscoring its fears, the PLA has issued intensified warnings in state-controlled media, launched large scale military exercises, expanded deployments and put troops on heightened readiness, the report said. After senior Pentagon officials moved to directly speak to Chinese counterparts, the concerns eased and a Chinese defense spokesman announced publicly that the United States in fact did not plan to trigger a crisis. "These events highlighted the potential for misunderstanding and miscalculation, and underscored the importance of effective and timely communication," the report said. The re-

port also questioned the PLA's intent in biological research into substances that potentially have both medical and military uses.

"Studies conducted at PRC military medical institutions discussed identifying, testing, and characterizing diverse families of potent toxins with dual-use applications," the report said, raising concerns over compliance with global biological and chemical weapons treaties. Such concerns have echoed since early 2020 after the Covid-19 pandemic erupted first in the area of a Chinese biological research laboratory with PLA connections in Hunan. The Chinese have denied the lab had anything to do with the Covid outbreak, but have limited access to it from investigators.

- Instability - Meanwhile the Pentagon's top general warned Wednesday that the Chinese military's stunning technological advances, signified by its recent globe-circling hypersonic missile test, left the world poised to enter an era of increased strategic instability. "We are witnessing one of the largest shifts in global geopolitical power that the world has witnessed," Joint Chiefs Chairman General Mark Milley told the Aspen Security Forum. "That means that we're going to have to put a premium, in my view, on maintaining