

INSIGHTS

SYNERGIA FOUNDATION

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THE ELECTION



THE WORLD IS WATCHING



EXPERT INSIGHTS



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Former Deputy National Security Advisor to President George W. Bush and director of the Geopolitics of Energy project at Harvard University's Kennedy School

AN INDIAN PERSPECTIVE



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EXPERT INSIGHTS

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'2020 is more predictable than 2016 election'

Mistakes from 2016 have been factored in, making predictions more accurate. All eyes are on the key state Florida as the U.S. inches towards a verdict

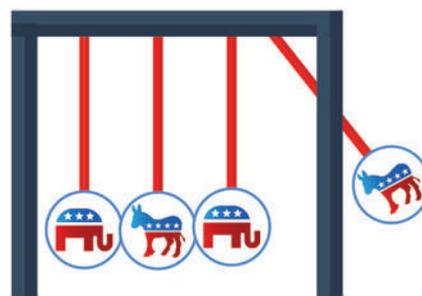


Meghan L. O'Sullivan

was the Deputy National Security Advisor on Iraq and Afghanistan in the George W. Bush administration. She is the Jeane Kirkpatrick Professor of the Practice of International Affairs at the Harvard Kennedy School and a board member of the Belfer Center for Science and International Affairs at Kennedy School. She is also a member of the board of directors of the Council on Foreign Relations, where she was previously an adjunct senior fellow, and the North American chair of the Trilateral Commission. This article is based on her views shared at the 90th Synergia Virtual forum.

On the eve of Election Day in the United States of America, I can say that the state of Florida will hold the key, like in the past, to who will win the presidential race. The results from the state would give categorical clarity and determine whether the election could end up contested and controversial, or have a clear road ahead.

At the moment, nationally, Joe Biden has been ahead by almost double digits in most polls, but it is a state-by-state vote in the Electoral College that decides the winner, and not a national vote. While looking at these polls, it still seems as if Mr. Biden could



get around 300 to 400 electoral votes, much more than the 270 he would need to claim this election.

Hence, the prospects for Mr. Biden are good, but there is still a path for a Donald Trump presidency via the swing states. If Mr. Biden wins Florida, then Mr. Trump has almost no way to the presidency. Now if Mr. Trump were to take Florida, the door remains slightly open for his return.

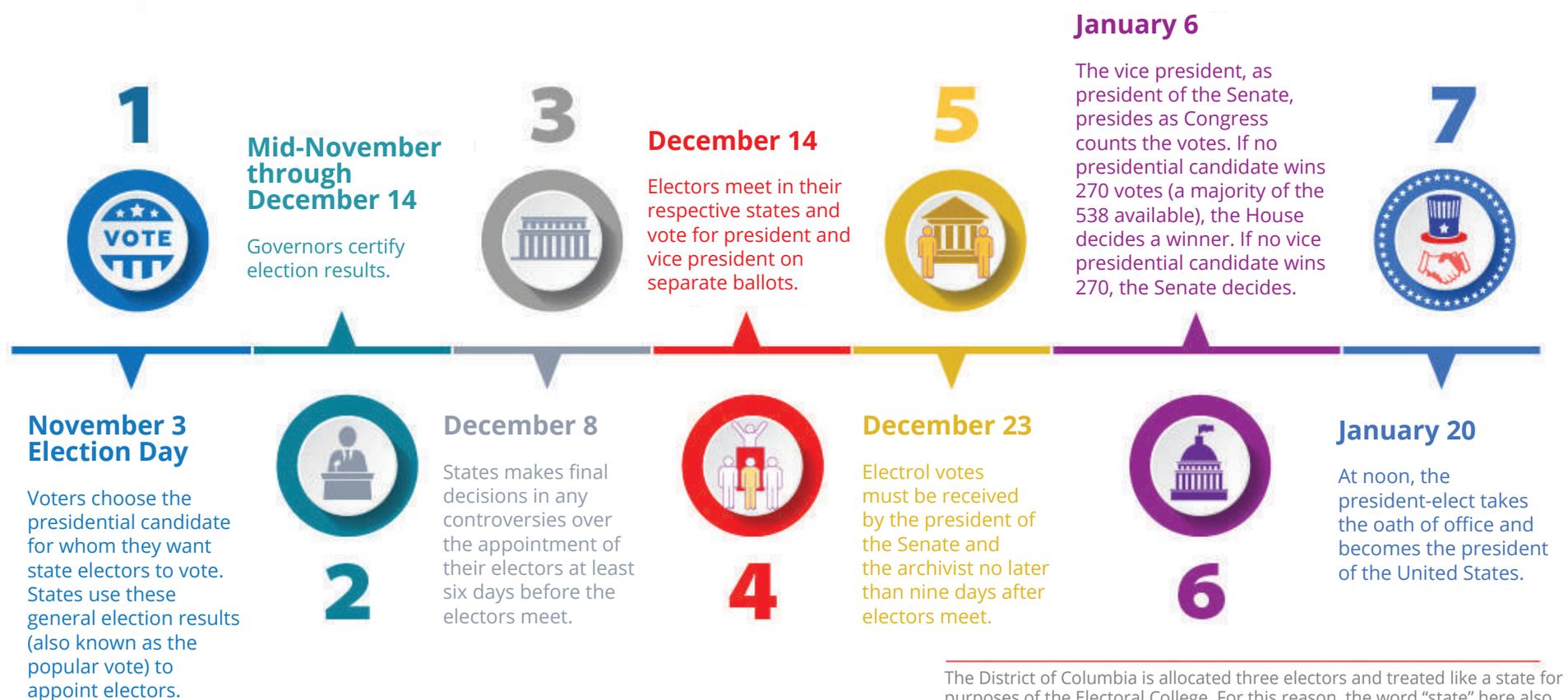
EARLY VOTER TURNOUT

Another reason the elections are more predictable this time, in comparison to 2016, is the large early voter turnout. There have been over 70 million Americans who have voted, either in person or by mail, which is half the number of the total citizens that voted in 2016.

Mr. Biden's growth track has been very stable and different compared to the trends of 2016. In the last elections, pollsters did not pay attention to the opinions of a group of people we now call 'white, non-college educated, Americans'. That had never been a race or demo-

2020-21 electoral timeline

(State Dept.)



Source: National Archives

The District of Columbia is allocated three electors and treated like a state for purposes of the Electoral College. For this reason, the word "state" here also refers to the District of Columbia and the word "governor" the District's mayor.

graphic detail indicative of how a person might vote. In 2016, that group was critical in voting for Mr. Trump. This time, there has been an effort to make sure the sampling is better.

There's also the fact that Mr. Trump is not a novelty anymore — he is someone the Americans now know well and can judge, whereas in 2016, Americans were dissatisfied and willing to take a risk on somebody new.

President Trump has, however, had a consistent approval rating, but that approval rating has never gone above 50 per cent of Americans.

CHANCE FOR CONTESTING

There are two potential scenarios in which the election outcome could be contested.

The first is one in line with Mr. Trump's allegations discrediting the practice of mail-in voting, even though there is not much data or support for that. There is a concern

that on election night, the people won't know the results and will only have the ballots that have been counted up to that point — mostly the votes of people who voted in person, which would be largely Republican.

It is conceivable that, just reporting those votes might make President Trump look like the winner. However, there will be millions of ballots, sent by mail, that haven't yet been counted. Media and opinion leaders need to reinforce the need to count all of the ballots.

Second, there is also the issue of invalid votes. New mail-in voters may not follow the instructions to the letter, which under many state laws will mean their ballots are invalidated. Even something as simple as not putting the ballot in the yellow envelope before they put it in the white envelope is unacceptable.

This could lead to people taking the vote tallies of different states to court, and we could see the tallies of

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important states tied up in courts for maybe days, weeks, potentially months, and then go all the way up to the Supreme Court.

If that's the case, we could have a contested election, and that could take some time to resolve. This would be unfortunate and chaotic.

However, all of this depends on Florida. If Mr. Biden wins Florida, none of these scenarios matter and the verdict would be clear.

CONGRESSIONAL ELECTIONS

While the presidential election is in full swing, there is also the Congressional election that raises the question of whether or not the Democrats are able to take the majority back in the Senate.

Earlier in the race, people thought it unlikely that Democrats would control the Senate, but now there's more of a view that it is likely. This will matter a great deal because if the Democrats have the Senate and the House, it is going to be a much smoother path for their legislative agenda. We could then see movement on aspects like climate action much more quickly and easily. If the Democrats have control of both branches of government, they could push forward structural changes, like passing a Voters' Rights Act or introducing Washington D.C. or Puerto Rico as a new state. There could also bring structural changes that will

shift the balance of power in institutions more in their favour than they have been traditionally.

BRIDGING THE DIVIDE

On the question of the growing cultural divide in the United States over the years, and whether Mr. Biden can bridge that, I feel that most Americans are looking for a way to heal. Mr. Biden is generally regarded sympathetically by many people, even if they don't support his policies. Therefore, personality-wise, he might be suited to do this, but that is not to diminish the fact that he is coming into office under a situation where there are angry, hurt Americans, with millions unemployed and more than a quarter of a million

people who have died under the coronavirus pandemic.

All of this is on top of a political reality that President Trump was able to capitalise on, which pre-existed his presidency. The coronavirus only accentuated the feeling that globalisation and technological advance had left big parts of this country behind. There is, therefore, a large sense of dissatisfaction in the U.S. that has not been adequately addressed since 2016, or even earlier.

Any administration, either Mr. Biden or Mr. Trump's, will need to address the roots of populism and political polarisation. While a Biden presidency would have a different tone and tenor, there is still hard work to be done to address some of the roots of the polarisation in the country.

DEMOCRACY'S MOMENT

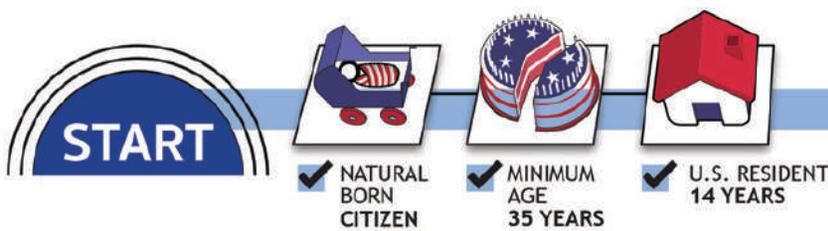
To the question on whether this election would be a watershed moment for restoring faith in democracy and in the eroding democratic process (vis-à-vis allegations of Russian interference in elections), I acknowledge that there is a new level of distrust among Americans about political institutions, but the focus is on the electoral system. If the elections go smoothly, it would be helpful in restoring confidence in American democracy. However, if it were to be contested, it could push people in a direction where they would lose confidence in the institutions in the U.S. Smooth transition of power and a clear electoral verdict would help negate domestic and global insecurities.



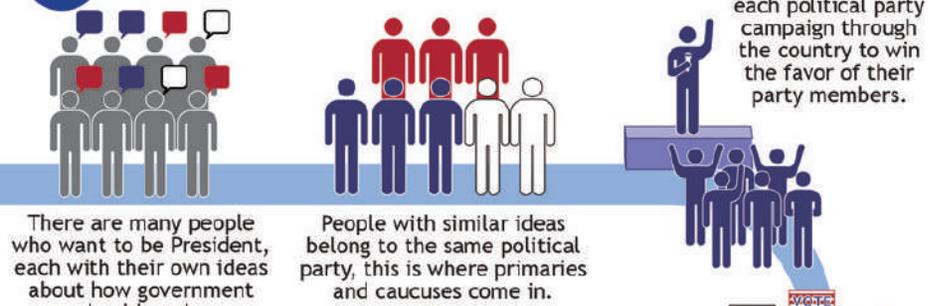
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HOW TO BECOME PRESIDENT OF THE UNITED STATES

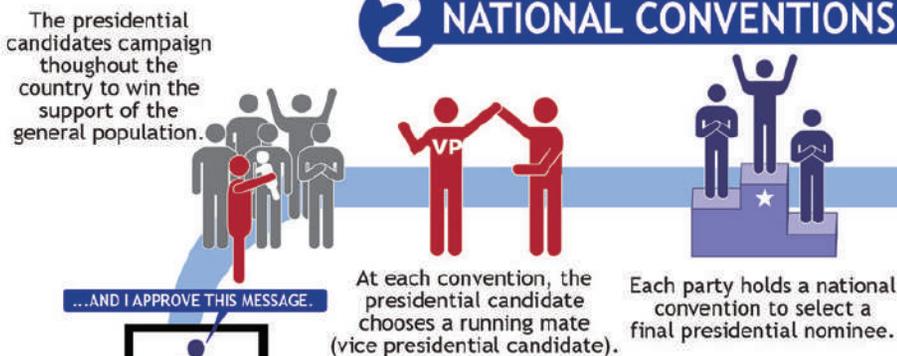
U.S. CONSTITUTION'S REQUIREMENTS FOR A PRESIDENTIAL CANDIDATE



1 PRIMARIES AND CAUCUSES



2 NATIONAL CONVENTIONS



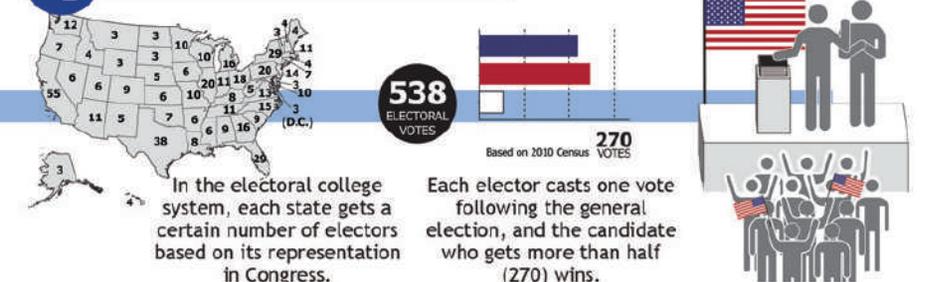
IN A PRIMARY IN A CAUCUS



3 GENERAL ELECTION



4 ELECTORAL COLLEGE



'Biden will aim for strategic ties'

'A Democrat administration is likely to work with allies, and not unilaterally, for a common approach in dealing with China'

U.S.'s issues with China have shifted ground dramatically in the last several years. There is a strong feeling that China needs to be confronted more than it has been in the past by the U.S. and its allies. An overwhelming majority of Americans, up to 70 per cent, feel negatively about China.

Hence, there could be similarities in the foreign policy concerning China, regardless of who is President. A decoupling of economies, especially in the technology sectors: supply chains moving back to the U.S.; restrictions on American investment in China; and Chinese investment in the U.S., may be expected.

However, Mr. Biden would probably look at working with allies to get a common approach towards China rather than taking a unilateral approach.

Mr. Biden's past record shows that he has been soft on China, but China's role in the world under Xi Jinping has changed so dramatically and if Mr. Biden becomes the President, he would have to take a much harder stand. His approach could be different to that of Mr. Trump, given his tendency towards multilateralism.

There is a possibility of more talks between countries that are close to the potential Biden presidency and a working together relationship.



(Meghan L. O'Sullivan also spoke on the implications on U.S. foreign policy post-elections, at the 90th Synergia Virtual forum)

Presidential candidate Joe Biden is known to be an internationalist — he has shown throughout his political career to be somebody who believes in the liberal international order. Having been around for in

the U.S. political scene more than 40 years, people have seen his commitment to multilateralism. This could be the tone and tenor of the U.S. outreach and foreign policy under a Biden administration.

ASIA AND RUSSIA

U.S.-India ties are going to remain important under either a Biden or a second Trump administration.

While it hasn't been largely discussed in the elections in the last few days, two Secretaries — Mike Pompeo and Mark T. Esper (Secretary of defense expert) — have been in South Asia, which is testimony to the importance of the ties. A Trump term would see the partnership become more transactional and economics-based, but a Biden term would turn the relationship into a more strategic partnership.

48%

said Mr Biden was the winner



41%

went for Mr Trump



A similar split to the national polling averages. Nearly 70% of people said the debate made them feel "annoyed".

[CBS News/YouGov]



Even with following a strict policy with China, there can be modes of cooperation, and climate is going to be on top of that agenda. This could lead to Beijing being interested in having a warmer relationship on the issue. There is an active effort by the Democrats to not paint China as a complete adversary, but more of a strategic competitor.

With Russia, on the other hand, Mr. Biden is known to be very tough and unsympathetic towards President Putin. This would also explain why Mr. Biden said he saw Russia as the pre-eminent threat, and not China.

EUROPE AND BIDEN

Coming to Europe, most are hoping and expecting, if there is a Biden presidency, that there could be a larger emphasis on the alliance that reaffirms NATO. This also extends to working together with the Europeans, particularly vis-a-vis China. The focus in the partnership

would be issues that are of a geo-economic nature, along with climate, being on top of the list. There would also be a lower resort to tariffs as a foreign policy measure under a Biden presidency.

MIDDLE EAST AND KABUL

Mr. Biden has a very clear relationship with the Middle East — as vice-president under the Obama administration, he was one of the naysayers on U.S. involvement or further involvement in the Middle East. He was against involvement in Syria; against the surge in Afghanistan; and was an architect of the withdrawal of the U.S. from Iraq in 2011.

Therefore, it is likely that Mr. Biden would be advocating for more of a distance from the Middle East, at least on the military front. There could be more activity diplomatically. Regarding Saudi Arabia, a Biden administration would take a much tougher stand. Mr. Biden has also stated that

if elected, he would rejoin JCPOA with Iran, but it could be harder than it seems, given that there is a lot of recalcitrance in Tehran.

Additionally, while President Trump has been clear on his interest to bring all American troops home from Afghanistan, there is a contrast with the Democrat party, where Mr. Biden had earlier expressed interest in maintaining a counter-terrorism fighting force in the region. It also depends on how the procedure would be executed, and if the talks go on after the Trump administration.

BIDEN AND ENERGY

The U.S., under both Presidents Obama and Trump, has played a rising role in global energy security. This top-dog approach has been a priority of the Trump administration and would continue to be a priority of a second Trump administration.

Under a Biden term, the energy security issue might

not get the same attention. There is a strong chance that the focus will shift away from oil, gas, and coal to renewable energy and decarbonising the economy. Mr. Biden has a \$2 trillion plan that discusses and addresses climate and decarbonisation, which would put the U.S. alongside Japan and South Korea, who have recently come out with plans of being net carbon-neutral by 2050. It would also lead the U.S. having a zero-emission power sector. The Democrat administration could lead to more laws and regulations on oil and gas, and would change our consumption patterns, yet not to a large extent.

Mr. Trump has also continuously tried to convince people that a Biden administration would ban fracking, whereas Mr. Biden has repeatedly stated that it is not his intention to do so. It's one of the significant stands Mr. Biden has taken against progressive pressures within the Democratic Party.



EXPERT QUESTION

Tobby Simon, Founder and President of Synergia Foundation, raised the following question at the panel

Q Tobby Simon: There will be a certain amount of residual polarisation in the society even assuming that there is a regime change in the US. How long would it take to mend these fissures. There will continue to exist unemployment, lack of social inclusion that can get people back on the street. Trump could still exploit this and create unrest.

A Meghan O' Sullivan: This polarisation

is going to be quickly addressed because it needs changes in an actual outcome. The people who are supporting Mr. Trump, have legitimate concerns and grievances, and I'm not talking about the things that get the most attention. I'm talking about economic situations, livelihoods, and access to public goods. Those things are hard to address and will need to be addressed in order for all Americans to feel like

they are part of the system and that they have voices in Washington and elsewhere advocating for them. Mr. Trump's ability to articulate the grievances of those people has been one of the reasons that he has been so popular among a certain segment of Americans. That won't change with an election. It will only change with policy measures, with hard work, and that will begin by addressing the coronavirus and the

economy. That is going to be the first job of any administration coming in in January, to get a handle on the virus. I know that India has been suffering in a very real way as well, so these comments are not exclusive to the United States. But the need to address the virus so that the economy can then be addressed, is going to be front and foremost, but obviously not something that's going to be easily or quickly done.

72%

of Indian-American voters who were polled are looking to vote for Biden

22%

will favour the incumbent President Donald Trump (YouGov).

India's interests at stake

From multilateral partnerships to energy security, India has a significant stake in the outcome of the 2020 U.S. elections



Ranjan Mathai

is a former Indian Foreign Secretary and High Commissioner to the United Kingdom. He shared his views on the U.S. presidential elections at the 90th Synergia Virtual forum. This article is based on his views.



As America heads into the Presidential elections, there appears to be a reasonable degree of bipartisan consensus on the value of India as a reliable global partner, said Ranjan Mathai. There are, however, certain foreign policy issues where the Biden and Trump camps seem to differ. This could have potential strategic implications for India.

TRIANGULAR TIES

Mr. Mathai recalled a recent statement by Mr. Biden, where he dubbed Russia as the 'biggest security threat' to the U.S., even while China was characterised as the 'biggest competitor'. This is in contrast to President Trump, whose policies have evolved, but now veer around to the

view that China is a clear and present danger- both externally and perhaps internally. This could reflect in their respective articulations on foreign policy as well.

If the incumbent President were to have his way, he might try to get the Russians on side to work with the US to China's disadvantage. In a certain sense, this would be like playing a 'Nixon in reverse' in strategy. As can be remembered, former U.S. President Richard Nixon and his Secretary of State Henry Kissinger had pursued a policy of 'triangular relations'

during the Cold War, after the Sino-Soviet split. They had opened up America's ties with China, in order to pressurise the Soviet Union into conceding on crucial areas of foreign policy. The Trump administration might be looking to copy this playbook, with China and Russia reversing their roles.

Biden on the other hand, seems to want to deal with Russia as its principal antagonist. This would give China greater latitude to pursue its policies in Asia. Any potential decline in the already tense U.S.-Russia relation-

ship is likely to be a problem for India, which has consistently sought to balance its interests with these states. If a Biden government were to act tough on Russia, New Delhi would not want its own bilateral ties with Moscow, which are vital, to upset its relations with the U.S.

Meghan O'Sullivan agreed that a Biden administration may indeed harden its stand on Russia. However, it would be unlikely to affect Washington's relationship with India in a significant way.

ENERGY SECURITY / FUTURISTIC POLICIES

The outcome of the U.S. elections is being watched keenly in India, for its potential impact on climate and energy policies. Mr. Mathai said the Trump administration had increased oil and gas production in the US, making it self-sufficient, and this has enhanced India's energy security by increasing our sources of supply for oil and gas and keeping prices moderate. Biden has said that US will transition away from oil. Many would say this fits well with a strategy to tackle climate change by giving a thrust to renewable energy. India has also aggres-



sively sought to establish its footprint in the area of renewable energy. Along with France, New Delhi has taken the lead in setting up the International Solar Alliance of 121 countries. Together, they have sought to step up the growth of solar energy worldwide and enhance its efficiency.

It is increasingly becoming clear, however, that the push for renewable energies will create dependencies on critical minerals including rare earths. Today that means dependence on China which has a dominant position in the mining and processing of these minerals. Trump has demonstrated determination to ensure that US has domestic capabilities to mine, process and refine the minerals for futuristic energy- which could be beneficial for global availability of these elements for the future. Biden has been muted on this issue and his support for the mining industry is uncertain.

Ms. O'Sullivan noted that the Biden campaign has focused more on reducing carbon footprints and ensuring net-zero emissions under the framework of the Green New Deal. He has also clarified his stand on fracking, an issue which has caused a split between the Democrats. She also recalled that Trump had worked with Russia and Saudi Arabia to shore up oil prices when market forces were in fact driving them down.

LEVERAGING U.S. PARTNERSHIP

There are several critical areas where India hopes to leverage its partnership with the U.S., said Mr. Mathai. For one, it is likely to continue pushing for a permanent seat in the UN Security Council. American support will be indispensable to this process.

As the recent LAC standoff with China continues, India will weigh Washington's role as a security partner. To this, Ms. O'Sullivan hastened to point out that there is a groundswell of American support for India on this issue. Irrespective of who comes to power, the U.S. administration is likely to characterise China's hostilities with its neighbours as unacceptable.

Mr. Mathai observed that New Delhi will also have a stake in the views of the next US administration on the

future of the G-7, as well as the international financial institutions. While Biden has spoken of strengthening US alliances, there are speculations that the U.S., under Mr. Trump, will expand the G-7, with India being included as a key member. He has already announced a decision to invite India, Russia, Australia, and South Korea to the G-7 summit, which has been postponed due to the COVID-19 pandemic. Against this backdrop, the U.S. elections can have a significant bearing on how the G-7 evolves and whether it would counter China.

On the counter-terrorism front, India continues to value the U.S. as an important ally. Will a possible Biden administration be firm on countering terrorism, of which Pakistan is the main breeding ground? Whether US will be tough on Pakistan, and the relationships the Pentagon and the National

Security Council build with Pakistan, after the impending withdrawal from Afghanistan, will be watched closely in New Delhi. India also recognises that the outcome of the elections will be instrumental in shaping the future of the Afghanistan Peace Deal which could have major security implications for India.

SIMMERING CONCERNS

India is well aware that Taiwan has emerged as a potential flashpoint. The issue is- how would Biden deal with a possible crisis in the Taiwan Straits?

Mr Mathai noted the assessment on the Middle East and Biden's positions on Saudi Arabia; he wondered how Biden would deal with Israeli opposition to the JCPOA. Dr O Sullivan recalled the difficulties in rejoining JCPOA, in view of the many sunset clauses requiring renewal, and Tehran's forthcoming elections, which would slow the path to any negotiations.

Finally, at a time when public trust in democratic institutions has been eroded, this election is exceedingly crucial. Restoring faith in democracy is important for countries all over the world, including India. Mr. Mathai concluded by expressing his hope that the outcome of the 2020 elections will serve the best interests of not just Americans, but democracies across the world.



All is not well in the digital space

'There's been a 715 per cent increase in ransomware attacks in 2020. Conversation and action on cyber resilience is crucial'




Melissa Hathaway is a leading expert in cyberspace policy and cybersecurity. She served under two U.S. presidential administrations from 2007 to 2009, which included working at the White House, spearheading the Cyberspace Policy Review for President Barack Obama after leading the Comprehensive National Cybersecurity Initiative (CNCI) for President George W. Bush. She is President of Hathaway Global Strategies LLC.

Melissa Hathaway's presentation at the Synergia Virtual Forum titled Reimaging and Understanding Digital

Threats to Critical Infrastructure centered on the need for cyber resilience. She spoke of the momentous occasion of October 29, 1969, when the very first transmission of the Internet took place between two universities. Back then, no one imagined it would become the backbone of the global economy. On March 11 this year, when the World Health Organisation declared COVID-19 a pandemic, and work from home was enforced, there was a 1,200 per cent increase in the use of collaborative tools like Zoom, which allowed us to remain connected, enabled the exchange of ideas, and kept commerce going.

The pandemic has showed us that the digital transformation of businesses is not a choice anymore; it

is an imperative, because of which there are new business models emerging and changes in consumer behaviour. Countries and companies are racing towards this digital opportunity. South Korea embraced this and enabled contactless industries. Other countries are using the digital space to overhaul their industries to come out of the pandemic better positioned.

But when one takes a closer look, not all is well with the digital revolution. There has been significant destruction in 2020 with a 715 per cent increase in ransomware attacks against corporations and hospitals. There has also been a significant uptake in a distributed denial of service attacks offline when one needs to be online. The disruptive and destructive activities are increasing at an exponential pace and there has been an increased stealing of sensitive data and intellectual property in the United States. In Germany, there has been a compromise of medical research for vaccines. Influence campaigns are leading to the erosion of confidence in the democrat-

ic processes through social media platforms.

There is an overall volume and velocity of things that are happening against infrastructure. It's only 30 years ago that people became critically dependent upon the Internet and the ICT (Information and Communication Technologies), but unfortunately, they've been delivered with the principle of being delivered fast and fixing problems later. With our critical infrastructures and services, one can no longer allow for the fast-and-fix-it-later norm as people connect 127 devices to the Internet every second.

Looking at two different companies - Microsoft and Oracle - and their patch cadence for 2020 highlights an important phenomenon. Patch Tuesday is an unofficial term used to refer to when Microsoft, Adobe, Oracle and others regularly release software patches for their software products. After this, its Vulnerable Wednesday, as most attacks on new software happen the very next day after the analysis of the patch, which helps hackers to take advantage of the previously undisclosed vulnerability.

There have been over 1,000 patches provided by Microsoft, and they're averaging 125 per month, of



The attacks have gone up in the last seven months by nearly

700%



which a significant proportion are critical, where one is likely to lose intellectual property or sensitive data. At Oracle, after their Patch Tuesday, had over 400 patches, of which 270 were critical. This becomes even more of a problem as these are the two main software packages that a lot of the industry around the world uses.

It is most likely that an attacker gains access through a non-authenticated transaction and gets into the enterprise. It only takes seconds to gain access, which is what one should be worried about. After that, it would take the company 30 to 90 days to patch the system, and it could take as long as seven months to find out that someone gained access into the enterprise. When one gains access and actually steals information or intellectual property, it could take the company almost a full year to remove the hack-

er from the overall network and architecture.

WORLDWIDE RISK

The conversation then has to be around what is at risk in our countries and our companies and the need for richer conversation. Financial institutions are losing money and they are experiencing malicious campaigns from North Korea, the Russian mafia, and others. There is the loss of sensitive information, intellectual property, personal health, and personal identifiable information being illegally copied and then sold in the underground economy on the dark web. There are also real assets being destroyed through malicious softwares that are erasing the operating systems and rendering the overall capital equipment useless. This is what's at risk and these are the things that we are currently losing. The

attacks have gone up in the last seven months by nearly 700 per cent.

Ransomware comes in through an unpatched system, and maps the entire enterprise and makes an illegally copy of the information. In the second phase, it goes in and starts to ransom or encrypt the different systems and data sets. In the third phase, it demands a ransom. Many times, the hackers actually expose the data. We are also seeing ransomware affect real life. A critical vulnerability was exploited just a few weeks ago in Germany, which brought 30 internal servers offline for an hour for a major hospital, and a critical patient had to be diverted to another hospital about 30 miles away, who ended up dying. Now the ransomware is not just a significant business disruption, it's now causing loss of life. There is an urgent need to address it responsibly at a

national level.

There have also been telecom, cloud, and infrastructure outages at scale. IBM's cloud had a global outage. T-Mobile was down for seven hours in the U.S.. Akamai could not service its infrastructure for seven hours. Virgin Media was down in London for half a day. As we are more and more dependent upon the Internet, as we work and learn from home, there is the need to think about how to build resilience into these critical infrastructures. Enterprise risk management at the corporate level needs to be thinking digital and how to move forward with it. There is the need to think more deeply about what's at risk at the national level and at the corporate level.

MANAGING CYBER RISK

There are a number of frameworks that I have built

which are publicly available for thinking about digital resilience and managing cyber risk, ranging from the Cyber Readiness Index to Managing National Cyber Risks that was recently published. But there is also the need to strategically assess what are at risk —what are the digital dependencies of a nation? The key companies, the infrastructures, the assets, and services if harmed would cause grave national consequences. One can look at it the same way for key services, networks and infrastructures of a corporation. Moving forward, we need to engage in a consultation process. The government needs to listen to industry, while the industry needs to work with the government.

A stop-light protocol for speed of response and information regime needs to be implemented, which is in use in the financial services sector. Red means that there's an imminent harm to the enterprise, because particular malicious software was spotted, or a particular vulnerability is being exploited. Amber means something needs attention, while green is just an alert. The financial services sector has perfected this around the world and managed to help prepare their overall digital resilience and shore up their defen-

There have been over 1,000 patches provided by Microsoft, and they're averaging 125 per month, of which a significant proportion are critical, where one is likely to lose intellectual property or sensitive data

sive posture in order to enable the free flow of capital across borders and limit the amount of damage to banks and financial systems.

Creativity in alternatives to protect from broadband is needed. Such as from space, where there are low satellites in orbit, through which there is a decent bandwidth available from maybe SpaceX's Starlink or Amazon's Kuiper. Once the web gets more robust through the Telesat, one can look at how one gets Internet that is reliable.

There is also the need to be transparent in the decision making of how one is promoting different technologies and what technologies are being blocked. This transparency needs to also be about how social media platforms are using citizen's data and selling the data, etc.

The governments need to be held responsible for how they are using data, along with holding companies responsible for how they are using data.

Raising awareness and developing skills among the youth and the elderly is of import as well, as the world is starting to embrace digital transformation. There needs to be a broad-based awareness campaign for what one needs to do in order to drive resilience and reduce the risk in core critical infrastructures. After having accelerated at an exponential pace over the last 7 to 8 months, we do have infrastructures at risk, and there is the need to start questioning whether things are resilient enough and how to work together to advance the ecosystem together.

RESPONSIBLE STATE BEHAVIOUR

On whether the bigger hurdle is government-to-government communication when it comes to cyber security issues and transparency between nations, I would say that each country has not yet defined or embraced where they want to be in 5 to 10 years in terms of digital dependencies. Everyone is taking different paths. In the U.S., security and resil-

ience in the technology supply chain is a concern, along with intellectual property theft, whereas in Europe, they are more worried about the crime that's happening against the infrastructures and the proliferation of the ransomware at the national and international level.

There is still no broad-based agreement on what is responsible state behaviour in cyberspace. The United States and the Western democracies, along with India and others, are working together on a number of initiatives, but the decisions still haven't got to an international level at the United Nations to get a broad agreement on what one should and shouldn't do in cyberspace.

This leads to some countries working with their intelligence services to advance their own country's interests through cyberattacks, while others are using their intelligence or military to break into the banks to steal money in order to get around sanctions. Then there are other activities that are using the Internet to hunt down dissidents for political stability.

Until we can get to a broader understanding of what is necessary to keep the economy stable, there would not be a consensus on responsible state behaviour on other means.

ACKNOWLEDGEMENT

RESPONSE FROM PARTICIPANTS

L Krishnan
Managing Director, TaeguTec
Ms Hathaway's presentation was excellent, giving an overview of cybersecurity challenges. Although we are in the manufacturing industry, all of it applies to us too! Thanks for organising.

Dr Prahlada Ramarao
Padma Shri-2015
Pro-Chancellor S-VYASA, Director, Centre for Energy Research
Former Distinguished Scientist & CC R&D DRDO

Former Vice-Chancellor, DIAT(DU), Pune. DRDO, Min of Defence, Adjunct Faculty, Dept of Management IISc and NIAS, Bengaluru. Member, IISc Court, and Board of Governors IITG
It is a very important and future-oriented topic and the speaker gave a well-studied and consolidated presentation.

She also covered the upcoming satellite-based broadband internet system which will change the way we

need to protect digital infrastructure. There were also discussions on identifying the country-specific critical infrastructure, assess them, and rate them priority-wise.

Next action would be to evolve the strategies and actions. Dedicated and trained human resource will need to be deployed to safeguard the critical infrastructure and manage preventive action plans to be implemented.

The risk is too high and serious to let it happen even by

oversight.

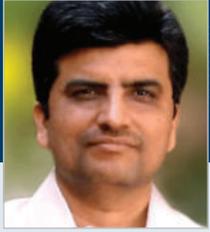
I hope that someone will note the action points that emerged based on the presentation, discussions, and post-presentation analysis, and move them forward. Kudos to Synergia.

C S Rao
Chairman and Co-Founder, QuadGen Wireless Solutions Pvt Ltd
As always, there were quality speakers and the subjects chosen were apt and have

significant relevance. It made a good impact on audiences like me. Keep it up. Veer-araghavan's questions are extremely good.

Hats off to Toby and the team for the energy and efforts.

S Selvakumar
IAS, Secretary to the Chief Minister, GoK
I enjoyed the Synergia Forum talk. Speakers were brief and to the point. It was informative and analytical. Keep it up.

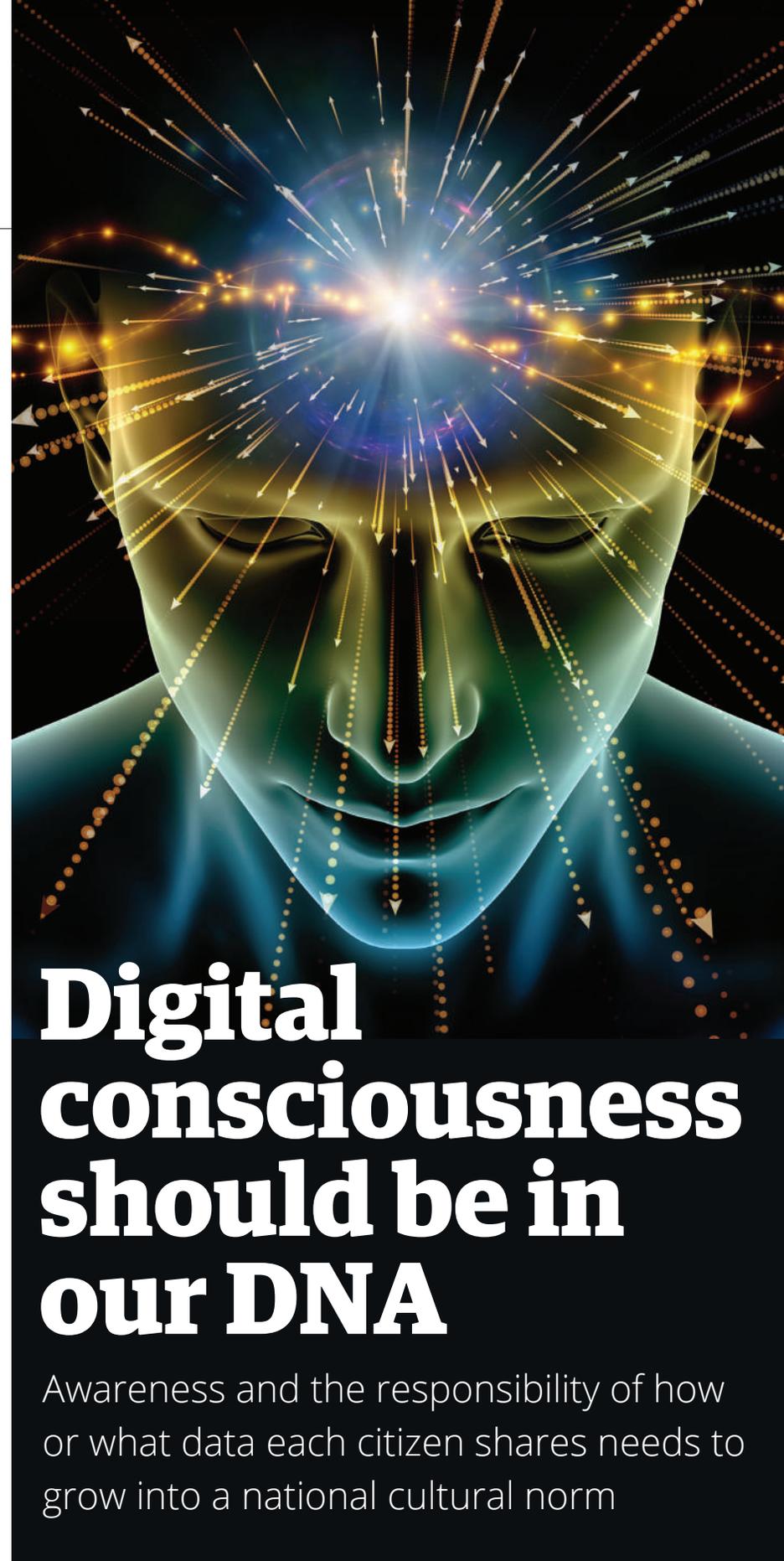
**Ajay Seth**

is a senior IAS officer and Managing Director of The Bangalore Metro Rail Corporation. He shared his views and posed questions at The 89th Synergia Virtual forum. This article is based on his views shared at the forum

From a physically interconnected world, we are now moving towards a very strongly internet-connected world, which has been accelerated by the pandemic, said Ajay Seth, Managing Director of Bengaluru Metro Rail Corporation Limited, during the webinar Reimaging and Understanding Digital Threats to Critical Infrastructure organised by Synergia Foundation. One of the challenges in a country like India is that there is limited awareness and we have to design a public policy to safeguard against cyber attacks for people who are not even aware of the threat.

Second, regarding balancing attempts by the government to control the digital world through privacy laws and the role of social media companies, the latter are expanding and becoming bigger, which naturally drives their revenue. However, since their policies are complicated and lengthy, such as the Terms and Conditions, people end up accepting it based on trust. Could it be possible to draw a balance in terms of privacy policies?

Third, hitherto the threat was more physical. Now, if one person wants to attack another, it can be done digi-



Digital consciousness should be in our DNA

Awareness and the responsibility of how or what data each citizen shares needs to grow into a national cultural norm

tally. This could also happen at the nation level, where there may be a wish to wreck the country which does not share the same ideology. They could start by disrupting its financial system and that could be catastrophic. What are the safeguards that can be put in place against this?

Considering Meslissa Hathaway's concerns over more and more cyber attacks on hospitals infrastructures, where she suggested hospitals could be helped to patch their systems, there needs to be some type of an emergency task force to help with restoring critical industries, beyond a computer emer-

gency response team.

The privacy laws around the world are being used to control, and control what's out of control, which is the use of the data, the collection of the data, and the storing of the data. There are many questions to be asked: how long do you keep the data; how do you retire the data; and who owns the data. Does the government own the data because it is something like tax records, or does Facebook own the data because one is using its platform for free? There needs to be a better conversation within our society about data and the controls around the data, and the ownership, col-

lection, and use of the data.

There then needs to be a harmonisation of those privacy laws across borders, because different countries have different ways of dealing with things. This could reduce the interoperability of countries and companies, which could reduce the data flows across borders.

There is also the need to hold social media platforms accountable, and they need to be transparent about how they are using data. It needs to be approached holistically by working together across government borders on how to address this. They cannot be renegade players in the market who wield a fair amount of power.

RAISING SKILL SET

The final area of the challenges is the literacy or awareness of the threat. Like the Cybersecurity Awareness Month (October), there should be larger conversations of how to mainstream the aspects of one's responsibility as a digital citizen. Irresponsibility with these technologies and the responsibility of how one share's data or what one should share, needs to be made into a cultural norm. This can be done through many different ways, like storybooks, comics, and such, that can get mainstreamed through education. There are a number of techniques and special academies to teach the skill set that we need that is emerging in different countries. There are different consumption models, and there is the need to actually start to take the different directions of how everybody learns and consumes information, and to bring about information.

The Ministry of Electronics and Information Technology (MeITY) told the Parliament that Indian citizens, commercial and legal entities faced almost 7 lakh cyber attacks till August this year.

“On an average, according to industry report, data breaches cost Indian firms an average of Rs 14 crore.”

[Raman Jit Singh Chima, Global cybersecurity lead and Asia Pacific Policy Director at Access Now to Hindustan Times]

Banks in India spend 15-20 per cent of their budget on IT security, while a hospital may only spend 5 per cent or even lesser.

[Viveka Roychowdhury, Shomiron Dasgupta, CEO, DNIF to ExpressHealthcare]



THE DATA GENIE

T.M. Veeraraghav, Consulting Editor, Synergia Foundation, wondered whether the genie is already out of the bottle, given the fact that countries have already collected a massive amount of biometric data. I can say the question going forward is whether we wish to shape our society and continue to allow social media platforms to influence and shape how we think, said Ms. Melissa Hathaway. One needs to question where we are headed and what we want, and it comes down to the choice of how we use these platforms. If people were made aware that they were being manipulated through different platforms, or their information was being misused, the state then begins to get involved. However, awareness needs to be raised and one also has to think about what happens when an authoritarian government is using data to

profile citizens, to keep them from participating in society or to quell their voice. That is alarming, and there are a number of authoritarian governments who are also using this data to hunt, track, and silence citizens.

Towards the end of the discussion, Mr. Ajay Seth pointed out that the basic role of a state is to protect its citizens' life and property against any aggression. However, now the case is such that there is aggression even through the cyber world, with the state taking a more proactive role now, where success depends as much on the state as the action of the individuals. The issue is about the lack of the broader awareness of what's going on, said Ms. Melissa, with people still trying to dismiss the action as a technology issue versus something that affects all of us every day. It then needs to be part of the culture and society versus just being a technology issue.

EXPERT QUESTION

S. Raghotham,
Assistant Editor,
Deccan Herald



Q S. Raghotham: We have grown up with the Internet thinking that it can be only useful as a global system. Is it time to consider the possibility that a splintered Internet, where China can have its own and Russia its own, is a better and more secure way to go. Is there thinking on this in the U.S. and other democracies?

A Melissa Hathaway: A number of papers have been written about the fracturing of the Internet. We are already starting to see different regional models emerge. China has really limited western technologies and has strong con-

tent filtering on its Internet. It is also accelerating in different regions. I think the most important thing though, that we need to recognise, is if we have multiple different Internet models of how we access and use the technology, we still have to recognise that the global economy is running on the backbone of this Internet then. So the flow of goods and data and services and capital across borders is on that backbone. So if it starts to become less interoperable, you're going to start to see a regionalisation of the economic aspects that we've really grown dependent on in the last 30 years.

Working together to thwart threat

Mutual learning between public and private enterprises is the way forward in mitigating cyber risks



Sanjay Prasad

Chief Information Officer, Calcutta Electric Supply Corporation, at RP-Sanjiv Goenka Group, in an interaction with Melissa Hathaway during the webinar held by Synergia Virtual Forum.

India has an IT Act, and under this, the National Critical Information Infrastructure Protection Centre (NCIIPC) looks at critical information infrastructure deficiency in sectors and agencies that could impact the national economy, public health, or safety, said Mr Sanjay Prasad.

Within its ambit are six sectors covering power and energy, banking and financial services, telecom, transport, government and strategic public enterprises. This centre, in coordination with the cyber emergency response unit of the government, has developed a mechanism over the last few years to work with both the public and private sector to share risks that might debilitate such sectors. For

example, the western shores around Mumbai is quite a sensitive coastline — there are oil refineries, an atomic research facility and power utilities, all located within kilometres of each other, along with one of the most resourceful municipal corporations.

There have been efforts to workout a balance between intelligence that could be shared between these agencies and what cannot be shared. It is indeed a challenge and the question is, what sort of cooperation and hindrances come into play to enable such a public-private partnership.

SHARING AND LEARNING

The information sharing that needs to happen across industries could be done in a couple of different models, said Ms Me-

lissa Hathaway. There is the traditional model of the government sharing information with the key critical sectors. However, there's also a different model that is emerging in some areas where, like the city of Boston, a learning circle among the different entities that are all operating in that area of the key corporations get together at least monthly to share what they're seeing happening against their enterprises, creating a place of mutual learning. They run tabletop crisis exercises together to learn from each other, of how they would actually respond if there were a problem in Boston or if there was a problem in any of those industries.

It also occurs in other cities in the U.S. like Houston, which is an oil and gas area but also gets hit by a lot of hur-

ricanes. Here they end up focusing on natural disasters in addition to digital issues.

There is another activity that happens in the U.S. that is focused on the financial services industry, where they sit in a private-public partnership where the law enforcement is, basically an operations floor, along with key companies, and they share information about what's happening to banking and finance, and they work together to identify the threat and then move on to quickly persecuting or thwarting the threat from an operational perspective.

That alliance has been effective and is being modelled again on the high-tech West Coast in California. Here, there is a high degree of intellectual property theft. When one can get together on the ground and work together, bringing the best of the authorities from the government with the insights and the operational excellence that businesses have, there is then a real functioning private-public partnership created. Otherwise, the sharing of information doesn't necessarily lead to actionable operations and they then become less effective.





India has seen a 37 per cent increase in cyberattacks in the first quarter (Q1) of 2020, as compared to the fourth quarter (Q4) of last year, a new report revealed on Saturday.

[The Kaspersky Security Network Report]



The data also shows that India now ranks 27th globally in the number of web-threats detected by the company in Q1 2020.

[The Kaspersky Security Network Report]



The number of local threats in Q1 2020 in India (52,820,874) shows how frequently users are attacked by malware spread via removable USB drives, CDs and DVDs, and other "offline" methods.

[The Kaspersky Security Network Report]



AI-AUTOMATED SECURITY

Talking of corporations, Mr Sanjay mentioned of one positive change that has been seen in the recent past where cyber security is now seen as part of the top 10 strategic or operational risks that most boardrooms discuss. As was mentioned earlier by Ms Melissa, over 7X numbers of ransomware attacks, and the world has seen almost a 200 per cent use of virtual collaboration tools in recent times. This also meant that both capability and capacity of each organisational setup to handle these attacks at a premium.

Conversely, AI-assisted automation brings about a lot of interventions in this regard, opined Mr Sanjay. But, what have been the pluses so far of such AI-assisted automation to eliminate the false positives and to filter the noise from actual incidents of compromised data

There have been efforts to workout a balance between intelligence that could be shared between these agencies and what cannot be shared

is to be pondered according to him.

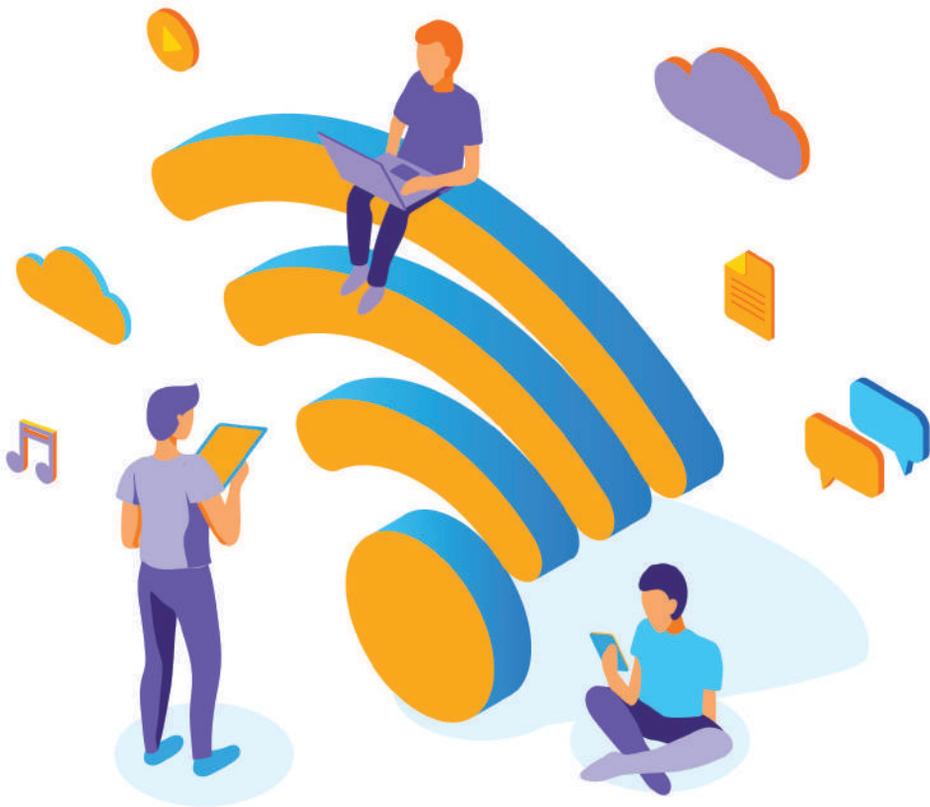
There is a great opportunity for automated information sharing, machine learning, and machine-to-machine interaction, to broaden the defence posture, said Ms. Melissa. In the consolidation of the security marketplace, there are just too many players. As one starts to get more automated tools out there, they will aggregate to the cloud or the managed security service providers, which could lead to stronger platforms and a stronger set of security principles. Digital risks translate into operational, financial,

and legal risks.

When thinking about enterprise risk broadly, it should be looked into how does one get that enterprise risk management as one continues to embrace the digital transformation. All the business units need to be working together. To the extent that one can limit this way of thinking that it's just a problem and not a broader issue, it should be embraced at a corporate level, at a national level, and it needs to transcend in society as we are all digitised at this point. It's the question of to what extent are we dependent upon it.

HAVES AND HAVE-NOTS

Mr. Sanjay added that the pandemic has brought in a new set of digital haves and have-nots, especially in India, for example, a good percentage of students enrolling in premier institutes have had to go back to their Tier 2 and 3 cities.



There are some areas in America where people have to drive 40 or 50 miles to sit in a parking lot in order to get wireless technology for their kids to go to school, which is unacceptable

Is there a need to have a universal bandwidth obligation or equivalent compared to what we are used to, as telecom's universal service obligation that will bring some parity? He felt it may not be as apparent in the United States, but even then there would be some element of disparity that needs to be handled so that citizens are on an equal footing. Ad-

ditionally, do corporates or citizens get to see a sort of tax exemption whenever one needs to infuse investment in secure infrastructure for people that work from home? Should there be public policy changes in this direction?

In the U.S., they are thinking more creatively on the issue of bandwidth and citizen Internet services, said Ms. Melissa. The U.S. too has haves and have-nots especially if one lives in a rural area. Moreover, in the U.S., telecommunications is costly. When the Internet gets to be unreliable and unaffordable, it becomes a public policy issue. If one can get reliable and affordable delivery of bandwidth or telecommunications from space, that would make it disruptive to the normal internet service providers, but it should also

be encouraged at this point since we need reliable and affordable Internet.

The U.S. has some corporations who are paying for the employees to get better and higher Internet bandwidth to their home, which is quite expensive, or delivering some of that infrastructure to them, but that's not consistent, especially if one thinks that we shall be working from home for better part of another couple of years. Some companies have said that they are going to permanently allow for work from home because it has proven to be cost effective.

Nationally, though, there isn't a conversation in the United States about reliable and affordable telecom, yet that is important. All countries should have reliable, affordable telecom, not just in the big cities, but also in the Tier 2 or 3 cities and in the rural areas. There are some areas in America where people have to drive 40 or 50 miles to sit in a parking lot in order to get wireless technology for their kids to go to school, which is unacceptable. How could the U.S. call itself a First World Country and not have reliable, affordable Internet for all citizens?



EXPERT QUESTION

T.M. Veeraraghav, Consulting Editor, Synergia Foundation

Q T.M. Veeraraghav: How safe are the U.S. elections? Is there a need to treat democracy as a critical infrastructure around the world and make sure that social algorithms don't dictate political choices and people's choices?

A Melissa Hathaway: There is a lot of activity going on in the U.S. to ensure the integrity of the electoral process and that votes gets counted —state and local officials are working on it along with cyber command. There is a lot of activity to ensure that that there is election integrity. The 'Social Dilemma' of how platforms like Twitter and Facebook are being used to manipulate the hearts

and minds of citizens has to be addressed through a national narrative and awareness, making sure that these platforms are not manipulated through bots and algorithms. It has to be addressed with the narrative of what's happening, and a counter narrative of why democracies are strong because they allow for freedom of speech and freedom of assembly. It has to be made certain that technology is not manipulated by other governments in order to influence or change the outcomes of the electoral or democratic processes. It isn't seen as algorithmic warfare in the U.S. as it's being observed on social media platforms, but it isn't being discussed in that way.

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