

China's Digital Expansion and India¹

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Summary

In reviewing a digital dimension of President Xi Jinping's Belt and Road Initiative, this paper examines the antecedents, structure and impact of China's Digital Silk Road. The focus of the paper is on the external dimensions of China's DSR and will assess the geopolitical consequences of the DSR with special reference to India. It will also reflect on the paradox of India's strong critique of the BRI and its unintended integration into DSR.

Introduction

China's ambitious Belt and Road Initiative continues to draw worldwide attention from policy makers, business communities and academic researchers. It has acquired unprecedented salience as the personal initiative of President Xi Jinping. The apparatus of the Chinese Communist Party has injected the BRI with great political, economic and strategic significance. Sceptics might point to the fact that Xi's recent predecessors too had come up with their own pet political projects and initiatives that did not survive their tenure at the top. President Jiang Zemin's 'Three Represents' and Hu Jintao's 'Harmonious Society' readily come to mind. While Xi's 'China Dream' might be comparable to those big ideas of his predecessors, the BRI must be seen not just as a personal commitment of the leader, but the expression of the unfolding transformations in the Chinese economy. While the BRI may not be tied to the fate of Xi Jinping, but the trajectory of the Chinese capitalism in the coming decades.

The BRI, as an international initiative, was preceded by massive Chinese investments in internal connectivity and the modernisation of China's domestic infrastructure relating to transport, communication and energy. President Jiang's 'West Region Development Strategy' unveiled at the end of 1990s emphasized the importance of connecting China's underdeveloped far western regions to the economic heartland in the east. As China began to connect these regions, it also chose to extend that infrastructure to the neighbouring regions in South, Southwestern, Central and inner Asian regions. The construction and connection of large number of ports in the eastern seaboard and their growing weight in the global maritime connectivity, China developed the capability to develop port and related infrastructure elsewhere in the world. The late 1990s also saw China actively encourage export of capital under the 'out' strategy. Much of the port construction in other countries as well as the development of infrastructure in third countries preceded Xi's 2013 initiative. The

¹ This paper was presented at the Symposium on "China's Digital Silk Road: Implications for India", organized by Institute of Chinese Studies, Konrad Adenauer Stiftung, India International Centre and Institute of South Asian Studies, National University of Singapore, held at the India International Centre in Delhi on 25 September 2019. This is a working paper and is not to be quoted.

Gwadar port and the energy pipelines from Central Asia, the China-Pakistan Economic Corridor, the Hambantota port in Sri Lanka and the China-Burma Irrawaddy Corridor all date well before announcement of the BRI.

Like the BRI, the Digital Silk Road too must be viewed as the external reflection of the digitalisation of Chinese economy, the rise of major technology companies like Huawei, Alibaba and Tencent among others, a rapidly developing economy, the deep penetration of the internet and the massive investments in the research and development relating to new technologies such as artificial intelligence, big data analytics, robotics, quantum computing, nano sciences, new materials and space technology. The impact of the DSR is likely to be as consequential as that of BRI's overland industrial belt and the maritime silk road. Other papers in this symposium have looked at the domestic factors that led to China's digital rise. This paper focuses on the external aspects. The following sections look at the historic antecedents to the DSR, the scope and structure of the initiative, and the DSR's geopolitical implications for India.

Connectivity, Technology and Power

As the CCP and Chinese state agencies whip up the propaganda on the BRI, there is a growing temptation in the analytical community to treat it as something historically unique and hugely transformative.² To be sure, the scale of the BRI is indeed unprecedented it, thanks to the kind of resources, financial and political, that the Chinese state can bring to bear. Its future and long term consequences will be necessarily dependent on the sustainability of Chinese capitalism and its ability to reconcile the deepening contradictions with other economic powers in the international system. It is important to note at this stage that the BRI has many antecedents, most notably from the Western experience in the last few centuries. The rise of Europe and the birth of modern capitalism saw the colonial powers embark on maritime connectivity to areas in the non-Western world that would provide raw material as well as markets for industrial goods. Many port cities in the east that we are familiar with today-- from Aden to Hong Kong and Bombay to Singapore and Shanghai—were the products of European expansion. The colonial era also saw the development of massive infrastructure projects like the Suez Canal and the Panama Canal that transformed traditional geography. And as the European powers gained large territories, developing connectivity and infrastructure within them were necessary for administrative, security and economic reasons. In large sized entities like the United States and Russia, the 19th century saw the dramatic internal expansion of rail and road connectivity as the states extended their territorial control. In America, the expansion was to the South (Rio Grande) and the West (the Pacific Coast); Czarist Russia raced to the Caucasus and Amu Darya in the South and the Pacific coast in the far west. The consolidation of the British empire in India saw road and rail projects that integrated the region and its heartland to the frontiers.

China, of course, had its own history of ambitious infrastructure projects like the Grand Canal and its renovation through the centuries. In the modern period, Chinese nationalists saw infrastructure and connectivity as critical for uniting and modernising the nation. If Indian

² See for example, Bruno Macaes, *Belt and Road: A Chinese World Order* (London: Hurst, 2018)

nationalists saw Subcontinent's railways as the facilitator of British hegemony, the Chinese nationalists saw the absence of railways as one of the sources of backwardness. For the first president of the Republic of China, Sun Yat Sen, the development of railways was a passion. His vision for railways within and beyond China is being fulfilled by his communist successors. India is also familiar with communist China's infrastructure building in Xinjiang and Tibet in the 1950s, its road building in Nepal in the 1960s and the Karakoram highway to Pakistan in the 1970s.

New Delhi opposed many of these Chinese initiatives over the decades. Its opposition culminated in the strong critique of the BRI in 2017 and since. However, Delhi seemed to ignore the digital dimension of China's connectivity initiatives. Even more interesting, India opened its market for deep digital penetration by Chinese companies. Before we discuss the implications of that interdependence, we need to recognise the dimension of power politics associated with the BRI and the DSR. Chinese propaganda presents these initiatives as being part of promoting a more inclusive globalisation and enhancing the development opportunities for the non-western world. It is worth recalling that many of the connectivity initiatives in the colonial era too presented as part of the civilising mission in the east. That they contributed to the modernisation of the developing world does not take away from the fact that it was driven by the commercial interests of the Western capital and the imperial imperative for political consolidation and control.

The tension between the opportunities (economic development and social modernisation) and risks (power and dominance) generated by foreign investment in infrastructure continue to animate the politics of the non-Western world. China's BRI has not been able to escape that tension in the developing world. Even more interesting is the fact that many developed countries feel threatened by the BRI, especially the DSR. The Anglo-Saxon powers as well as the Europeans and Japanese are either competing with or pushing back against the BRI and the DSR.³ How the tension between development and dominance gets mediated could vary in time and space. But there is no denying the relationship between strategic influence and infrastructure development beyond borders. As a recent American report notes, "history is filled with examples of states using foreign infrastructure to access territory, harvest resources, shape government policy, dominate technology, and undercut their competitors."⁴ The report offers a broad framework to understand the avenues of influence across all stages in the development of infrastructure in foreign lands by major powers (See Figure 1 below).

³ See for example, Kristin Shi-Kupfer and Mareike Ohlberg, *China's Digital Rise: Challenges for Europe* (Berlin: Merics, April 2019); and Bob Seely, Peter Varnish and John Hemmings, *Defending Our Data: Huawei, 5G, and Five Eyes* (London: Henry Jackson Society, May 2019);

⁴ Jonathan Hillman, *Influence and Infrastructure: The Strategic Stakes of Foreign Projects* (Washington: CSIS, January 2019), p. 23.

Figure 1 - Avenues of Influence for Foreign Developers

Stage	Finance	Design & Construction	Ownership & Operation
Strategic Objectives	Win political concessions	Set standards	Collect intelligence
	Reward supporters	Transfer technology	Restrict access
	Set standards	Collect intelligence	Adapt to disruptions
	Access resources		Monopolize skills & technologies
	Control operations		

Source: Jonathan Hillman, *Influence and Infrastructure: The Strategic Stakes of Foreign Projects* (Washington: CSIS, January 2019)

Economists argue that the DSR, much like the BRI, is driven by the Chinese capital’s imperatives of expansion beyond borders. The criticism of China’s DSR has begun to gain ground in the last couple of years, but Beijing appears to be playing by the same book that guided the Western powers. American historian Daniel Headrik, has written about the role of technology in advancing European imperial ambitions in the past. And his study of the spread of global telecommunication in the 19th and early 20th centuries reveals the strong connection between technology, power, and the ability to shape the global norms and enforce technical standards.⁵ It should not be a surprise therefore that China would like to use its growing national capabilities in the digital arena to exercise leadership in the emerging fourth industrial revolution, capture the markets around the world, use it to buttress its own political power in the international arena, defend the CCP rule in China, and export the “Chinese model” of political and social organisation to the rest of the world.

Scope and Structure of the DSR

The idea of a silk road in the cyber and space domains has figured in the Chinese discourse for some time. The Digital Silk Road made its first formal appearance in the China-EU forums in 2015.⁶ But it was only since the middle of this decade that it has been presented in a coherent form. In his speech at the first Belt and Road Forum in Beijing on May 15, 2017, President Xi urged the international community to “..pursue innovation-driven development and intensify cooperation in frontier areas such as digital economy, artificial intelligence, nanotechnology and quantum computing, and advance the development of big data, cloud computing and smart cities so as to turn them into a digital silk road of the 21st century.”⁷

⁵ Daniel R. Headrik, *Tools of Empire: Technology and European Imperialism in the 19th Century* (New York: Oxford University Press, 1981); See also his *Invisible Weapon: Telecommunications and International Politics, 1851-1945* (New York: Oxford University Press, 1991).

⁶ Shi-Kupfer and Ohlberg, Op. Cit.

⁷ “Full text of President Xi’s speech at opening of Belt and Road Forum”, Xinhuanet (14 May 2017), http://www.xinhuanet.com/english/2017-05/14/c_136282982.htm.

Two years later in April 2019 at the Second Belt and Road Forum, President Xi again emphasised in his speech, the “..need to keep up with the trend of the Fourth Industrial Revolution, jointly seize opportunities created by digital, networked and smart development, explore new technologies and new forms and models of business, foster new growth drivers and explore new development pathways, and build the digital Silk Road and the Silk Road of innovation.”⁸ He further pledged that the Chinese government will “..support companies of various countries in jointly advancing ICT infrastructure building to upgrade cyber connectivity.”⁹

In presenting the DSR as a collective international initiative, President Xi was trying to serve a few national objectives. According to one analysis, Xi had five major objectives: “cutting industrial overcapacity, enabling corporate China’s global expansion, supporting the internationalisation of the renminbi (RMB), constructing a China-centred transnational network infrastructure, and promoting Internet-enabled ‘inclusive globalisation’”¹⁰. China’s leading internet companies and state agencies are partners in this enterprise. Jack Ma of Ali Baba, for example, has sought to promote an electronic World Trade Platform (eWTP) that will bring barriers around the world down for e-commerce. The Chinese Academy of Sciences has launched an initiative on Big Earth Data that will deliver remote sensing data for a variety of projects along the BRI routes.

To date, China has signed with over 16 countries cooperation agreements to strengthen the construction of the Digital Silk Road (DSR).¹¹ The China-based Belt and Road Portal has also reported that over 6,000 of China’s Internet enterprises alongside over 10,000 Chinese technological products have gained access to overseas markets.¹² Among the areas that Chinese entities are making an impact are the following: telecommunication infrastructure including 5G, space and satellite services, e-commerce and smart cities. The low cost of Chinese digital products services and a solid alliance between state and the internet companies have made China’s digital expansion rather welcome in most parts of the world (See Figure 2 below). In India, its neighbourhood in South Asia and the Indian Ocean, there has been significant growth in China’s DSR technological projects and investments(See Figure 3 and Figure 4).

⁸ “Xi’s keynote speech at the opening ceremony of the second Belt and Road forum for International Cooperation”, Belt and Road Portal (27 April 2019), <https://eng.yidaiyilu.gov.cn/qwyw/rdxw/88232.htm>.

⁹ Ibid.

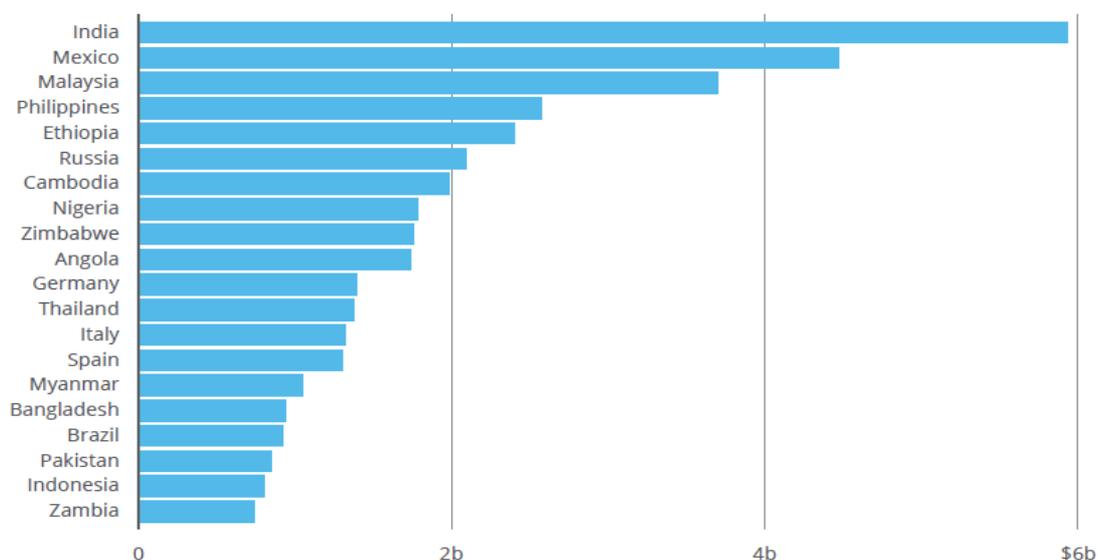
¹⁰ Hong Shen, “Building a Digital Silk Road? Situating the Internet in China’s Belt and Road Initiative”, *International Journal of Communication*, Vol 12 (2018), pp. 2684-85.

¹¹ “共建“一带一路”倡议：进展，贡献与展望”，中国一带一路网 (Belt and Road Portal) (22 April 2019), <https://www.yidaiyilu.gov.cn/ldzd/dejgfld/wjxz/86708.htm>.

¹² “汪巍：数字丝绸之路建设助力经济发展”，中国一带一路网 (Belt and Road Portal) (25 November 2017), <https://www.yidaiyilu.gov.cn/ghsl/gnzjgd/36420.htm>.

Figure 2 – China’s spending on Digital Silk Road projects, by country

China’s spending on Digital Silk Road projects, by country



Data: RWR Advisory Group. Includes projects completed or initiated outside China since 2012 that enhance the digital infrastructure of the target country. Does not include mergers or acquisitions. Dollar values for some projects are unavailable and therefore aren't reflected in country totals.

Extracted from: 'BRI update 2019 – recalibration and new opportunities', Deloitte,

<https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/ser-soe-br/deloitte-cn-bri-update-2019-recalibration-and-new-opportunities-en-190422.pdf>

Figure 3 – China’s Cable Projects

<u>Year Initiated</u>	<u>Initiative/Project</u>	<u>Countries connected</u>	<u>Participating Firms of Chinese and South Asian origins</u>
2011	Africa Europe-1 (AAE-1), Approximately 25,000km [Submarine]	Hong Kong, Vietnam, Cambodia, Malaysia, Singapore, Thailand, Myanmar, India, Pakistan , Oman, UAE, Qatar, Yemen, Djibouti, Saudi Arabia, Egypt, Greece, Italy, France	China Unicom, Pakistan Telecommunications Company, Reliance Jio Infocom
2013	Bay of Bengal Gateway (BBG), Approximately 8,040km [Submarine]	Oman, Malaysia, UAE, India, Sri Lanka	China Mobile, Reliance Jio Infocom, Dialog Axiata PLC
2014	Southeast Asia-Middle East-Western Europe (SEA-ME-WE 5) across the Bay of Bengal, Approximately 20,000km [Submarine]	Singapore, Malaysia, Indonesia, Thailand, Myanmar, Bangladesh, India, Sri Lanka, Pakistan , UAE, Oman, Qatar, Djibouti, Yemen, Saudi Arabia, Egypt, Italy, Turkey, France	China Mobile, Sri Lanka Telecom PLC
2017	Pakistan East Africa Cable Express, Approximately 13,000km [Submarine]	China, Pakistan , France, Egypt, Djibouti, Kenya, Somalia, South Africa	Huawei Marine, Hengtong, Cybernet (Lakson Group of Companies)

<u>Year Initiated</u>	<u>Initiative/Project</u>	<u>Countries connected</u>	<u>Participating Firms of Chinese and South Asian origins</u>
2017	Kashgar (China) – Faizabad (Afghanistan) optic line through Wakhan region (Afghanistan)	China, Afghanistan	China Telecom, Afghan Telecom
2018	Jilongzhen (China)-Rasuwagadi (Nepal) optical fibre cables outside Kathmandu	China Nepal	China Telecom Global, Nepal Telecom

Sources: Many, mainly from “Mapping China’s Tech Giants” database, Australia Strategic Policy Institute, Barton, September 2019, <https://www.aspi.org.au/report/mapping-chinas-tech-giants>. Accessed on 16 September 2019

Figure 4 – Other Chinese Technological Projects, Space-related Initiatives and Acquisitions in South Asia

<u>Initiative/Project</u>	<u>Location</u>	<u>Parties involved</u>	<u>Category</u>
Huawei Airlink Cloud data centre	Pakistan	Huawei, Airlink Communication	Data Centre
MoU in 5G and Internet of Things	India (New Delhi)	ZTE, Bharat Sanchar Nigam Limited	Internet of Things, 5G
Jio Pre-5G Partnership	India	Reliance Jio, ZTE	5G
Bharti Airtel Pre-5G Partnership	India	Bharti Airtel, ZTE	5G
Vodafone India Pre-5G Partnership	India	Vodafone, ZTE	5G
Smart Maldives IT Infrastructure	Maldives	Huawei	IT Infrastructure (General)
Sino-Nepal Joint Research Centre	Nepal	China and Nepal government	Research and Development; for Mountain Hazards, Ecology and Environment Monitoring
Pakistan R&D Centre	Pakistan	ZTE	Research and Development; for software development
BeiDou satellite navigation	Pakistan	BeiDou	Satellite Services
Supreme SAT-1, Supreme SAT-2	Sri Lanka	N.A	Satellite Services

<u>Initiative/Project</u>	<u>Location</u>	<u>Parties involved</u>	<u>Category</u>
Afghan SAT-2	Afghanistan	N.A	Satellite Services
AsiaSat-4 Pakistan Satellite Management Station	Pakistan	SUPARCO, China Great Wall Industry Corp	Satellite Services
Asia-Pacific Space Cooperation Organization (multilateral)	China	Pakistan Bangladesh China	Satellite Services, Research and Development
Huawei Safe City Project	Pakistan (Punjab, Lahore, Islamabad)	Huawei	Smart Cities
Daraz	Pakistan	Alibaba	E-Commerce/ Acquisition/ Major Shareholder
Paytm	India	Alibaba	E-Commerce/ Acquisition/ Major Shareholder/ Joint Venture
Big Basket	India	Alibaba	E-Commerce/ Acquisition/ Major Shareholder/ Joint Venture
Flipkart	India	Tencent	E-Commerce/ Acquisition/ Major Shareholder/ Joint Venture
Ola	India	Tencent	E-Commerce/ Acquisition/ Major Shareholder/ Joint Venture
Baidu India Internet	India	Baidu	E-Commerce/ Acquisition/ Major Shareholder/ Joint Venture

Sources: Mainly from the authors' compilations in another of their paper - C Raja Mohan and Chan Jia Hao, "South Asia's Space Programmes: Development and Diplomacy", *Institute of South Asian Studies, National University of Singapore*, <https://www.isas.nus.edu.sg/wp-content/uploads/2018/07/ISAS-Working-Paper-No.-300.pdf>; and "Mapping China's Tech Giants' database", Australia Strategic Policy Institute, Barton, September 2019, <https://www.aspi.org.au/report/mapping-chinas-tech-giants>. Accessed on 16 September 2019.

India and China's Digital Geopolitics

As it envelops India and its neighbourhood, China's digital expansion presents at least three sets of challenges for policy makers in Delhi. The first is the impact of the unfolding contestation between China and the United States on digital issues. The deepening economic integration between the US and China seemed to reach its pinnacle in the partnership between the US technology companies and China in the 2000s. Tensions in the economic and technological relationship started rising in this decade and culminated in the vigorous push

back from the Trump Administration. The US has begun to decouple the two economies that have fused over the last four decades. It has mounted a political challenge to the BRI and confronted the Chinese tech companies, especially the digital ones that have become quite central to the trade war between the two countries. There is a growing sense that the current conflict over 5G and Huawei are about deciding whether the US can retain its technological edge over China or cede space irretrievably to Beijing. If the US is putting pressure on India, as on so many other partners to keep China out of 5G development, Beijing is warning Delhi that any rejection of Huawei in India's 5G choice would be an unfriendly act.¹³ India's careful navigation between China and the US, one of its principal foreign policy preoccupations in the 21st century, will come under increasing stress. Delhi's simultaneous pursuit of good relations with both China and the US will become harder as pressure to make choices begins to mount. Somewhat unexpectedly technology issues have acquired place, front and centre, in the triangular dynamic between Delhi, Beijing and Washington. The choices Delhi makes will have deep impact on its IT and telecom sector that has evolved with significant dependence on Chinese hardware and deep connections to Silicon Valley on the software side. Rearranging its digital economy amidst the US-China Cold War will be quite hard.

Second, beyond 5G and the US-China confrontation, there are larger political issues of digital governance that will challenge India. For what is at stake in dealing with China's digital rise is the very Indian commitment to democracy and pluralism. India on its part has tended drift somewhere in the middle between the extreme positions that China and the West have come to represent in the debate on the issues. To be sure, there is no longer absolute unity within the West on the issues of digital governance. The divisions are not just between Western nations, but within them as well. But in the broader debate, India has often vacillated between the emphasis on the need for state control and the importance of limiting it according to democratic norms. In multilateral forums it has often tailed the Russians and Chinese on ICT issues but has also occasionally tilted in favour of Western positions. While it will continue to balance the competing political imperatives, India may have shown little inclination to support the framework of "cyber sovereignty" that China talks about. For China Cyber Sovereignty is about subordinating entire digital domain and its uses in the service of the state and its ideology.¹⁴ India has no reason to accept or support the kind of model for authoritarian digital state that China is promoting with its digital exports to the developing world.¹⁵

Third, is the challenge of limiting China's power in India's neighbourhood. Although never stated in such bald terms, this has been a major Indian foreign policy objective since the

¹³ "China warns India of 'reverse sanctions' if Huawei is blocked", Reuters (6 August 2019), <https://www.reuters.com/article/us-huawei-india-exclusive/exclusive-china-warns-india-of-reverse-sanctions-if-huawei-is-blocked-sources-idUSKCN1UW1FF>.

¹⁴ For a discussion see Adam Segal, "When China rules the web: technology in service of the state", *Foreign Affairs*, September/October 2018.

¹⁵ See Alina Polyakova and Chris Meserole, *Exporting Digital Authoritarianism: The Russian and Chinese Models* (Washington DC: Brookings, August 2019).

middle of the 20th century. Concerning infrastructure and connectivity, India has either opposed Chinese initiatives on the grounds of sovereignty (Karakoram Highway, CPEC) or competed with the Chinese projects (road building in Nepal or port construction in Sri Lanka). As China rose to be a great power and its economic impact in India's neighbourhood grew, Delhi's concerns have rapidly grown and have been reflected in India's criticism of the BRI. But Delhi seemed to be utterly oblivious of the digital dynamic and its consequences for South Asia.

It is not that there were no warnings. Through the last two decades, there were frequent warnings from the intelligence community on the dangers of letting Chinese technology companies into the Indian market. But the low price of Chinese products and the commercial interests of Indian telecom companies, which were preparing for a major boom in the Indian markets, tilted the balance in favour of China. It has continued to deepen in the last two decades. An India that could not see the consequences for its own market seemed even less prepared to see China's digital expansion in South Asia and the Indian Ocean littoral. Despite much talk about 'neighbourhood first' and the emphasis on connectivity, India has steadily ceded digital domain to China within the region. Although India had considerable advantages in the field of IT and space technologies, Delhi seemed unable to leverage it in pursuit of its foreign policy goals in the neighbourhood. One Indian initiative, the South Asia Satellite, for example has done little to counter the significant advance of China's space cooperation with Delhi's South Asian neighbours. The time has come for Delhi to take a fresh look at the challenge of digital diplomacy in the neighbourhood, identify the current limitations and find ways to overcome them.

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