

# India's Potential as a Growing Digital Economy: An Opportunity for Canada's Indo-Pacific Strategy

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## Issue

India's development of a highly digitized economy represents untapped potential for Canadian participation and engagement. How can Canada leverage this in the context of Canada's Indo-Pacific Strategy?

## Background

In the current geopolitical climate, the Canadian-Indian bilateral relationship has been strained, nevertheless, India remains a key actor in the Indo-Pacific region. In the event of a restoration in diplomatic relations, digital transformation is an area of potential positive improvement in this relationship.

India is of growing strategic and economic importance to Canada's engagement in the Indo-Pacific region. It has been identified in the recent Indo-Pacific Strategy as a "critical partner" in pursuing our objectives (Global Affairs Canada [GAC] 2023). India has emerged as a powerful economic force with a GDP exceeding four trillion dollars CAD since 2021 and being home to the world's largest population (ibid.). Under Prime Minister Narendra Modi's leadership, India is positioning itself to attract a large share of foreign investments, notably in the electronics sector, where the government aims to expand its manufacturing economy from 16 percent to 25 percent over the next few years (*The Economic Times* 2022). India is expected to play an increasingly dominant role in the Indo-Pacific region.

By 2030, the Indian GDP is forecasted to rise to over US\$7.7 trillion (Biswas 2023).

Continued engagement with India will therefore become increasingly important, especially considering the deterioration of Canada-China relations since 2019 (Reaves 2020, 55). The Indo-Pacific Strategy correctly identifies India's importance in achieving Canadian strategic goals in the region by focusing on developing economic, academic, educational and research ties (GAC 2022). However, given recent trends in New Delhi's economic strategy, one area that merits greater attention is the country's potential to become the largest digitized economy in the region.

## Digital Transformation in India

India prioritizes digital transformation in its current economic development platform. This transformation will not only modernize India's domestic infrastructure and stimulate economic growth, but it will also open a gateway to a more digitized and connected global landscape. Throughout his term, Prime Minister Narendra Modi has placed digitization at the forefront. In 2015, he initiated the "Digital India" campaign aimed at enhancing digital infrastructure and facilitating basic bureaucratic and commercial functions online (*The Indian Express* 2015). Since then, this strategy has produced various homegrown digital capabilities and services.

Digital India has been a momentous addition to the country's digitization efforts. In 2006, the Indian government launched a national e-governance strategy, covering digitization and tech adoption in various government areas, including agriculture, land records, health, education, passports, police, courts, municipalities, commercial taxes and treasuries. Since then, its expansion into its current, full-fledged digital strategy has brought about three major infrastructure projects in digital ID, broadband and service delivery. It also includes 10 government service initiatives and 16 others designed to empower citizens and businesses to pursue digitization in their own work (Ministry of Electronics & Information Technology [MEITY] 2021).

For example, the Indian government's foray into digital infrastructure through its "India Stack" project has led the country to develop a broad, open API (application programming interface) that allows government bodies, businesses, start-ups and developers to utilize a unique digital infrastructure to solve India's hard problems towards presence-less, paperless and cashless service delivery (ibid.). This enabled innovations such as the Unified Payments Interface, which allows more efficient and accessible peer-to-peer and bank-to-bank transactions. The Government of India hopes to use initiatives like these to transform its economy while tapping into a greater network of people in India and abroad (Dieterich 2023).

Additionally, with the launch of the 2020 Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors, the Indian government has increasingly focused on building a domestic electronics manufacturing industry (MEITY 2020). Most importantly, India is transforming its economy to meet the physical requirements of digitization by joining the global semiconductor race. Narendra Modi's "Make in India" campaign has driven the country to incentivize semiconductor manufacturers to launch ventures in cities like Chennai, with subsidies amounting to around US\$10 billion (Reed 2022).

Evidently, India views digitization not simply as a tool for efficiency, but as a window for adopting advanced manufacturing offering investment upsides for tech multinationals from other industrialized countries.

## **Canada-India Science and Technology Relations**

Canada and India have a long-standing commitment towards science and technology (S&T) cooperation, laid out by the 2005 Canada-India Science and Technology Agreement. This has led to multiple memorandums of understanding and joint declarations in areas such as patent protection, aerospace, agriculture, energy, information technologies, mining, remote sensing and medicine (Giri 2022). In 2018, Canada and India signed a Joint Declaration of Intent on Cooperation in the Field of Information and Communication Technology and Electronics. This document charts the potential areas for collaboration, though with little mention of India's growing focus on digitization (Ministry of External Affairs 2018). As well, Canada and India partake in a biannual India-Canada Joint Science and Technology Cooperation Committee Meeting in which both governments discuss emerging priorities in this field, the last of which was held in 2022 (GAC 2022).

Additionally, Canada and India have very strong civil society and business linkages, both formally and informally. Indian companies are increasingly becoming active in Canada in fields such as information and communication technology and software. At the same time, more than 600 Canadian companies have a presence in India and more than 1,000 are actively pursuing business in the Indian market (High Commission of India 2023). Moreover, Canada has become an education destination for over 650,000 Indian students from 2012 to 2021 (GAC 2023).

Comprehensive engagement with India will require a multifaceted response that engages with the Indian state, civil society and business community. Despite India's recent push towards digitization, supporting Indian digital transformation remains an under-explored area for cooperation. While supporting the development of regional digital infrastructure is a stated goal of the Indo-Pacific Strategy, Canada must recognize the potential that India represents for future Canadian participation and engagement as it pursues its digitization agenda (ibid.).

## **Cultivating Digital Transformation Cooperation with India**

The prevailing S&T relationship with India sets the foundations for a concerted focus on digital transformation cooperation. Like New Delhi, Ottawa

is increasingly interested in building a highly digitized economy. In the last few years alone, Canada launched the Canada Digital Adoption Program, which seeks to help Canadian businesses adopt digital technologies to increase their competitiveness (Innovation, Science and Economic Development [ISED] Canada 2023a), implemented its very first digital charter that improves transparency, safety and protections for everyday Canadians accessing digital platforms (ISED Canada 2023b) and announced a CDN\$136 million Advancing Industry Driven Digitalization of Canada's Supply Chain initiative (Transport Canada 2022). These highlight mutual priorities in the digitization of Canada and India's respective economies.

Canadian strengths, expertise and credibility can be leveraged to support India in its digitization agenda. Canada can become a foremost partner in sharing technological and policy-relevant knowledge, opening avenues for digital business and building secure digital economic infrastructure in both countries. While India is not a traditional ally of Canada, nor do Ottawa and New Delhi see eye-to-eye on every issue, digital transformation cooperation is an area where interests converge. Both countries stand to gain from the investment in this increasingly critical area for current and future cooperation.

Cultivating digital transformation cooperation with India will be the vehicle to secure the five objectives laid out in the Indo-Pacific Strategy (GAC 2023). It will promote peace, resilience and security (Objective 1) by promoting safe and accountable digital platforms. It will expand trade, investment and supply chain resilience (Objective 2) by building on digital technology industries and emerging markets. It will invest in and connect people (Objective 3) through increased international S&T knowledge-sharing. It will build a sustainable and green future (Objective 4) by enabling digital solutions to societal challenges. It will solidify Canada as a committed and engaged actor in the region (Objective 5) by partnering with the largest democracy and soon-to-be largest digitized economy in the region. Not recognizing the potential of Canadian participation in India's digital transformation will be a strategic loss to Canadian interests.

## Recommendations

**GAC should facilitate greater working relationships between Canadian and Indian academia, firms and civil society on digital transformation.** Expanding Canadian academic and research elements rests on Canada's advantage from healthy and organic interactions. Canada should focus its partnership on research with Indian academia and development firms. In accordance with the Investment Canada Act (ICA) and the National Security Guidelines for Research Partnerships (NSGRP), preventing foreign interference and unwanted knowledge transfer, among other considerations, should be at the forefront. As a result of recent Chinese state involvement and in accordance with the above, GAC needs to encourage research and development programs with Indian institutions that follow these guidelines. GAC must consider a partnership with the Natural Sciences and Engineering Research Council of Canada and Canada Research Chairs to develop research programs with Indian institutions. Research partnerships should focus on digital technologies, transformation and the digital economy, and follow the guidelines set out under the ICA and NSGRP. Following the guidelines, Canada can secure partnership with Indian institutions and its growing technology community fostering greater innovation in emerging technologies.

**GAC should pursue greater government-wide cooperation with India on digitization efforts.** Canada should pursue greater efforts as laid out in the 2018 Joint Declaration of Intent on Cooperation in the Field of Information and Communication Technology and Electronics. This can be expanded toward a memorandum of understanding between Innovation, Science and Economic Development Canada and India's Ministry of Electronics and Information Technology, focusing on taking advantage of digitization and developing digital infrastructure. Canada should signal digital transformation as a key priority in the 2024 India-Canada Joint Science and Technology Cooperation Committee. Canada should also pursue novel and innovative forms of cooperation in digitization, including developing cooperative mechanisms between Canadian and Indian ministries on digital safety, supply chain resilience and in accountable data governance, many of which will present mutual positive spillover effects in other domains, such as strengthening national security, pursuing green technologies and ensuring economic resiliency.

**GAC should ensure that the Canada-India bilateral Comprehensive Economic Partnership Agreement (CEPA) includes goals similar to the Digital Economy Partnership Agreement (DEPA).** India's growing commitment to digital transformation presents an opportunity for Canada to partner in technology expertise sharing, digital business, investment and securing digital infrastructure. A clear, transparent Canada-India digital partnership should incorporate elements from the DEPA, a comprehensive digital trade framework open to World Trade Organization members. Despite India's historical hesitancy toward formal trade agreements, Canada should strive to incorporate DEPA aspects into a bilateral CEPA, specifically, the non-application of customs duties on electronic transmissions, digital small and medium-sized enterprise dialogue and digital inclusion to enhance connections and access.

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