Picture a windowless conference room at an information communications technology (ICT) ministerial meeting in Bengaluru, or perhaps a working group session in Kazan. The air conditioning hums, and the projector displays dense schematics of API gateways, interoperability frameworks, and federated data lakes. It is a scene devoid of the high-stakes geopolitical grandstanding that usually captures global headlines. There are no dramatic speeches about overturning the unipolar world order or toppling the U.S. dollar. Yet, the quiet, highly technical conversations happening in these rooms are arguably more consequential for the daily lives of billions of people in the Global South than any leaders' declaration.

Behind the flashier narratives of multipolarity, the BRICS nations are attempting to build the plumbing of the future. By focusing on Digital Public Infrastructure (DPI) and Artificial Intelligence (AI) governance, the bloc is testing a new kind of geopolitical glue. The central question defining this effort is profound: Can shared digital rails and common AI norms make BRICS cooperation sticky, embedding it into the structural realities of their economies, even when political alignments inevitably diverge?

To understand this shift, one must first strip away the Silicon Valley jargon surrounding Digital Public Infrastructure. In plain terms, DPI refers to open, interoperable digital systems—specifically digital identity, fast payments, and secure data exchange—that function as a basic utility. Just as governments in the 20th century built physical roads and power grids for private enterprise and citizens to use, modern states are building digital rails. Because these systems are foundational, both governments and businesses can build specialized applications on top of them.

For the BRICS bloc, DPI is not merely a tech upgrade; it is a critical development multiplier. Historically burdened by vast geographies, high unbanked populations, and bureaucratic friction, these nations view DPI as a mechanism to leapfrog legacy constraints. A robust DPI ecosystem lowers transaction costs, rapidly expands financial inclusion, and allows

governments to target social welfare programs with unprecedented precision, cutting out middlemen and reducing leakage. In the long term, interoperable DPI enables seamless cross-border digital services, trade, and remittances.

However, the architecture of these systems is not without peril. A rush to digitize the public square raises immediate cautionary notes regarding privacy, state surveillance, and cybersecurity. Furthermore, if these systems are poorly designed, they risk vendor lock-in—where governments become hostage to single corporate tech providers—or they threaten to widen the digital divide, excluding citizens who lack digital literacy or reliable connectivity. Therefore, the governance design of DPI is just as critical as its software code.

Who is Building What?

The BRICS approach to DPI is not monolithic. It is a mosaic of different sovereign strategies, each reflecting unique domestic priorities. Looking closely at five distinct models reveals both the immense potential and the inherent frictions of this shared vision.

China: China operates arguably the most advanced digital ecosystem in the world, though it fundamentally differs from the open-protocol DPI model. Dominated by highly integrated super-apps (WeChat, Alipay), China is now pushing state-led digital infrastructure via e-CNY (its Central Bank Digital Currency) and massive AI deployments across public services, smart cities, and industrial manufacturing.

- The BRICS Lesson: Unprecedented scale and tight integration are extraordinarily powerful, but achieving cross-border interoperability and resolving data governance disputes remain contentious.

India: India’s approach is the most widely exported blueprint for DPI. It rests on a triad of foundational systems: Aadhaar (a biometric digital ID covering over a billion people), the

Unified Payments Interface (UPI, facilitating billions of real-time transactions monthly), and the Account Aggregator framework for secure, consent-based data sharing. India has expanded this open-protocol philosophy into sectoral DPI, building rails for health registries, agricultural advisories, and urban mobility (like the ONDC e-commerce network).

- The BRICS Lesson: Open, low-cost digital rails can catalyze explosive private-sector innovation while making public spending vastly more effective.

Brazil: The Central Bank of Brazil's creation of Pix, an instant payment system, has been nothing short of revolutionary. Within a few years, Pix has transformed retail and SME finance, rapidly pulling millions of Brazilians into the formal financial system and displacing cash at an astonishing rate. Alongside Pix, Brazil has steadily unified its digital government services under a single portal, expanding citizen access.

- The BRICS Lesson: A well-designed, user-centric payments layer can rapidly change economic behavior across an entire population.

South Africa: South Africa is currently focused on digital ID modernization and expanding its e-government initiatives. Amidst challenging physical infrastructure constraints—including well-documented power supply issues—the country has still seen vibrant fintech growth, heavily reliant on mobile penetration.

- The BRICS Lesson: Inclusion gains are fragile; they depend heavily on system reliability, institutional trust, and last-mile connectivity.

Indonesia, UAE, and Egypt (Partners): As BRICS expands its partnerships, countries like Indonesia, the UAE, and Egypt bring pragmatic approaches to the table. Their focus has largely been on tangible, high-impact projects: digital ID integrations, mandatory e-invoicing to close tax gaps, cross-border logistics corridors, and smart-city pilots.

- The BRICS Lesson: Practical, immediate use cases—such as trade facilitation, transit integration, and utility payments—often drive the adoption of digital rails far more effectively than grand ideological alignments.

AI Cooperation: From Principles to Pilots

If DPI is the nervous system of this new digital economy, Artificial Intelligence is the brain. BRICS AI cooperation is slowly moving from high-minded declarations to ground-level pilots. The bloc's working groups are prioritizing "responsible AI," but with a distinct Global South flavor: focusing less on the existential risks debated in Western capitals and more on applying AI to pressing socio-economic challenges, such as health diagnostics, agritech advisories, and urban traffic management.

Proposed mechanisms for collaboration are highly ambitious. They include shared research repositories—often pitched as "one library of science for eleven countries"—designed to pool anonymized data and circumvent the Western monopoly on large-scale training datasets. Other initiatives focus on preserving heritage via AI-enabled cultural object identification and establishing joint platforms to fund and scale youth tech startups.

To understand how this could work in practice, consider a comparative playbook. Imagine an Indian agritech AI, trained to provide micro-advisories on soil health via open APIs, paired with a Brazilian machine-learning model optimized for predicting macroeconomic crop yields. Now, federate that data with a South African AI triage tool designed for rural health clinics. By sharing datasets, standardizing evaluation metrics, and pooling computational resources, BRICS could create a modular, plug-and-play AI playbook uniquely tailored to the development needs of emerging economies.

Cross-Border Payments: The Hard Part

While AI pilots and digital IDs are gaining traction, cross-border payments and interoperability remain the hardest part of the BRICS digital agenda. Linking national payment systems and digital IDs across borders is a technical and policy minefield. It requires harmonizing disparate technical standards, navigating complex foreign exchange (FX) mechanisms, and reconciling conflicting laws regarding AML/KYC compliance and data localization.

There is ongoing, highly visible work in this space. BRICS nations are running DPI pilot projects, actively exploring Central Bank Digital Currency linkages (such as Project mBridge), and convening task forces on intrabloc settlement systems aimed at bypassing traditional Western correspondent banking networks. Yet, it is vital to view these efforts without overstating their current progress; full, seamless interoperability is still years away.

From a market perspective, however, the incentive to solve this puzzle is immense. True interoperability would fundamentally alter the economics of remittances, drastically reducing fees for migrant workers sending money home. It would empower SMEs to engage in frictionless cross-border trade without absorbing exorbitant currency conversion spreads, and it would simplify tourism across the bloc. This is precisely why global banks, fintech upstarts, and traditional payment networks are watching BRICS DPI summits so closely. The moment these rails connect, the global flow of money shifts.

Why the Summit in India is Crucial

Within this landscape, India occupies a unique position. The “India Stack” is arguably the world’s most tested, large-scale implementation of DPI, with exhaustively documented effects on financial inclusion and the reduction of administrative costs. But for BRICS to succeed as a collective, the narrative cannot simply be “India exports its tech.” India’s

experience is vital, but it must be immediately paired with Brazil's explosive success with Pix and China's pioneering CBDC work to demonstrate that there is a spectrum of valid approaches.

India's greatest contribution to the BRICS tech agenda may be its aggressive push for open standards, mentorship, and knowledge sharing. By offering open-source codebases (like the Modular Open Source Identity Platform, MOSIP), publishing architectural compendiums, and fostering research networks, India is attempting to make digital solutions portable.

However, to maintain credibility, this narrative must balance optimism with a sober acknowledgment of the constraints India has faced. Scaling these systems has exposed deep digital literacy gaps. The reliance on biometric authentication has, at times, led to painful exclusion errors for the most vulnerable. And the ongoing, complex domestic debates over India's data protection legislation underscore how difficult it is to build robust privacy safeguards after the technology is already deployed. Acknowledging these friction points makes the Indian model a credible roadmap for BRICS, rather than just a promotional brochure.

Governance, Standards, and the "Rules of the Road"

Ultimately, software is entirely dependent on the rules that govern it. The emerging BRICS conversations on data governance, AI ethics, cybersecurity, and digital trade are best understood as a search for minimum common denominators. Unlike the European Union, which seeks a monolithic, top-down regulatory framework (like the GDPR), the BRICS nations are too diverse in their political systems to adopt a single legal model.

Instead, the bloc is applying a practical lens. They are working to align procurement guidelines, establish common API standards, build mutual certification regimes for cybersecurity, and draft frameworks for dispute resolution in cross-border digital services. If a

Brazilian company wants to offer telehealth services in South Africa using Indian software, whose data protection laws apply, and how is the data secured? These are the granular governance questions currently being hammered out.

There is a distinct business angle to this regulatory alignment. U.S., European, and Asian tech firms are watching closely to see if BRICS will erect a walled digital garden with alternative, non-Western standards. The reality is likely more nuanced. Western firms will likely have to adapt to localized BRICS standards for public procurement and critical infrastructure, while collaboration will remain open in consumer tech and enterprise SaaS. But the era of Western tech firms dictating the foundational architecture of Global South economies is drawing to a close.

From Pilots to Platforms

The true measure of the BRICS digital agenda will not be found in the language of its summit communiqués, but in the hands of the people building the future.

Picture a 24-year-old software developer sitting in a co-working space in São Paulo. She is building a mobile triage app for rural clinics. To make it work, she integrates an open-source health-registry API specification originally developed in India, trains her diagnostic tool on an anonymized, federated medical dataset hosted in South Africa, and optimizes the application’s processing speed using a lightweight, open-source AI model released by a Chinese tech firm.

This is what shared digital layers look like in practice. It is the transmutation of high-level geopolitical “cooperation” into everyday, scalable utility.

The ultimate test for the bloc is simple and empirical. If, a year from now, three BRICS countries are running live cross-border DPI pilots with real users—moving money, verifying

identities, and sharing data seamlessly across their borders—the summit will have done far more than issue another political declaration. It will have laid the track for a new global economy.