

# Writing the next chapter in growth

How businesses can thrive with India's digital public infrastructure



Strategy. Design. Engineering.



## Foreword

How businesses can thrive with India's digital public infrastructure

India's Digital Public Infrastructure (DPI) is transforming the business landscape, paving the way for unprecedented innovation and collaboration. Following the remarkable success of Aadhaar and UPI, newer DPIs are emerging, reflecting a growing awareness among Indian businesses that these digital frameworks are essential for unlocking efficiency, driving growth, and gaining a competitive edge.

Thoughtworks customers are already reaping the benefits of this transformation. By leveraging tools like Account Aggregators and DigiLocker, businesses can streamline processes and enhance customer engagement without heavy infrastructure investments. This strategic alignment of resources and expertise is not merely about technology; it represents a significant shift in how companies approach market opportunities. We're actively involved in creating the next wave of DPIs, leveraging the power of Gen AI to deliver significant benefits at scale to both citizens and corporations.

The potential economic impact of DPIs is substantial. According to industry reports, mature DPIs could contribute as much as

4.2% to India's GDP by 2030, underscoring their role in driving economic expansion. As businesses embrace these advancements, they gain access to data-driven insights that strengthen their market position.

With growing global interest in India's DPIs, the country is well-positioned to become a global innovation hub, offering innovative solutions and services that can revolutionize global industries.

Looking ahead, India's commitment to expanding its digital infrastructure promises a future rich with innovation. This journey is not just about building tools; it's about reimagining the very essence of conducting business and service delivery in India, positioning the nation as a global leader in digital transformation.

**Manish Kumar**

Regional Managing Director  
India and Middle East

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# Introduction

**Can India's home-grown Digital Public Infrastructure be harnessed to transform your business?**

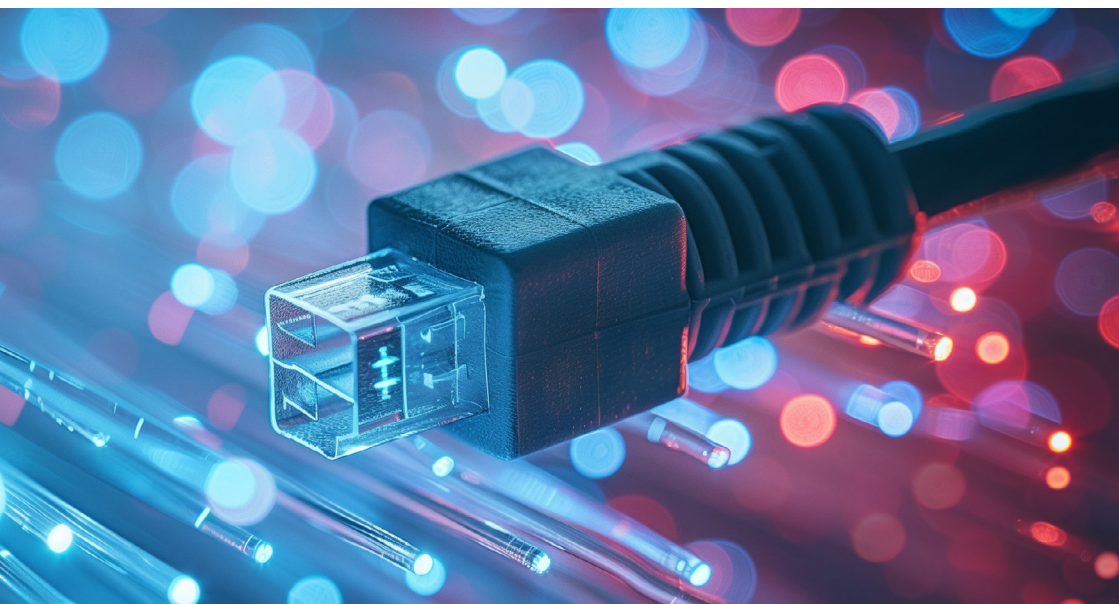
**The short answer is yes.**

Here's the long answer.

Over the years, Indian businesses have evolved from small-scale industrial enterprises to expansive conglomerates with a global reach. India's startup ecosystem is now the third-largest worldwide, attracting over \$8.4 billion in funding in 2023 alone. These businesses have made significant strides in accumulating wealth, optimizing costs and expanding into untapped markets. However, they rely heavily on Western technological capabilities.

## Why?

India possesses a remarkable asset—arguably the most sophisticated and advanced digital public infrastructure (DPI) in the world, known as India Stack. This digital backbone offers transformative opportunities for businesses willing to leverage it.



## The power of India Stack

**The Unified Payments Interface (UPI)** is the most well-known example of this digital revolution. UPI enables millions of previously unbanked citizens to easily make digital transactions from their phones, processing over 14 billion transactions monthly, totaling more than INR 20 trillion.

**But UPI is just the beginning. Other digital public goods are making significant impact:**

- Banks use the Unique Land Parcel Identification Number (ULPIN) or Bhu-Aadhaar and satellite data enabled by DPIs to streamline loan approvals.



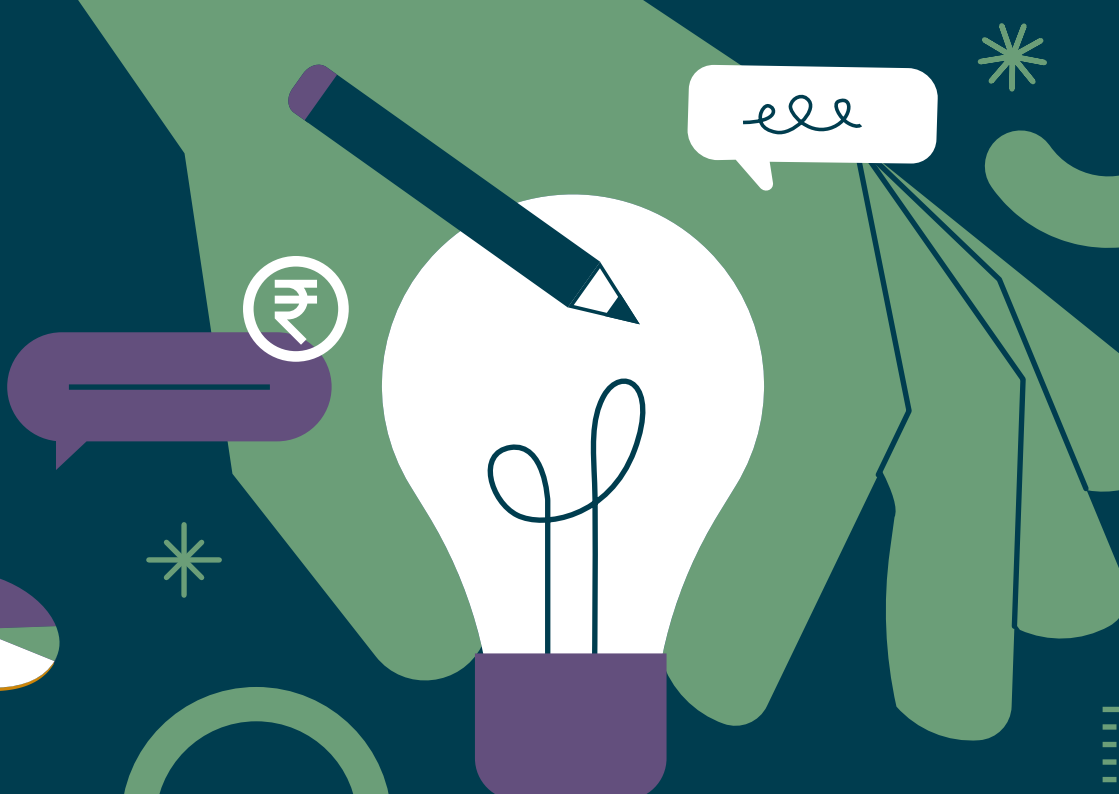
- Citizens can easily submit identity proofs and financial data using Aadhaar (a unique identification number) and DigiLocker (a digital locker service).
- The Open Network for Digital Commerce (ONDC) empowers local businesses and provides consumers with wider choices and better deals, like how Namma Yatri simplifies access to trip booking and travel.
- RuPay debit cards give international giants such as Visa and Mastercard a run for their money, fostering healthy competition, potentially lowering transaction fees and improving service for all.

UPI Sandboxes give businesses a way to utilise and build on top of digitized banking services.

The integrated impact of these DPLs is greater than the sum of their parts. Combining DPLs such as Aadhaar, UPI, and RuPay improves service delivery and reduces corruption. Even international remittance services benefit from these efficient digital platforms.

**“Digital Public Infrastructure is not just a technological necessity; it is a strategic enabler of business growth. It can unlock new opportunities, drive innovation, and achieve sustainable success in the digital age. By leveraging DPLs, we have successfully tapped into new client demographics and optimized our cost effectively. This strategic initiative has supplemented us to serve our customers better and expand our range of services.”**

**Avinash Raghavendra, President & Head-Information Technology at Axis Bank**



## The challenge and opportunity

Despite these advantages, Indian businesses are only scratching the surface of what India's digital public infrastructure can offer due to various reasons.

Understanding and serving a population of 1.4 billion people, with their varied purchasing power and cultural nuances, is no small feat. As the popular aphorism goes, India speaks a different language every few kms, creating huge personalization challenges.

India's per capita income is approximately \$2,400 in 2023. While this figure signifies progress, a significant portion of the population still earns less than \$1 (PPP) daily. This disparity



highlights the need for inclusive economic policies to improve all citizens' living standards.

While India has made considerable progress in various domains, inequalities remain. For instance, women's participation in the workforce is still relatively low, with a Female Labor Force Participation Rate (FLFPR) of approximately 37%.

Additionally, the All India Survey on Higher Education (AISHE) 2019-20 data reveals that while the gross enrollment ratio of female students in higher educational institutes is slightly higher than male students, the employment-to-population ratio is much lower for females compared to males.

On the other hand, India will be a formidable market force in 2024, boasting the fifth-largest economy in the world. Morgan



Stanley projects that India will overtake Japan and Germany to become the third-largest economy within the next three years.

A push for digital literacy and adoption significantly drives this growth. India is home to over 820 million active Internet users, with more than half coming from rural areas. India also boasts the highest number of WhatsApp users globally, with over half a billion people using the app. Businesses utilize WhatsApp to market products, reach potential customers, and facilitate transactions.

Similarly, the platform X (previously known as Twitter) attracts many Indian users. The Indian Prime Minister, Narendra Modi, has over 100 million followers, making him one of the most followed leaders globally. Politicians, celebrities, social activists, and ordinary citizens actively engage on X, sharing updates and participating in public discourse.

India's massive population, coupled with increasing internet penetration and affordable smartphones, has fueled a surge in data consumption. Video and OTT (Over-The-Top media services) contribute significantly to this usage, with 20% of netizens preferring the Internet over TV.

For example, a 5-kilogram bag of atta (wheat flour), sufficient to feed a family for around a month, costs approximately Rs. 200-250. In contrast, monthly data expenses, including mobile data plans and recharge packs, can be as low as INR 100 to INR 150. This stark difference showcases the remarkable affordability of data services in India compared to essential food items.

To capitalize on this opportunity and circumvent socio-political challenges, DPLs can be the gamechanger. Many notable companies are already using DPLs to revolutionize efficiency by identifying delivery agents and tracking deliveries in real time.

However, there is a lot left to do. Indian companies need to fully leverage DPIs to ride out the ongoing recession and seize available opportunities efficiently. This requires a paradigm shift in business transformation. Businesses must prioritize exploring untapped demographics, extending their reach, and creating sustainable growth that aligns with India's diverse landscape.

**As researchers Erik Simanis and Duncan Duke** write in the Harvard Business Review:

**“Success at the bottom of the pyramid requires companies to focus on business fundamentals and start their ventures with a rigorous understanding of two key challenges in low-income markets: changing consumers’ behavior and changing the way products are made and delivered.”**



The ten tenets in this guide were designed to address these challenges head-on. We offer these ten tenets to empower you to write the next chapter in your business growth. By following these tenets, we wish to help you create universal and equitable business expansion by leveraging the far-reaching but underutilized Digital Public Infrastructure.

**We hope you enjoy.**

## Ten tenets for corporate success in digital India



**Build tailored MVPs for rural India:** Customize your products and services to fit the unique needs of rural markets.



**Leverage the multi-faceted influence of delivery agents:** Empower delivery agents to be your brand ambassadors and community connectors.



**Language is the key to rural India:** Communicate in the local language to build trust and understanding with rural customers.



**Focus on volume instead of per-unit value:** Prioritize high-volume, low-cost transactions to scale your business in rural markets.



**Be everything to your customer:** Offer a comprehensive suite of services to meet all the needs of your rural customers.



**Leverage government assets:** Utilize government infrastructure and digital platforms to expand your reach and streamline operations in rural areas.



**Digitalize your business:** Embrace technology to improve efficiency, reduce costs, and enhance customer experience in rural markets.



**Think ecosystem, forge partnerships:** Collaborate with other businesses and organizations to create a stronger ecosystem for rural development.



**Focus on affordable innovation:** Develop cost-effective solutions that are accessible to rural consumers.



**Reimagine branding:** Tailor your branding strategy to resonate with the diverse needs and preferences of rural India.



## Tenet 1

# Build tailored MVPs for rural India

A one-size-fits-all approach won't capture the unique needs of rural markets. Instead, we advocate for a "few-sizes-for-a-few" strategy. Tailor your services to align with rural populations' distinct lifestyle and challenges.

## What it means

Private corporations often miss the mark in rural markets due to a limited service outlook. We need a fresh approach to service design to penetrate these new markets, starting with the minimum viable product (MVP). Think of it like McDonald's and KFC customizing their menus for India. Similarly, intelligent systems should be designed to recommend the most suitable service plans based on customer location and needs. For example, customize agricultural services based on farm size to establish stronger relationships and boost customer satisfaction

## The possibilities

Leverage Digital Public Infrastructure (DPI) to reach rural markets with these targeted strategies:

**Curated Product Selection:** Launch MVPs with small-sized essential products to cater to first-time customers, such as HP Gas Appu, a smaller 5kg LPG cylinder designed for those who can't afford a full cylinder or don't have necessary documentation for it. Curated products are what you would do for a generic product.

**Simplified Communication:** Use clear, concise language in marketing and product descriptions. Avoid jargon, and consider local dialects and literacy levels.

**Cash-friendly Transactions:** Implement cash on delivery (COD) and integrate the Aadhaar Enabled Payment System (AEPS) for secure and familiar transactions.

**Community-centric Entertainment:** Offer content that meets the needs of the community. For instance, the choice of content of the farmer community might be vastly different from a trading community. Also, enable downloadable movie rentals at

affordable prices instead of monthly subscriptions to cater to shared viewing preferences.

**Localized Content Focus:** Feature regional content prominently in subscription services, with pricing reflecting rural value propositions.

**Robust Products:** Focus on durable, simple designs that require minimal maintenance and fit the constraints of the rural environment. The Taraltec Disinfection Reactor, which converts contaminated water from borewell handpumps to potable water, is a prime example.

Focusing on these possibilities can create a more approachable and relevant experience for first-time customers in rural India.





## Tenet 2

# Leverage the multi-faceted influence of delivery agents

Delivery agents in rural India are more than just couriers; they are trusted community figures who influence consumer behavior. Leveraging their role can unlock success in rural markets.



## What it means

Intermediaries such as postwomen, village officers, and community workers play crucial roles in rural communities. They speak the local language and have built trust within the community, making them essential to successful market penetration. Empowering these agents fosters economic activity and contributes to rural development. Partner with local administrative centers and community workers to amplify your service outreach, ensuring effective communication that respects local cultures.

## The possibilities

Empower delivery agents to elevate your rural market success:

**Agent as a Persona:** Make the delivery agent a key persona in application flows. Foster partnerships with local bodies and create incentive programs such as commissions and rewards for agents.

**Tailored Service Design:** Collaborate with agents to understand community needs and develop resonant service packages.

**Cascading Transaction Systems:** Enable agents to transact on behalf of multiple individuals while protecting privacy with tiered accounts or secure access.

**Data Security and Privacy:** Implement robust privacy measures and train agents on data security protocols. Proactively educate customers on their rights and best practices.

**Reliable Support System:** Provide agents with thorough training on corporate services. Reinforce this training through accessible knowledge bases, video content, and e-learning portals. Maintain channels for addressing issues.

**Building Trust and Accessibility:** Utilize agents for local marketing and community outreach, leveraging their established relationships.

**Ensuring Reliability:** Mitigate the risk of the agent becoming the single point of failure by creating support systems and secondary resources.

Empowering delivery agents can create a trusted and effective channel to engage and serve rural customers.



**“Utilizing Aadhaar and Vahan portals for verifying Shippers and also suppliers ( Transporters) enable us to verify the authenticity and correctness of transporters to be used by our load providers and it builds confidence to load providers that they are transporting goods through reliable and compliant transporters**

**We have been able to save the time and the cost attached to the time and resource by adding DPI like Aadhaar, Vahan Portals.**

**This has also improved the overall experience for both our vendors and shippers.”**

**Arockiasamy.B, Business Head, Letsgro.co**



## Tenet 3

# Language is the key to rural India

Language is a window to culture and a crucial tool for engaging rural audiences. By speaking their language, businesses can build trust and expand opportunities.

## What it means

There are other options than waiting for rural populations to get online. Corporations must use technology to reach them where they are. Understanding the technological maturity of rural audiences is key, and language plays a critical role. Businesses that communicate in the local language foster credibility and connection, making it easier to understand and meet customer needs. Businesses can use platforms like Bashini which is a one of its kind platform in the world that processes speech to text, text to text, text to speech, and image optical character recognition (OCR) in multiple languages.

## The possibilities

Harness the power of language to drive growth:

**Speaking the local lingo:** Offer services in the local language, making them more approachable. Design intuitive apps that become daily essentials.

**Audio-first:** Use audio to reach those uncomfortable with reading, transcending barriers of age, education, and technology literacy—design tech with audio as the default, similar to how websites adapt to different devices.

**Cultural sensitivity:** Tailor services to local tastes and preferences, using audio to deliver customized messages that foster connection and understanding. For instance, voice-based vernacular conversational AI is better suited for rural markets than text-based chatbots.

By embracing linguistic diversity, businesses are committed to inclusivity and customer-centricity, making them more relatable and trustworthy in rural markets.



## Tenet 4

# Digitalize your business

In today's India, digitalization isn't just an option—it's essential for success. Bridging the digital divide effectively to serve both urban and rural areas requires a fundamental shift from traditional business models. Simply adding features or acquiring cloud services won't cut it.

## What it means

Most corporations are like “monoliths”—rigid systems that struggle to meet the unique needs of rural India. To serve diverse communities, businesses must become agile, transforming from a single “cruise liner” to a fleet of nimble “speedboats.”

This modularity must come not only in the form of technology, but also in business structure.

To begin with, businesses should evolve into technology companies at their core. It’s not about incremental changes—it’s about building modular solutions with robust architecture, leveraging existing Digital Public Infrastructure (DPI) like Aadhaar and Unified Payments Interface (UPI) to create customizable solutions for different regions.

To support rural expansion, they must also recast their operations and processes to support a modular business structure. This could mean decentralizing some decisions, giving local teams more marketing budgets, restructuring leadership to be closer to the consumer, or setting up new and nimble subsidiaries entirely.

## The possibilities

The potential of a fully digitalized business is vast:

**Modularity:** Develop core functionalities as independent modules, allowing for flexible combinations tailored to specific regional needs.

**Localization:** Incorporate language and audio layers to ensure effective communication across diverse populations.

**Dynamic catalogs:** Build systems that adjust product offerings based on real-time factors like location, season, and local events.

**Data-driven insights:** Capture, analyze and leverage data at every stage to gain valuable user insights.

**Accessibility:** Ensure services are accessible to urban and rural residents, transcending geographical barriers.

**Innovation:** Use digitalization to foster innovation, accelerate service delivery, and enable cross-sector integration.

By digitalizing your business, you will not only effectively serve both urban and rural India but also position yourself as a pioneer in a transformative era where technology bridges gaps, empowers communities, and propels socioeconomic progress.





## Tenet 5

# Focus on volume instead of per-unit value

Digitalization offers immense opportunities for businesses. A high-trust, low-value (HTLV) model, leveraging DPLs, can automate processes, expand reach, and achieve profitability.



## What it means

In India, trust and affordability are paramount. Customers expect high-quality products and services at reasonable prices, often relying on brand loyalty and positive word-of-mouth. This requires shifting from focusing solely on per-unit value to maximizing transaction volume through efficient operations. This is where DPLs like Aadhaar and UPI become game changers.

## The possibilities

Digital Public Infrastructure enables corporations to thrive in the HTLV market in several ways:

**Efficiencies:** Automate repetitive tasks such as order processing, customer service, and logistics, freeing up human resources for higher-value interactions and reducing costs.

**Customer Service:** Utilize DPLs for 24/7 customer support through chatbots, SMS notifications, and vernacular language options.

**Tailored Marketing:** Leverage Aadhaar data (with user consent) for targeted advertising and personalized offers.

**Data-Driven Decision Making:** Analyze customer behavior and market trends using DPLs to inform pricing, product development, and marketing strategies.

**Existing networks:** Use the vast network of post offices in rural India, training mail carriers to be delivery agents and digital service providers.

**Flexible pricing:** Implement pay-as-you-go or micro-payments to cater to low-income communities.

**Product localization:** Develop products like shampoo sachets or micro-loans tailored to the needs and budgets of rural customers.

Success lies in building solutions that are accessible, affordable, and relevant to the unique needs of the Indian consumer.



**“With the inception of Digital Public Infrastructure (DPI), India is redefining how public services are delivered on an unprecedented scale. By combining strong public foundational frameworks with private market participation, DPI has achieved a remarkable pace of adoption. A major milestone in this journey was the launch of Aadhaar in 2010, which sparked a digital identity revolution, creating a secure, unified identity system that enabled transformative financial initiatives. Leveraging Aadhaar, programs like Jan Dhan Yojana rapidly expanded banking access, increasing coverage from 20% in 2010 to 80% by 2016—a leap that set new standards for financial inclusion.**

**Powered by DPI and homegrown innovation, fintechs are now reaching millions, driving financial inclusion and empowering individuals and businesses with digital-first services. At Razorpay, and previously in my role with NPCI, I’ve had the privilege of helping build and implement key DPI initiatives. Through these experiences, I’ve witnessed firsthand the transformative impact of DPI innovation on the everyday lives of Indians. DPI fuels India’s ambitions, ushering in an era where essential services—such as identity, payments, and data—are accessible to every individual and household across the country, paving the way for resilient, inclusive growth.”**

**Arif Khan, Chief Innovation Officer at Razorpay.**



## Tenet 6

# Think ecosystem, forge partnerships

The untapped potential of rural and semi-urban India, including tier 4 and 5 towns, requires alternative thinking. Instead of focusing solely on your organization's growth, consider the collective advantage the entire ecosystem can gain through meaningful partnerships. Organizations can leverage each other's strengths to overcome limitations and reach a wider rural audience by joining forces.

## What it means

Partnerships are essential for expanding your corporate footprint into rural markets. These include industry associations that provide access to partners with similar goals, local businesses offering complementary solutions, or government initiatives like Digital India or Skill India to leverage existing infrastructure.

## The possibilities

Thinking ecosystem enables enterprises to forge partnerships across various dimensions, opening up channels for sales and communication:

**Market Access:** Collaborate with established rural retail chains to offer products or services through their extensive networks.

**Delivery and Fulfillment:** Partner with logistics companies like Delhivery and India Post to leverage their expertise in rural last-mile delivery.

**Financial Inclusion:** Work with financial service providers like Spice Money to offer micro-loans, micro-insurance, or digital payment options within their rural outreach programs.

**Technology:** Collaborate with local tech startups to develop customized mobile applications or services tailored to the specific needs of rural customers.

Corporations, financial institutions, logistics providers, local businesses, and the government can create win-win situations that fuel growth and empower rural communities across India by working together.



## Tenet 7

# Be everything to your customer

In today's rapidly changing landscape, rural and semi-urban customers demand more comprehensive services. Organizations must adapt by offering a range of services under one umbrella to stay ahead. In India, the mantra is "be everything, but local." Utilizing tiered service models powered by cutting-edge technology is the key to achieving this level of customization.

## What it means

Indian corporations venturing into rural and semi-urban areas can't rely on a single product to make a significant impact. Customers in these regions prefer simplicity and convenience—they want to access multiple services without the hassle of various apps or vendors. If a single organization can provide a broad array of services, it will likely foster customer loyalty.

## The possibilities

Here are some innovative ways to serve the rural and semi-urban segments in India:

**Telcos as financial hubs:** Telecom companies with extensive rural networks can leverage Digital Public Infrastructure (DPI) like Aadhaar for secure user identification and Unified Payments Interface (UPI) for digital transactions. By partnering with financial institutions, they can offer micro-banking, micro-loans, and micro-insurance directly through mobile apps or Unstructured Supplementary Service Data (USSD) menus.

**Retail Chains + Financial Products:** Large retail chains can collaborate with banks to provide in-store financial services such as micro-loans and bill payments, utilizing DPI for secure transactions.

**Banks as service aggregators:** Banks like the State Bank of India (SBI) can use their vast customer base and infrastructure to offer various services, from e-commerce to online education. They can transform their branches into multi-service hubs, integrating government initiatives and skill development programs within their mobile banking apps.

**A multi-service ecosystem:** Companies like Jio exemplify this approach by offering a range of services, from e-commerce

(JioMart) to digital wallets (JioMoney) and Over-The-Top (OTT) platforms (JioTV). DPIs enable features like single sign-on using Aadhaar, personalized recommendations, and localized content.

**Agricultural services and data:** Companies providing agricultural supplies can integrate additional features like weather updates, market prices, and access to government subsidies within their mobile apps, all facilitated by DPIs.

By adopting a “glocal” (global + local) approach and leveraging DPI, corporations can evolve from single-service providers to trusted partners meeting various rural customer needs. This fosters financial inclusion and drives growth in the vast rural Indian market.

**“India’s approach to create population scale Digital Public Infrastructure (DPI), designed for wide-scale and democratized usage at affordable cost, has been transformational and has shaped the nation’s social, financial and economic landscape.**

**YES Bank as the innovator of API Banking in India and an early adopter of the country’s DPI, complimented its investment in technology with a collaborative approach towards Fintechs. The Bank harnessed the opportunity and garnered significant market leadership within the digital payment ecosystem. Resultantly, today one-third of digital payments by volumes, gets routed through the counters of YES Bank.**

**Ajay Rajan, Country head - Government, Multinational and International Business Transaction Banking and Knowledge Units, YES Bank Limited**







## Tenet 8

# Focus on affordable innovation

Corporations need to prioritize affordable innovation to bridge the digital divide in India. High-tech features that neglect cost-efficiency simply won't work in rural areas. It's about creating quality solutions that everyone can access.

## What it means

Developing solutions focused solely on high-tech features ignores the reality of limited resources in rural India. “Affordable innovation” advocates for cost-effective solutions that leverage existing digital public infrastructure, like Aadhaar (a unique identification number), ONDC (Open Network for Digital Commerce), and UPI (Unified Payments Interface). This strategy ensures wider adoption and financial inclusion, bringing technology to a larger audience.

## The possibilities

Here are some examples of affordable innovation in action:

**Voice-based interfaces:** Develop voice-based interfaces for mobile apps or USSD (Unstructured Supplementary Service Data) menus to cater to users who are more comfortable with spoken communication or have limited literacy skills.

**Offline functionality:** Enable offline data capture within apps, allowing users to interact with the service even in areas with limited internet connectivity. Data can then be synchronized later when a connection is available.

**SMS and missed call alerts:** Use SMS or missed call notifications for critical updates as a cost-effective way to reach users who might not be actively using data services.

**Pay-As-You-Go models:** Introduce flexible pay-as-you-go models. Implement a freemium model with ads in a basic tier, similar to Hotstar and Jio Cinema. This caters to budget-conscious users and offers a glimpse of the premium experience.

**WhatsApp business integration:** Leverage WhatsApp Business for customer communication, product information sharing, and

even basic transactions. This eliminates the need for expensive app development and caters to user preferences.

**Create your market:** Use the foundation of the digital public infrastructure to create markets with new technologies, such as:

- Drones for land surveying, goods delivery, and crop monitoring, especially in areas grappling with inadequate infrastructure or inaccessibility.
- Solar panels to generate electricity for households, businesses, and schools, curbing reliance on fossil fuels and bolstering energy security.
- Biogas plants to build a renewable energy source employed for cooking, lighting, and powering generators without causing pollution or affecting air quality.
- Internet of Things (IoT) sensors to track crop health, livestock, and water levels, enhancing agricultural efficiency.

By adopting affordable innovation, creating new markets, and repurposing technology, corporations can unlock the true potential of DPs to bridge the digital divide. This approach fosters long-term customer loyalty and drives sustainable growth in the vast rural Indian market.



## Tenet 9

# Leverage government assets

Maximizing the potential of government assets in India is a treasure trove of opportunities. This goes beyond physical infrastructure like post offices and schools. Collaborating with the government and leveraging both physical assets and Digital Public Infrastructure (DPI) can expand reach, optimize resources, and achieve sustainable growth.

## What it means

Moving beyond traditional methods, corporations can forge partnerships with the government to unlock the potential of physical assets like post offices and schools alongside DPs like Aadhaar (a unique identification number), UPI (Unified Payments Interface), and UMANG (Unified Mobile Application for New-age Governance). These government-backed digital and physical assets offer secure and convenient solutions for various aspects of business operations, fostering collaboration and mutual benefit.

## The possibilities

Here's how you can unlock growth with DPs and government physical assets:

**User authentication and onboarding:** Leverage Aadhaar for secure and instant user authentication, streamlining customer onboarding processes. This eliminates the need for lengthy paperwork and ensures a frictionless user experience.

**Financial inclusion:** Integrate UPI for convenient and secure digital payments. This caters to the growing population of mobile-first users in India and promotes financial inclusion, especially in rural areas.

**Government services:** Utilize UMANG, a single platform for accessing various government services, and DigiLocker to integrate your offerings with relevant citizen services.

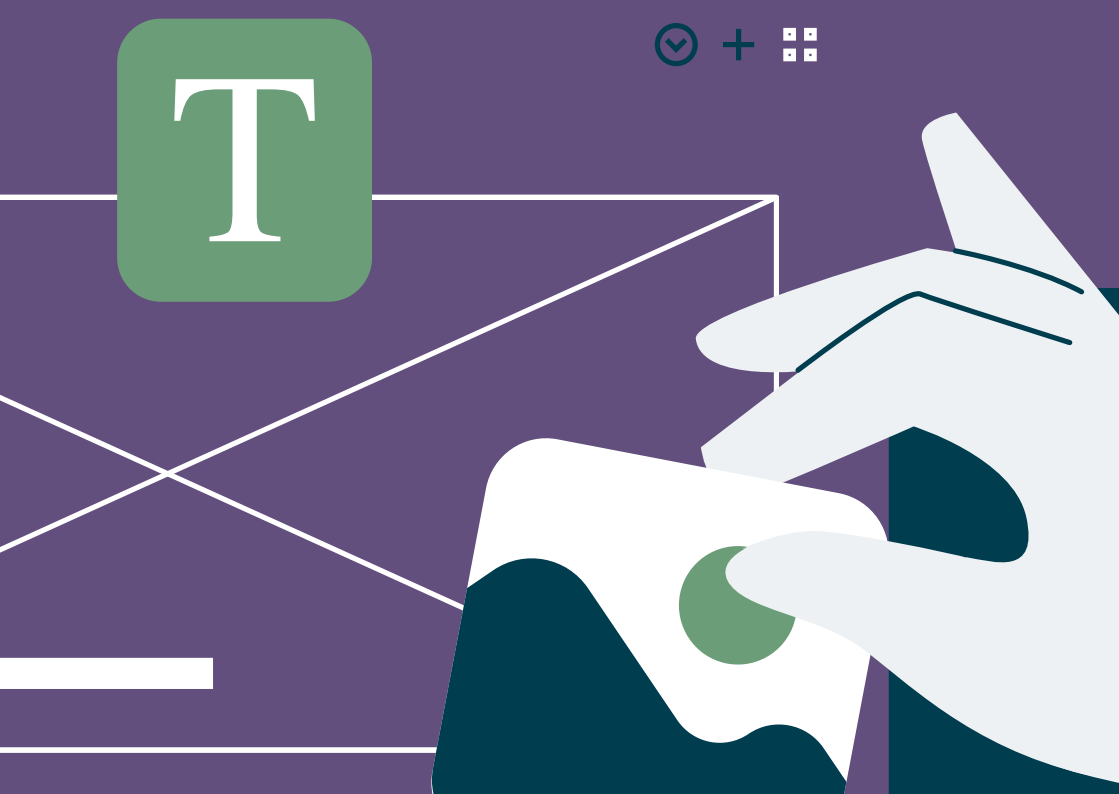
**Service delivery:** Use DPs to streamline service delivery processes. Aadhaar can facilitate targeted communication and personalized service offerings, while UPI enables instant payments for service fulfillment.

**Reach and last-mile delivery:** The extensive network of post offices across India is a boon for last-mile delivery. Leverage this infrastructure for product delivery, reverse logistics, or even house micro-retail outlets in rural areas. Partner with logistics providers using DPLs for real-time tracking and efficient delivery management.

**Upskilling and social impact:** Government schools and community centers, especially during non-school hours, can be repurposed for corporate training programs or skilling initiatives. This approach benefits both sides. i.e., corporations gain access to training facilities, while institutions add revenue streams and contribute to community development.

By creatively and responsibly utilizing both physical government assets and DPLs, corporations can unlock significant potential in the Indian market. Success lies in leveraging these assets to create a more inclusive and prosperous India.





## Tenet 10

# Reimagine branding

India's diverse demographics demand a nuanced approach to branding. Corporations must move beyond a "one-size-fits-all" strategy and leverage DPIs to create targeted messaging and engagement for each segment.

## What it means

Gone are the days of generic branding in India. Today's India can be divided into three distinct demographic segments:

**India 1:** The urban upper class and middle class. They are well-educated and have high disposable incomes. They are interested in international brands and the latest trends.

**India 2:** The semi-urban and rural middle class. They are less educated and have lower disposable incomes than India 1. They are more interested in local brands and are price-sensitive.

**India 3:** The rural lower class. They are the least educated and have the lowest disposable incomes. They are more interested in basic necessities and are very price-sensitive.

Digital Public Infrastructures (DPIs), like 4G along with the DPDP Act, can provide valuable insights and communication channels to tailor branding efforts for maximum impact.

## The possibilities

Tailor Your Brand Messages

**For India 1: Focus on benefits such as quality, style, or convenience.**

Create aspirational messages that appeal to a desire for modernity and sophistication.

**For India 2 & India 3: Highlight basic benefits like affordability or availability.**

Craft straightforward and easy-to-understand messages suitable for limited education levels.

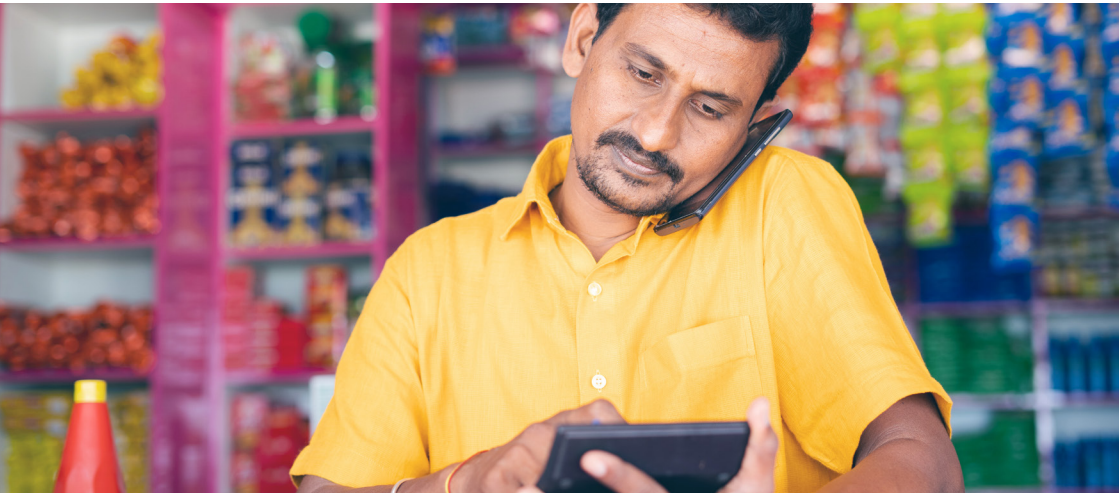


## Example Applications

**Bicycles:** In urban areas, fitness and environmental benefits are emphasized. Rural areas highlight bicycles as essential modes of transportation and livelihood enhancement.

**Mobile Phones:** Serve as communication tools, sources of weather updates, government programs, and banking services.

**Fashion:** For India 1, follow international trends.  
For India 2 & India 3, integrate functionality with regional styles.



**“Utilization of Aadhar KYC for vendor registration has improved our efficiencies and allowed for operational enhancements. We including our Vendors have been able to save up to 12% of costs by adopting Digital Public Infrastructure (DPIs) such as Aadhaar. This has also enabled an overall better experience for both our vendors and employees”**

**R.Shinivasa Naraayan, CFO – OHM Global Mobility P Ltd.**

## Additional Considerations

**Language:** Use appropriate languages for each segment. India 1 may prefer English, whereas India 2 and India 3 may prefer regional languages.

**Images:** Use images that resonate with the target audience—modern cityscapes for India 1 and rural villages for India 2 and India 3.

**Cultural References:** Connect with the audience using relevant cultural icons—bollywood stars for India 1 and folk songs for India 2 and India 3

**Community Preferences:** Understand local buying habits, such as loose vs. packaged goods preferences, and adapt accordingly.

**Word of Mouth:** Leverage close-knit community networks for marketing in rural areas.

**Nuances of Credit:** Recognize different credit needs and sources across demographics, from informal borrowing to formal financial institutions.

In essence, recognizing India's diversity and tailoring products, services, and messaging to suit the distinct needs of each demographic ensures resonance, relevance, and success across the vast landscape.



## Why it's different this time

Organizations have been trying to make inroads into rural markets for ages. Product innovations like sachets, micro-loans, and radio edutainment have long existed. Yet, the market remains largely untapped by mainstream businesses. This time will be different. **Here's why:**

### **Digital public infrastructure**

India is making rapid strides in building sophisticated digital rails for corporations to adopt and utilize. With critical components such as Aadhaar, UPI, GSTN, and ONDC, India boasts one of the most advanced DPIs in the world. Furthermore, the development of public platforms incorporating AI, ML, and Blockchain technologies facilitates the creation of public goods tailored to India's unique landscape.

## Educated population growth

India's literacy rate now stands at 77.7%, and over 600 million people—almost double the entire population of the United States—use smartphones in all corners of the country.

## Willingness to spend

Indian customers are ready to invest if they see value and convenience. For instance, the Paytm Soundbox, employed by over 69 million merchants, exemplifies new businesses emerging from the rollout of the India stack, showcasing the enthusiasm of rural businesspeople to adopt tools that enhance their operations.





## Aspiration

Every 20-year-old in India is exposed to the Internet. Coupled with rapid travel and population distribution, most of India's youth know the potential for improved quality of life. This awareness and higher literacy rates create a unique opportunity for companies to target this segment and cater specifically to their aspirations.

## Access

By 2023, it's believed that 99.6% of households in India will have electricity, spurring economic growth. The penetration of 4G internet is remarkable; from just over 400 million users in 2018, India has reached 759 million and is anticipated to grow to 900 million by 2025. With 56% of new internet users coming from rural areas and 93% of villages covered by 4G, the transformative impact of widespread internet access enables opportunities such as online education, telemedicine, and e-commerce.



## **Awareness about Aadhaar and UPI**

Most Indians possess Aadhaar, and 300 million use it for regular financial transactions. Meanwhile, 300 million Indians and 50 million merchants have adopted UPI, with digital payments showing a 13% growth since 2021—36% of which is attributed to rural users.

## **The Data Protection Act**

The passing of the Digital Personal Data Protection Bill, 2023 by the Indian Parliament is expected to enhance credit availability for consumers and small businesses, unlocking potential for companies in previously inaccessible markets.

Given the emerging trends—blurring rural and urban boundaries, increasing literacy, enhanced access, and burgeoning digitalization—the time is ripe for universal and equitable expansion of businesses throughout the Indian economic landscape.



# Conclusion

## **New horizons with India's Digital Public Infrastructure**

With a population of 1.4 billion, India represents a complex mosaic of socioeconomic statuses, purchasing power parity, language variants, and cultural nuances. To effectively reach and engage this diverse audience, sophisticated infrastructure, technological innovation, and strategic thinking are essential.

Fortunately, India possesses an extraordinary asset: one of the world's most advanced digital public infrastructures. The India Stack provides a wealth of opportunities for companies to adopt innovative approaches, hyper-personalize their offerings, and meet the unique demands of the Indian market.

Taking advantage of this opportunity requires a significant shift in mindset and practices. Through our experiences in developing digital public infrastructure and products for leading brands, we've identified these ten guiding principles to drive universal and equitable business expansion. From creating tailored MVPs

for rural India to harnessing the influence of local delivery agents, these tenets are designed to foster stronger connections with diverse communities while ensuring sustainable growth in the region.

Remember to implement these principles as you navigate the journey of expanding your business in this market. They offer actionable insights to refine your strategies, enhance customer engagement and leverage India's remarkable digital public infrastructure.

Moving forward, dismissing the potential of the India Stack as merely a tool for citizen service delivery would be a mistake; it forms the bedrock for a flourishing Indian economy and presents an equitable framework for small businesses, startups, and large enterprises alike. Embracing the India Stack is the most sustainable and effective expansion strategy for any corporation seeking to thrive in this growing marketplace.

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