

---

# India's Quiet Digital Revolution



By Vinika D. Rao , INSEAD

**As China's breakneck digitisation rivets the world, another Asian giant is unfurling its own transformation.**

It may just be the most sweeping revolution you've never heard of. As the world is transfixed by China's digital advancements, its internet juggernauts and frenetic innovation in the last decade, India is undergoing its own upheaval measured in terabytes, largely away from the international media spotlight.

The numbers are staggering even by the sub-continent's standards. More so the speed. Some 1.2 billion people are now registered on Aadhaar, the national biometric digital identity programme introduced in 2009. More than 80 percent of Indian adults now have at least one digital financial account, thanks largely to the Jan Dhan scheme launched in 2014, just months after Prime Minister Narendra Modi was first sworn into office. The vast majority of the accounts are linked by the Unified Payments Interface (UPI), which started in 2016 and logged 1.2 billion transactions in November alone. Another mammoth digital infrastructure, the two-year-old Goods and Services Tax Network, unifies India's 60 million small and medium enterprises on a single platform that replaced a confusing array of federal and local taxes.

There are now more than 450 million mobile internet users in India, a number that is expected to grow to **667 million** by 2022. Not so surprising considering that India has the **lowest data costs** in the world and its fixed-line download speeds continue to rise. It's not just the urban middle class who have benefitted. Nearly half of India's 250,000 village councils are now connected by fibre optic networks, with the other half scheduled to come online in the next two years. More than 300,000 so-called common service centres have been set up around the country to provide even impoverished villagers with access to digital services.

India's High Commissioner to Singapore, Jawed Ashraf, highlighted many of these advancements at the 4<sup>th</sup> Annual Emerging Markets Conference at INSEAD earlier this year. Digital technology, he said, "has changed the way we live, consume, work, communicate, even entertain ourselves."

### **Fast and furious**

The economic and social impact of this rapid digitisation drive is manifold. India has rocketed from 142<sup>nd</sup> to 63<sup>rd</sup> spot in the World Bank's **Ease of Doing Business Index** in just five years, and from 81<sup>st</sup> to 52<sup>nd</sup> place on the **Global Innovation Index** in four. The country is now the third-largest start-up ecosystem in the world, birthing 8,000 start-ups in the last five years and eight unicorns (start-ups with valuations of US\$1 billion or more) in 2018 alone, Ashraf noted.

Udaan, the Bengaluru-based B2B trading platform, became the **fastest Indian start-up to become a unicorn** in September 2018, only 26 months after its launch by three former Flipkart executives. Hotel chain OYO, founded in 2013 by 19-year-old Ritesh Agarwal, announced in May it had become the **second-largest hotel network in China** within two years of opening its first *jiudian* in the country. Masayoshi Son of OYO investor Softbank Group has even loftier ambitions for OYO, which is also expanding in the US, UK and Southeast Asia. OYO "will soon become the largest hotel network in the world," he said at a shareholders' meeting in **June**.

In fintech, India overtook China in venture capital-backed deal activity in the second quarter of 2019, according to market research group **CB Insights**. Indeed Chinese investors injected US\$3.5 billion into Indian tech in 2018, even as **American behemoths** Amazon, Walmart, Google and WhatsApp made their own forays into the massive market.

Flourishing businesses necessarily create jobs. Occupations such as plumbers, cleaners and painters, which previously relied on word of mouth, now enjoy more opportunities with online visibility. In manufacturing, the mobile phone-making industry has created about **400,000 jobs** in the last five years as the number of factories increased from two in 2014 to 127 in 2019.

But it is digitisation's potential for levelling the playing field and reducing gender and wealth gaps that may have a greater impact on Indian society in years to come. Ashraf underscored this in his address at the INSEAD conference. He cited a new universal healthcare scheme that will cover 500 million Indians with affordable healthcare; welfare payments to the poor and marginalised; and the MUDRA scheme which will disburse over 200 million loans to micro enterprises and whose beneficiaries are 75 percent women. The government has been able to directly credit payouts into the bank accounts of millions of Indians, said Ashraf.

“For example, the benefits of subsidies for cooking gas – and over 70 million women have been given cooking gas connections – flow directly not into the husband's account, but into the accounts of women,” said Ashraf. “It is only possible because we have been able to link these (Aadhaar and Jan Dhan banking) accounts to the health and welfare schemes.”

Digitisation has also boosted farming, which still employs about 50 percent of Indians and accounts for some 18 percent of Indian GDP. The government's electronic National Agriculture Market has helped farmers increase revenue by up to 15 percent, consulting firm McKinsey said in a recent **report**. Farmers can now obtain cheaper credit by way of online banking and crop insurance through more accessible digital land records. These and other digital innovations in Indian agriculture can add up to **US\$65 billion** of economic value by 2025.

Ashraf said: “An economy that has a billion-plus cell phones, a billion-plus biometric identity and a billion bank accounts is really poised to do anything that imagination and inspiration enable us to do.”

### **Towards a 5-trillion-dollar economy**

No revolution can take place without cost and resistance, much less in a country as populous and diverse as India. Modi's demonetisation order on 8 November 2016 put the two largest denomination banknotes out of

circulation overnight, in part to promote digital payment, but sparked protests and continuing criticism. The GST is blamed for forcing **small businesses** which couldn't comply with monthly online filings to shut down, resulting in the loss of hundreds of thousands of jobs. The linking of Indians' digital ID with their bank accounts have triggered privacy disputes in court.

Digitising India also means contending with inadequate infrastructure and traditional ways of life. Only about 40 percent of the population have an internet subscription. And even though most Indians now have access to online banking, 90 percent of all retail transactions in India are still done in cash as many people remain bewildered by PIN numbers or distrustful of technology.

If Modi's first term is any indication, however, there will be no let-up in India's digitisation drive in the next five years. The prime minister, who won re-election by a landslide in May, promises to nearly double the Indian economy to US\$5 trillion by the end of his second term. Not such a tall order since India has shown it can change with scale *and* speed.

#### **Find article at**

<https://knowledge.insead.edu/economics-finance/indias-quiet-digital-revolution>

---

#### **About the author(s)**

**Vinika D. Rao** is the Executive Director of the INSEAD **Emerging Markets Institute**, **Gender Initiative** and **Africa Initiative**, and the Asia Director of the **Hoffman Global Institute for Business & Society**.