India’s innovation economy is booming, or so the country’s technophiles would have us believe. It’s not hard to see why.

The country’s start-ups—which many believe can help plug major gaps in financial services, health care and employment—received over $15 billion in funding last year. Smartphones, which are the primary way Indians access the internet, are becoming a tool of the masses. The number of users is predicted to rise from 300m today to well over half a billion in the next three years. To show that “dinosaurs can dance”, established companies are spending big on digitising their businesses to ensure they can meet the demands of a new breed of digitally inclined customers. And the government, through regulatory reforms and programmes such as Startup India and Digital India, wants to lend new and established companies the support they need to grow.

Can India’s innovation economy live up to the hype and become an engine of future growth? On September 7th, The Economist Events gathered more than 200 C-suite executives, entrepreneurs, critical thinkers and government officials at the India Summit 2016, to debate whether India can become a global innovation hub and what is needed to help its innovation economy develop and prosper.
KEY TAKEAWAYS

India is off to a solid start…
Prime Minister Narendra Modi’s administration has launched several initiatives—Digital India and Startup India among them—to improve internet infrastructure across the country and support new and digitised businesses. The most important regulatory step towards seeing the country climb the World Bank’s ease of doing business index is the passing of a goods and services tax (GST) that will subsume India’s miasma of local and national taxes into a uniform code.

…but more landmark reforms are needed
India’s success in IT in the 1990s happened despite government, not because of it. A mobile-internet boom, on the other hand, will need sound regulation that makes payment systems easier, enables improvements in information and communications technology infrastructure and reduces red tape. Complex land and labour laws will also need an overhaul.

India’s youth can fuel growth if productivity improves
Unlike most developed countries, which are fighting slow growth and an ageing population, India boasts a young workforce and entrepreneurial nous. The challenge will be to make the most of its favourable demographics. Although labour is in abundant supply, nine out of ten jobs are in the informal economy, which generates only half of domestic output.

Education must be reformed
Primary and secondary education reform is urgently needed. “We are a country of contradictions,” said S.D. Shibulal of Axilor Ventures, formerly of Infosys, an IT giant. While colleges produce 1.5m engineering graduates every year, millions of kids drop out of schools. Moreover, the focus should not only be on faculties like engineering and medicine, but also on other areas, such as liberal arts. The current exam-oriented, rote-learning approach must be ditched in favour of better-rounded educational programmes.

Innovation should solve everyday problems
India’s innovation must go beyond IT to address everyday problems such as giving people access to clean drinking water, improving sanitation and developing new and renewable sources of energy. The West is good at developing blockbuster drugs, driverless cars and smart thermostats; India’s pursuit should be to build affordable, durable and lean solutions that help improve the quality of life of India’s masses.

Inclusive growth must occur in practice, not just on paper
Progress should not be come at the cost of social welfare. Initiatives such as the Smart Cities Mission and Startup India should lift millions of people out of poverty. The Digital India campaign is “more for the poor and the underprivileged”, said Ravi Shankar Prasad, minister of law and justice and of information technology. “It is for the rickshaw drivers, masons and electricians seeking business through their smartphones.”
LIVING UP TO INDIA’S POTENTIAL

“We are far below our best potential, even if our figures indicate 7%-plus growth.”

Arun Jaitley
Finance minister
India

As transformational initiatives go, the introduction of the GST in August was one of the biggest in India’s recent history. Once in force, it is estimated it will add 1–2% to India’s GDP by supplanting a variety of local levies. The GST will “facilitate seamless transfer of goods across the country and bring a lot of financial equity”, said finance minister Arun Jaitley. He assured summit participants that the government is up against a “stiff target” date for implementing the scheme, and is “on course” to achieve it.

Banks need rescuing
Although official figures indicate that the economy grew by a healthy 7.5% last year, the ailing banking sector needs immediate attention. Public-sector banks hold 70% of all outstanding assets, and the central bank estimates that 17.7% of those are “stressed”. Mr Jaitley acknowledged that his “first priority will be [to fix] the health of public-sector banks”. These will need around $40 billion in fresh capital by 2018 just to conform to minimum standards. Dud loans are also limiting the banks’ ability to fund India’s growing economic needs.

Reason for hope
To fix some of the chronic problems, the government has “already initiated a number of steps”, Mr Jaitley said, referring to a package of reforms across the textiles, real estate, steel and power industries. An above-average monsoon after two years of merciless drought has also lifted the economy.

Progress should not come at the cost of social welfare, Mr Jaitley said. “We should blend reforms along with social-sector schemes so that the benefit is passed on to the people who need that advantage.” He also gave credit to a new wave of optimism among India’s “aspirational” middle class, which keeps the government on its toes.
Narendra Modi’s Startup India campaign seeks to give small and medium enterprises the opportunity to get off the ground. But the initiative is at odds with the country’s lousy digital and physical infrastructure. How is India placed to overcome these challenges?

Fail, recover, reboot

“Startup India is an excellent initiative, but we still have a long way to go,” conceded S.D. Shibulal, a co-founder of Axilor Ventures and of Infosys, an IT giant. Innovation thrives on “experimentation”—and experiments often fail. The government must allow start-ups to shut down more efficiently just as it promises them an environment where they can flourish, so investors and entrepreneurs can dust off their failed ventures swiftly and start afresh.

The second Silicon Valley?

Jay Chen, chief executive of Huawei India, remarked that India has all the ingredients it needs “to become the next Silicon Valley”. The country benefits from “a big, young and energetic population that integrates easily with the global market.” Bangalore is fast becoming an innovation hub, where many multinationals have set up their research and development labs. Chinese engineers now routinely make trips to India’s tech capital to learn new skills.

But India’s Silicon Valley will not be about driverless cars and smart thermostats. It will instead seek to solve everyday problems, bringing clean drinking water to millions, building better sewage management facilities, and constructing zippy flyovers “in 30 days rather than five years”, said Amitabh Kant of NITI Aayog, a government task force. Innovation is not just about concocting a blockbuster drug, but also about finding ways to deliver it at an affordable price. “That’s transformational, if not as exciting as coming up with a new drug molecule,” said V.T. Bharadwaj of Sequoia Capital.

Transform education to fuel innovation

To foster such a change, the primary and secondary education system will need a shakeup. Rote learning in classrooms should be ditched in favour of experiential and vocational training. “To create more inquisitive minds, tinkering labs and incubation centres”, said Mr Kant, “government must disrupt its education system radically.” Only then will India be poised for a different kind of innovation.

“In developed economies, innovations are expensive, faster, smarter. India needs to focus on affordable, durable, leaner innovation.”

S.D. Shibulal
Founder
Axilor Ventures

THE INNOVATION ECOSYSTEM
REDEFINING INDIA’S ECONOMY

“Innovation is the creation of new ideas, products and processes, and an enabler for entrepreneurship.”

Ananth Venkat
Managing director and regional head
Standard Chartered

Smart innovations can help start-ups punch above their weight. Today, relatively unknown brands can go viral, disrupt industries and win customers faster than before.

Local business, global reach
Falling broadband rates and cheap smartphones have taken competition from cities to smaller towns, said Ananth Venkat of Standard Chartered Bank. The hinterland contributes up to 40% of aggregate demand. Artisans and local craftsmen who would once peddle their wares only to local clients now tie up with e-commerce firms to reach customers from across the country.

Big companies are learning from smaller ones. “We see start-ups as opportunities to rethink our own business model,” said Anish Shah of Mahindra Group. Multinationals that wear the start-up hat have the added advantage of a faster turnaround from cobbling together a prototype to building the final product. Small firms, on the other hand, can benefit from the scale that the giants can bring to their businesses.

Show me the money
Ideas need investment to flourish. Banks, angel investors and venture capitalists all play an important role. “But innovation and disruptions are punishable offences these days,” quipped Mr Venkat, perhaps referring to the excess of bad loans that plague Indian banks. He pointed to the Unified Payment Interface, which promises to bring banking to India’s 1.2 billion people, as a source of hope: it will provide vital working capital, improve productivity and “have a transformational impact on supply chain financing”, he said.

Try again, fail better
A good idea and a stellar team do not guarantee success; the “successful start-up” is rare enough to be almost an oxymoron. Entrepreneurs need to learn that there is no shame in failing. “One of our biggest problems is that failures are not celebrated. So, most things die before they start. People give up,” lamented Mohit Saxena, the boss of InMobi, a fast-growing online firm that sells technology and services for advertising on the mobile internet.

Kishore Biyani, founder and chief executive of Future Group, was quick to sound a word of caution about the hype surrounding start-ups. “90% of them”, he reckoned, “create little value and have no meaning at all.” Deepak Shahdadpuri of DSG Consumer Partners saw the brighter side and reflected on how start-ups could learn from mistakes made by bigger players. He added that the few companies that can figure out cost-effective ways to solve everyday problems, especially in rural India, will be “sitting on a gold mine”.

“Innovation is the creation of new ideas, products and processes, and an enabler for entrepreneurship.”

Ananth Venkat
Managing director and regional head
Standard Chartered
Painful reforms need sound policy backing, lest they be overwhelmed by a combination of politics, bureaucracy and corruption. Mr Modi’s start-up initiative, while commendable and ambitious, needs to be complemented by reforms in the physical and digital realms. Has the government done enough?

Fix domestic infrastructure, then invite foreign competition

“We have been working at various levels to make India an investor-friendly destination,” Nirmala Sitharaman, minister of state with independent charge for the ministry of commerce and industry explained, while acknowledging that India “is not in an enviable position” in this regard. Over 1,200 unwanted laws have been scrapped, and states are being encouraged to outperform each other. But the government is also cautious. For instance, while India “can create several Walmarts of its own”, it is not a favourable time to open the multi-brand retail sector to foreign competition. “[Poor] infrastructure, last-mile connectivity and [inadequate] financial inclusion of farmers does not make it a level playing field,” she said.

It’s a great start, but a lot needs to be done

In that context, what do foreign players make of India? “Over the last four years, we have been moving forward,” said Juvencio Maeztu, boss of Ikea India. “Roll-out of [the] GST is fantastic news for consumers and businesses.” Shaktikanta Das, a bureaucrat from the ministry of finance, credits the government for having high expectations of the public service, which is “under a lot of pressure [to perform]”.

Indeed, there is no room for complacency. Outmoded land and labour laws, for instance, need to be rewritten. The state and federal governments need better on-ground co-ordination to implement reforms at the grass roots. Panellists also singled out schools and colleges for special treatment. “Take education away from state education ministers. Empower the principals and teachers,” pleaded Nitin Desai, chairman of the Institute of Economic Growth. “You can’t have skilled development without quality education.”

Such changes will not come about overnight. While the glass may still be half-empty, said Mr Maeztu, “We have been highly satisfied with government policies ... We see big movement in a positive direction, and we welcome that.” This cheery sentiment was in stark contrast to the gloomy mood that prevailed among panel members and the audience at the 2015 summit.

“We need to move from a culture of control and inspections to self-compliance, but overall we see big movement in a positive direction, and we welcome that.”

Juvencio Maeztu
Chief executive
Ikea India
YOUNG AND RESTLESS? EMPLOYING THE MASSES

“We are making progress.”

Manish Sabharwal
Chairman and co-founder
TeamLease

Every year for the next decade, more than 10m Indian youngsters will enter the workforce. At present, around 90% of the country’s jobs are in the informal economy. Over 600m people depend on the agriculture sector, which is fragmented and over-reliant on rainfall. Manufacturing accounts for 15% of GDP but just 11% of jobs. Fifty million people toil in factories with little or no electricity.

Focus on wages, not jobs
Where will the additional jobs come from? This seems a pertinent question. But according to Manish Sabharwal, chairman and co-founder of TeamLease, “India does not have a jobs problem. We have a wages problem.” Mr Sabharwal’s staffing company recruits people from the informal sector and employs them with companies across various industries. “Urbanisation, regulatory cholesterol and lack of human capital are [the] top three reasons for jobless growth in India,” he said.

A LinkedIn for the unorganised workforce?
Suraj Saharan of Delhivery, a logistics start-up that employs over 15,000 deliverymen, complained of having to deal with “insane laws and regulations”, for which there is a desperate need to “change and simplify”. The informal economy also poses the peculiar challenge of there being no way to verify the credibility of millions of candidates seeking jobs. How can you trust a person without any formal employment record to deliver high-value items to customers who pay in cash? Since there is no database prospective employers can use to scan the history of new hires, Mr Saharan put forward the possibility of a “LinkedIn for the blue-collar workforce”.

A solvable problem
Martin Rama of the World Bank recommended that India make a conscious effort to “generate female employment”, saying “it could learn from neighbouring countries like Bangladesh”. While the “level of informality in India is massive compared to any other country”, said Mr Sabharwal, “joblessness is not a problem like cancer or climate change; we are making progress.”
MANUFACTURING INDIA’S FUTURE: SMES, START-UPS AND ENTREPRENEURS

What they lack in size, capital and deep pockets, India’s 1.3m small and medium enterprises (SMEs) make up for in frugal innovation and duct-tape ingenuity. Unlike lumbering giants, start-ups are nimble-footed and find ways to do more with less. Why is it important to nurture these upstarts?

Innovation outside of IT will boost jobs
If India wants to create “Nests and Teslas”, said Sanjay Nath of Blume Venture Advisors, it needs “to favour true tech innovation outside of consumer internet firms”. Manufacturing should be singled out, according to Venkat Venkatakrishnan of GE Appliances. “Manufacturing has a bigger multiplier effect than any other industry. It creates jobs in other sectors.”

Companies such as Paras Batra’s Leaf Wearables, which have hardware at the heart of their products, are looking for help. “Mentorship and expertise” is hard to come by. “Even if you succeed in making a prototype by hustling your way around, it’s tough to raise funds to take the product to market,” Mr Batra complained. Crowdfunding, too, can only go so far, and its limits are determined by the country’s culture. But, “In India, if you hit the sentiment, you stand a chance to raise money.”

Manufacturing start-ups will continue to face roadblocks. Until the government and investors have over the solution, said Mr Venkatakrishnan, is to “travel, meet people and learn”.

“The success of crowdfunding is determined by the country’s culture. In India, if you hit the sentiment, you stand a chance to raise money.”

Paras Batra
Co-founder
Leaf Wearables
India’s firms have earned a solid reputation overseas, but roughly 179m of its people remain destitute and in desperate need of help. In his speeches, Mr Modi has often talked about “inclusive growth”. How can technology assist in achieving it?

From mobile revolution to financial inclusion

“Digital India is more for the poor and the underprivileged. It is for the rickshaw drivers, masons, and electricians seeking business through their smartphones,” said Ravi Shankar Prasad, minister of law and justice and minister of information technology.

“Financial inclusion is one area that has been led by the government,” said T.R. Ramachandran of Visa. In regional rural banking, microfinance, and the proliferation of banking correspondents who sign people up for savings accounts, regulators have shown the way. “It’s time for the private sector to take over the baton from what has hitherto been the purview of the government,” he said. How can this be done?

One way is to ride the wave of “technology [that] has created a fundamental shift in basic financial services”, said Shinjini Kumar of Paytm, a mobile wallet firm. Empowering customers with user-friendly ways to transact over smartphones will lead to financial inclusion. “It is important to create a tech backbone that reaches the villages,” according to Hemant Kanoria of Srei Infrastructure Finance. Where banks have failed to lend to the poor in the last few years, companies like Srei have filled the gap and have “continued to grow”.

The myth of disability

Srikanth Bolla, chief executive of Bollant Industries, a packaging firm, goes a step further. Bollant employs “differently abled” people in factories and customises machinery to suit workers’ disabilities. The company’s drive to make a difference for the physically and mentally disabled is so high that Mr Bolla sometimes wonders if the slogan for his company should read, “We also employ able-bodied workers”.
POWER TO THE PEOPLE

One of the top priorities of the Modi government, after it stormed into office in 2014, was to rejuvenate the stumbling power sector. Around 50m of the 250m households in India have no access to electricity. At the India Summit 2014, Piyush Goyal, minister for power, coal and new and renewable energy, promised that “within the span of its term in office, [the government] will deliver 24/7 power to every home in the country”. Mr Goyal believes the daunting task can be achieved by 2020 if not earlier.

There are daunting hurdles
One of the biggest problems is to bring power to India’s remote hamlets on mountains and inside forests. Mr Goyal has also been bequeathed a troubled legacy. When he took charge, power firms were losing $10m every year, with a cumulative debt of $65 billion.

A turnaround just ahead?
Things are set to change, Mr Goyal assured summit participants. “By 2019 or 2020, no state distribution power company will report a loss,” he said. The centre and state will work closely to “serve the people”. Coal-fired plants are meeting the bulk of the country’s electricity needs. This will continue until there is a breakthrough in producing consistent and “affordable renewable energy”, he said.

“If we could find ways to develop affordable renewable energy, I would close down all coal plants today.”

Piyush Goyal
Coal and renewable energy minister
India
THE EXTRA MILE

The World Bank reckons that India’s transport network is one of “the largest and... densest in the world”. By length, its roads rank third, behind only those of China and the United States. But “longer” does not necessarily mean “better”. National highways account for just 2% of India’s total road length, but carry 40% of the traffic load. Meanwhile, big cities are plagued by clogged and crumbling roads, and lumbering freight trucks trundle slowly across state borders before reaching their destinations. What steps has the new government taken to amend the country’s woeful infrastructure over the past two years?

First, build quality roads

“When we complete five years of government, the target is [for transport] to have added at least 2–3% to the GDP,” said Nitin Gadkari, minister of road transport, highways and shipping. Building quality roads and new ports will play a major role in achieving this lofty target. Completing existing projects quickly, he said, was one of the government’s top priorities. The average speed of laying new roads in the country when the Bharatiya Janata Party took office two years ago was 2–3km per day. Today, the figure is around 23km, and the aim is to reach “42km per day by the end of the year”.

Another vexing problem is the record number of road deaths. Although it will “take time” to fix, the aim is to halve casualty rates within two-and-a-half-years, by improving the quality of roads and implementing a host of safety measures.

Next, take to the water

Roads bear a disproportionate burden in transporting goods across India. Hence, logistics overheads account for up to 18% of the total cost of production, as compared to just 8% in China. “Make in India will be possible only if we reduce logistics costs,” he said. Harnessing the power of inland waterways will ease some of the pressure. The government is looking to convert more than 100 rivers into national waterways. This could provide relief for office-goers, weary travellers, frustrated lorry drivers and companies that ferry goods across the country.

“When we complete five years of government, the target is [for transport] to have added at least 2–3% to the GDP.”

Nitin Gadkari
Minister of road transport, highways and shipping
India

“The Economist
Events
YOU’VE COME A LONG WAY, BABY

India has come a long way since the new government took office two years ago. While other emerging economies have wobbled in recent times, India has consistently achieved commendable GDP growth of more than 7%. The country’s biggest strengths include a young workforce and a strong pool of entrepreneurial talent.

But India also has its fair share of problems. Steps to fix the ailing banking industry will need to get underway swiftly. To create consistent and equitable growth, Mr Modi must implement big-bang reforms, and build a business-friendly climate which will fuel innovation-led growth. Thus far, caution has been a watchword of Mr Modi’s domestic reform policy. Will the new government unleash a set of crucial but unpopular changes during its third year in office?