WORLD ECONOMIC FORUM

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Regional Agenda

India Economic Summit

Fostering an Inclusive India through Digital Transformation

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Contents

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Preface

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Head of India and South Asia
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World Economic Forum

Fostering an Inclusive India through Digital Transformation

The India Economic Summit, held in partnership with the Confederation of Indian Industry, convened regional and global leaders to explore how to collectively shape policies for inclusive growth and harness the benefits of the dawning Fourth Industrial Revolution. It is a critical moment for the country, when it can ensure that its economic growth is more broad-based and socially inclusive, thereby benefitting its people and communities.

Under the theme *Fostering an Inclusive India through Digital Transformation*, participants in the summit discussed digital economy catalysts that can drive structural transformation and debated how to strengthen public-private collaboration on key global and regional challenges affecting the subcontinent. The summit offered these leaders an opportunity to gain insight through candid discussions in a variety of session styles that focused on the strategic actions that can deliver shared prosperity across India.

As the government ensures that the benefits of the previous industrial revolutions reach all Indians, it should also prepare itself for the Fourth Industrial Revolution – a technological revolution that is changing the scale, scope and complexity of the opportunities and challenges that we face. India's leadership in innovating with technology continues to improve the country's economic prosperity, civic participation and digital governance – engaging with its citizens, updating them on policies, resolving issues and connecting with them through live conversations. And yet, further reforms and alliances are needed to accelerate development and expand socio-economic opportunities by leveraging digital transformation.

Indeed, innovation was at the forefront of the summit: participants were transported through a virtual reality experience, and gained insight in hubs featuring Transformation Maps linking issues of importance to the country. They explored the world of start-ups and entrepreneurship in sessions like Start-Up Nation through programme tracks highlighting new business models and thinking. In fact, virtually every session at the summit featured a digital dimension.

Participants deliberated new approaches to ignite transformation, particularly in the face of swift technological changes that have the potential to spark inclusive growth and strengthen the entrepreneurial spirit of the country. They did so through a programme built on a selection of System Initiatives, part of the platform approach of the World Economic Forum. These System Initiatives focused attention on issues such as digital economy and society; employment, skills and human capital; energy, environment and natural resource security; agriculture and food security; long-term investing, infrastructure and development; and manufacturing.

This year's summit saw more than 600 participants from over 30 countries. This figure includes 440 business leaders, among them more than 140 top executives; 34 public figures and ambassadors; over 100 women leaders; more than 60 Young Global Leaders, Global Shapers and Social Entrepreneurs; and other Forum communities, including media leaders and members of the academic community.

The Co-Chairs of the summit in New Delhi reflect a diverse group of leaders from the public and private sectors. On behalf of the Forum, I would like to thank them for their support before and during the summit. I would also like to thank the Confederation of Indian Industry for its great support and partnership, and look forward to continuing this into the future.

The World Economic Forum is grateful to its Partners, Members and communities for their ongoing commitment to and participation in the India Economic Summit. We look forward to welcoming you to our next gathering.

New Delhi Highlights

India Social Entrepreneur of the Year

Neichute Doulo of Entrepreneurs Associate (EA) is the winner of the 2016 India Social Entrepreneur of the Year award. Doulo was honoured for his work in promoting entrepreneurship and peace-building in north-eastern India. The Naga movement, one of the oldest unresolved armed conflicts in the world, has hampered economic development in the region. Over the last 20 years, EA has successfully launched the first generations of Naga and Manipuri entrepreneurs, built up vibrant local markets, catalysed local production, generated local jobs, activated financial institutions and steered government will to demonstrate that entrepreneurship can be the route to peace building. More here.

Transformation Maps at the Summit

The Forum's Transformation Maps are a dynamic knowledge and analysis tool for visualizing change in a complex and interdependent world. The tool reflects the collective intelligence of the Forum network, is expert-curated, and provides a synthesized and holistic base for exploring and understanding the key issues driving transformational changes across economies, industries, global issues and System Initiatives. For the first time at the India Economic Summit, Transformation Maps were featured in a series of sessions ranging from diversity to the future of work, which took place in the Transformation Hub. They can be accessed on the Forum digital platforms: under the Knowledge section of TopLink or via the Forum Knowledge app.

Salsa, Sidra and Selam at the Source

To showcase virtual reality, one of the emerging technologies of the Fourth Industrial Revolution, the Forum offered summit participants three so-close-you-can-touch-them 360-degree virtual reality (VR) experiences. The trio of short films brought to immediate proximity the life of a 12-year-old Syrian girl Sidra in the Za'atari refugee camp in Jordan ("Clouds over Sidra"), the sexy spontaneity of Cuban dance from the rumba to reggaeton ("A History of Cuban Dance") and the daily miles-long trek of 13-year-old Ethiopian Selam to fetch water from a murky leech-filled pond ("The Source"). Participants put on virtual-reality viewers and sat back to enter these worlds – children playing football practically at their feet, getting startled by salsa dancers swishing by, and cheering along with howling villagers celebrating the long-awaited drilling of a well and the arrival of clean, drinking water – a tech-enabled tour around the world from a chair in New Delhi.

Improved Knowledge App for Participants

Using the new Forum Knowledge app, participants explored 100+ economies, industries and global issues through analysis by more than 200 specialist sources globally (think tanks, research institutes, media outlets), and gained contextual knowledge by topic, including India.

Co-Chairs

"It is a phenomenal time for India. We have invested most of the money we have raised in India. It is very important that we develop our SMEs and start-ups. They are what we need."

Anil Agarwal
Executive Chairman, Vedanta Resources, United Kingdom

"The challenges will be daunting with the Fourth Industrial Revolution and the tensions between jobs and digital developments. But we have to make sure that progress is inclusive."

Johan C. Aurik
Global Managing Partner and Chairman of the Board, A.T. Kearney, USA

"To keep the pace of progress would entail further structural and institutional reforms. But if that is done, then it will be mind-blowing for India."

Gita Gopinath
Professor of Economics, Harvard University, USA

"India's start-ups will disrupt the world. They will disrupt health, education. They will do a lot more social innovation."

Amitabh Kant
Chief Executive Officer, NITI Aayog, India

"You have to make sure you are investing in the right things, including basic infrastructure. You can't do it if you have 200 million people without electricity."

John Rice
Vice-Chairman, GE, Hong Kong SAR

"For the first time, Indians are very proud of producing for India. Indian entrepreneurs are now accepting that we should build something for India, working for technology that will serve Indians."

Vijay Shekhar Sharma
Chief Executive Officer, Paytm, India

High-Tech Thrills and People's Skills

For India to master the economic, social and competitiveness challenges posed by the Fourth Industrial Revolution, it will need the right ecosystem to promote innovations for the local market that can then be taken global. Top priority: skills.

Developed and developing economies alike have to confront the changes that are taking place with the rapid adoption of a range of technologies, from artificial intelligence and the Big Data revolution to robotics and quantum computing. With over 300 million people already online and 1 billion expected by 2025, India appears poised to transform itself into a future-ready nation. With a raft of government initiatives to promote digitization and digital governance, skills development, entrepreneurship and manufacturing, India is setting up a platform from which it could take off and sustain high growth for decades (the economy is expected to expand by 7.6% this year).

"You have to create the right ecosystem," Summit Co-Chair Amitabh Kant, Chief Executive Officer of NITI Aayog – a government policy think tank – told participants in the closing plenary. "The government must act as a facilitator and spearhead change." Leading the charge towards mastery of the Fourth Industrial Revolution will be India's emerging entrepreneurs. Indian innovators took Silicon Valley by storm; there is no reason why, given the right conditions, home-grown talents cannot reshape their own country. "We need to allow Indian entrepreneurship to grow. We need young entrepreneurs to take on the Amazons of the world by sheer technology and their ability to understand the Indian market better," said Kant.

"We don't want to miss the digital revolution; we want to lead it," declared Minister Ravi Shankar Prasad, who holds the portfolios of Law and Justice and Electronics and Information Technology in the Indian government. India is already proving what it can do. The country is on its way to possibly becoming the world's first cashless society. It has made significant strides in digital governance with the launch of the Aadhaar national identification number project, in which nearly 90% of the population had enrolled by the beginning of October 2016. Opened last year, the government's DigiLocker, or digital locker, service for Indian citizens to store personal documents is now used by nearly 2 million people. Most of India's states have digitized

"A lot of people who, a few years back, could not get on the digital wave are now getting on. It will make a lot of young Indians digitally literate."

Sunil Bharti Mittal
Chairman, Bharti Enterprises, India

land records. India is also the world's biggest offline internet (download content online but access offline) market.

Soon to come, if the right ecosystem comes together, are world-beating Indian technology or tech-enabled enterprises – not copies of Google or Uber, but originals that start as solutions to local problems. India's large consumer market and online customer base have spurred a boom in start-ups.

"For the first time, Indians are very proud of producing for India," reckoned Summit Co-Chair Vijay Shekhar Sharma, Founder and Chief Executive Officer of Paytm, an Indian e-commerce company based in Noida, an industrial development in the National Capital Region. "Indian entrepreneurs are now accepting that we should build something for India, working for technology that will serve Indians." But, he added: "The opportunity is to build a global company out of India and not to give the market to a global company."

The most important part of the ecosystem – and the most difficult to achieve – is skills development. "With the convergence of digital and industrial, a different set of skills is required to win," explained John Rice, Vice-Chairman of GE in Hong Kong SAR and another Summit Co-Chair. "Every industrial revolution brings with it dislocation. You can't have your head in the sand. If the goal is to prepare people for a 35-year career that does not change, then you are going to fail. You have got to prepare for life-long learning. Who can predict what 2040 will look like?"

Start-Up Nation

Since Prime Minister Narendra Modi unveiled the government's Startup India initiative in January 2016, there has been a buzz about Indian entrepreneurs – where's India's Google or Alibaba? While the launch sparked a start-up craze, the hard fact is that getting any enterprise going, let alone a company that can conquer the world, is not easy. "Government regulations just don't allow investments in start-ups," argued Srivatsan Rajan, Chairman of Bain & Company India and an angel investor, in a debate about Indian entrepreneurship. "We need to build the ecosystem."

According to Mahesh Murthy, Managing Partner of Mumbai venture capital firm Seedfund, when it comes to tech start-ups, virtually all copy-based applications have failed. His most successful companies are the ones that do not have an American, Russian or Chinese equivalent. "They look at what the problem is in India and what solves it. Companies that do well here tend to go to Africa, the Middle East, South-East Asia. We don't look at India as the fag end of the 'first world' but as the leader of the 'second world', not something that caters to the first billion customers but to the next two or three billion."

Indian investors are reluctant to put in the kind of money needed to fund big ambitions, said Vijay Shekhar Sharma, Founder and Chief Executive Officer of e-commerce company Paytm. "But why are we not placing the big bet? Why does India go to the back office but not the front office or own the building?" The government is trying to change mind-sets – and reduce or eliminate the regulatory impediments. This will require working with Indian states and coordinating efforts to free up markets to be start-up friendly.

"It is still not the aspiration of a majority of people in the country to start a business," Rajan acknowledged. But "we are only at the beginning of the game." India, he argued, needs to promote start-ups not just in technology but also in manufacturing, agriculture, health and education, among other sectors. Ramesh Abhishek, Secretary of Industrial Policy and Promotion of India, summarized: "With the commitment from the top, the problems will be resolved. We need to sensitize the states to be start-up friendly."

01: Start-Up Nation: Diksha Madhok, Editor, Quartz India, India; Mahesh Murthy, Managing Partner, Seedfund, India; Vijay Shekhar Sharma, Founder and Chief Executive Officer, Paytm, India; Ritesh Agarwal, Founder and Chief Executive Officer, OYO, India; Srivatsan Rajan, Chairman, Bain & Company India; Ramesh Abhishek, Secretary of Industrial Policy and Promotion of India

Consider the implications of the sharing economy and the emergence of such services as Uber and India's Ola Cabs. Drivers are not just employed by a company and reporting to their boss. "It is a different kind of job," said Pranay Jivrajka, Chief Operating Officer of ANI Technologies, which operates Ola. "It's not just a worker relationship but a partner relationship, where you make the driver an entrepreneur and he creates a livelihood for himself."

Skilling programmes have to set out pathways for people – young and old, man or woman – to change careers as conditions warrant. For example, as India's agriculture sector becomes more productive, requiring less labour, workers have to be able to learn new skills and shift to another industry. Skills need to match the requirements of the jobs that are available. This would require closer coordination between employers and educators. "The distance between the schools and the labour market is becoming bigger," warned Sergio Picarelli, Regional Head, Italy, Eastern Europe, Middle East and North Africa, and India, of the Adecco Group in Switzerland.

India's education system should focus on improving the "learnability", or the capability to learn, and employability of young people. Special attention must be paid to providing women with the training they need to enter and stay in the labour force. To promote entrepreneurship, "we have to think about the soft skills we need to be teaching," Akshay Kothari, Managing Director of LinkedIn in India, observed in a session on skills development. Instilling empathy and compassion in people from an early age would motivate them to understand local and global problems and then aim to solve them, he said. "Imagine a world where companies are working closely with colleges and vocational institutes to drive a curriculum that can help them actually employ the right people. That can truly transform the Indian economy."

Such crucial efforts would go a long way in mitigating the often-brutal and sudden impact of technology on employment and career prospects. "With the Fourth Industrial revolution and the tensions between jobs and digital developments, the challenges will be daunting," concluded Johan C. Aurik, Global Managing Partner and Chairman of the Board of global consulting group A.T. Kearney in the US and a Summit Co-Chair. "But we have to make sure that progress is inclusive."

Making India's Newest State Future Ready

In Telangana, India's newest state (formed in 2014, with Hyderabad as its capital), the Mission Bhagiratha initiative, which provides drinking water to people by laying 150,000 kilometres of pipeline, has expanded into a project to use the same trenches to lay fibre-optic cables to provide a broadband connection to every household. This project aims to supply 25,000 rural habitations and 67 urban areas. Combined with this "dig-once" plan is a programme to train hundreds of thousands of people, with the goal of having at least one digitally literate person in every household in the state.

Telangana's water-cum-broadband play illustrates how one Indian state is getting ready for a Fourth-Industrial-Revolution future. This project will lift the benchmark for India's herculean efforts to bring its people directly into the digital world.

The benefit multiplier effect could be significant. This project will create the most extensive broadband network on the subcontinent. It will result in a revolutionary spike in information through e-learning, e-health and e-governance. Bringing clean drinking water to all residents of the state will free up girls and women, typically assigned to fetch water for the household, to go to school, get skilled or enter the workforce. Greater connectivity will improve financial inclusion, bringing "unbanked" citizens into the financial system and making it easier for them to start their own businesses or access microloans.

Broadband across the state will open up new opportunities for people in both rural and urban areas to reach new markets and participate in e-commerce.

There are big challenges to address for Telangana to see its ambitions through. Success will likely require innovative funding solutions – blended financing that includes public and private sources – and new models of public-private collaboration with many stakeholders, from service and content providers to educators and civil society. The World Economic Forum is exploring how to support these efforts through its Internet for All initiative, which has similar programmes in Africa and Latin America.

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01: India Economic Update
02: K T Rama Rao, Minister of IT, Municipal Administration and Urban Development, Industries and Commerce, Public Enterprises, Sugar, Mines and Geology, and Non-Resident Indian Affairs of Telangana, India
03: Baba N. Kalyani, Chairman and Managing Director, Bharat Forge, India
04: Powering Growth in India
05: Ajit Gulabchand, Chairman, HCC, India
06: Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas of India
07: Ananth Narayanan, Chief Executive Officer, Myntra, India
08: Social Entrepreneur of the Year India 2016 Award Ceremony: Shereen Bhan, Managing Editor, CNBC-TV18, India
09: Ratul Puri, Chairman, Hindustan Powerprojects (Hindustan Power), India

How Technology Can Assure Food, Energy and Livelihood for All

As the world's fastest-growing economy heads into the Fourth Industrial Revolution, what are the innovations, technologies and policies that can help India bring food, energy and livelihood to its people?

Is it premature to speak of a Fourth Industrial Revolution when India is still struggling to assure the very basics of life and dignity to a majority of its people? This question was often posed at the 2016 India Economic Summit, but the general vibe was overwhelmingly more positive and forward-looking: the digital revolution is already here, and it can help India leapfrog across sectors.

Telecommunications is a prime example of technological leapfrogging – India went straight to mobile technology, bypassing landline telephony. In electricity, it is doing the same – since it has proved impossible to build a national grid and connect everybody to it, the alternative of off-grid, decentralized power generation and supply is already being realized thanks to a combination of public policy, technology and private-sector participation.

By tapping renewable energy and creating the infrastructure for a smart grid – distributed generation, smart meters and storage capacity – India has seen the production cost of thus-far-too-expensive renewable energy fall close to that of thermal power, to about 8 cents per kilowatt-hour. When it falls further – as it looks set to – storage costs will matter less (because low production costs will offset higher storage costs), enabling deployment of better storage solutions to make renewables' intermittence less relevant.

Complete structural transformation is possible within just 5-10 years through an integrated solution that encompasses production, transmission and storage innovations. This is remarkable because, less than a decade ago, India seemed determined to keep building high-carbon-footprint thermal plants and nearly 40% of the population had no access to electricity.

Nevertheless, thermal power will continue to form a significant part of India's energy mix even as nuclear and renewables get a larger share, as will lesser-used technologies such as coal gasification and waste-to-energy, in order to bring electricity to all of India's people in an affordable and sustainable manner. It is important to create technologies relevant and suitable for India – improving the efficiency of biomass use, for instance, can be a game-changer, as biomass accounts for 32% of primary energy use in India.

"Inclusiveness in India and in the world will be one of the most decisive objectives the world community and Indian society have to achieve."

Klaus Schwab
Founder and Executive Chairman, World Economic Forum

“We need to marry the marketplace where the jobs are to the education system.”

Shikha Sharma
Managing Director and Chief Executive Officer,
Axis Bank, India

Similarly, new technology can play a big role in water security by providing data and information to monitor and improve water harvesting, supply, use, recycling and reuse across the farm, industry and domestic sectors. Already, a range of technologies is being deployed to push the government’s “more crop per drop” slogan in the farm sector, which is responsible for 70% of India’s water use. These technologies include satellite imagery to assess variables such as soil moisture and mobile telephony to send advisories to farmers on the right seeds, the best time to plant, apply fertilizer and irrigate, as well as drip irrigation and other “precision agriculture” tools.

India’s food security objectives can benefit tremendously from precision agriculture, including drip irrigation, better fertilizers and genetically modified crops, although the latter are highly controversial at present despite their potential to meet the imminent threat of climate change. India’s food security hinges as much on improved agricultural yields as on preventing waste and assuring access to food. India’s farms need warehousing, food processing, transport and similar services. And its hungry poor require effective policies that can enable existing technological platforms such as Aadhaar to be used for cash transfers, for instance.

Revving up the farm sector is also important to quell unrest among rural the 200 million youth living in villages who do not want to work on the farm and aspire to service-sector jobs instead, which are not available to them. Agriculture must be made aspirational for the youth of today by making farming profitable. However, although India has been a food-surplus country for most of the last 40 years, this has not translated into respectable amounts of profit for the majority of farmers.

Government policy has been focused on keeping food inflation down, for which farm policy has been a primary tool, with the result that higher food profits – which would mean higher profits for farmers – are not allowed, and the government stops exports if there is a domestic shortage. In such a scenario, farmers will continue to require subsidy, which is best provided through direct cash transfers and not “freebies” such as cheaper fertilizers and free electricity, which lead to overuse.

At the same time, agriculture remains an over-regulated sector of the economy – even the impending transition to the Goods and Services Tax regime completely leaves agriculture out of its ambit, which means agriculture will continue to be taxed by a criss-cross of state and central levies instead of a single, uniform tax.

Over-regulation has to go, according to participants at the summit. The private sector is ready with the necessary investment and technologies, but the government must deregulate as well as provide conducive policy stimuli to encourage some potentially game-changing practices, including crop insurance; custom hiring of machines and equipment; effective knowledge dissemination; aggregation through community farming, corporates and farmer producer organizations; and market access through e-commerce.

Innovations in these areas will enable farmers to take risks to experiment with different crops, cropping seasons, new technologies for irrigation and harvesting, and non-farm avenues of generating income, for example, while realizing a lucrative price for their produce. Only then can the prime minister’s call for doubling farm income by 2022 be realized.

01: Social Entrepreneur of the Year India 2016 Award Ceremony

Public Policy and Private-Sector Involvement

Allow markets to operate, regulate them effectively and step in to eliminate negative externalities – this sentiment underlined all discussions at the summit on the way forward for India's government. Sectors where the government has paid heed to this axiom are already blossoming. For instance, in the energy sector, the share of solar and wind power in the energy mix is steadily rising; and, in transport, the opening-up of the market to private players such as radio and online cab-hailing services has transformed the sector.

Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas of India, told participants in a session on Powering India's Energy Potential that the ruling government is committed to policy reform to create market-friendly mechanisms and introduce transparency and competition, "India is on a good trajectory," he said, referring to the deregulation of the diesel and petrol markets two years ago, and the removal of cooking gas subsidy from consumers above a certain income threshold. He said the government is making policy changes to stimulate investment, assure returns, establish free-market mechanisms and introduce certainty. The private sector has eagerly stepped in by creating new business models that deliver enhanced production, better distribution and affordable access to all.

Similar policy changes are imperative for the water sector – not only should successive governments stop giving free water and power to the farmer, subsidies, if any, should be channelled towards drip irrigation and recycling/ reuse technologies, according to summit participants. Policy changes have directly produced positive outcomes in many areas. For instance, policy emphasis on recycling and reuse of water helped the industry realize that the technology is economically viable, with the result that recycling and reuse have become a part of every bid document in the infrastructure sector in India.

01: Powering Indias Energy Potential: Tejpreet Singh Chopra, President and Chief Executive Officer, Bharat Light and Power, India; Leocadia Zak, Director, US Trade and Development Agency (USTDA), USA; Dharmendra Pradhan, Minister of State for Petroleum and Natural Gas of India; Ibrahim Baylan, Minister for Policy Coordination and Energy of Sweden; Banmali Agrawala, President and Chief Executive Officer, GE South Asia, India; Tulsi Tanti, Chairman, Suzlon Energy, India

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01: Nirmala Sitharaman, Minister of State for Commerce and Industry of India
02: Linking the Supply Chain System
03: Pawan Munjal, Chairman, Managing Director and Chief Executive Officer, Hero MotoCorp, India
04: Malik Samarawickrama, Minister of Development Strategies and International Trade of Sri Lanka
05: Pratik Agarwal, Chief Executive Officer, Sterlite Power, India
06: N. Chandrababu Naidu, Chief Minister of Andhra Pradesh, India
07: Harin Fernando, Minister of Telecommunications and Digital Infrastructure of Sri Lanka
08: Enabling Gender Equity in India

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Manufacturing, Long-Term Investing, Infrastructure and Development

Quantum Leap Needed to Create 100 Million Jobs in India

Since it was launched by Prime Minister Modi in September 2014, "Make in India" has become one of India's most recognizable brands. In terms of public relations, it's been an unparalleled success. But what will it really take to deliver on the promise of 100 million manufacturing jobs by 2022? It's a vital question for India – democracy itself might depend on it.

From 2010-2014, just 4 million jobs were created in manufacturing in India. To hit the target for 2022 will require a tenfold quantum leap in job creation. It's a huge challenge demanding an equally huge and urgent response. To achieve this target will require bold action on many fronts: a surge in infrastructure connectivity, wholesale reforms of land and labour laws, far greater investment in innovation, mastery of new technologies, export-quality brands – not to mention massive injections of capital.

Indian manufacturers must think big and use the domestic market as a springboard for exports, said Amitabh Kant, Chief Executive Officer of the National Institution for Transforming India (NITI), which in 2015 replaced India's top-level Planning Commission. Brushing aside objections that India cannot imitate China's export-led growth trajectory, Kant argued that only manufacturing can deliver the jobs and growth that India so urgently needs to service the 250 million young people joining the job market in the next decade.

To succeed in the world's white-hot export markets requires creating innovative, world-class brands. Would a person on a Chicago street be able to name a single Indian brand, other than yoga and spices? "Innovation and design are keys to India becoming a great manufacturing nation," said Kant. But India is lagging behind: only 22% of the patents registered in India have been booked by Indian companies. And Indian tech firms need to bump up their investment in R&D, which accounts for only a small proportion of their revenues. "Indian industry must embrace technology with all its might.

"We have the potential to work together. Let's have the whole area around the Bay of Bengal be a vibrant place of economic cooperation. The growth is here."

Ranil Wickremesinghe
Prime Minister of Sri Lanka

We've missed out on the industrial revolution; don't miss out on the intelligent manufacturing revolution," said Kant.

But it's not just about exports – especially in a global climate of volatility and sluggish growth. India has a colossal, burgeoning domestic market. The challenge is to replace imported goods with products made in India. The tech sector is leading the way in consumer goods. Defence procurement is another obvious opportunity. "Make sure that whatever India consumes we start producing – whether it's defence, railways or energy," said Baba Kalyani, Chairman and Managing Director of Bharat Forge, India. To succeed requires creating the ecosystem for manufacturing within India, he said. Just relying on low-cost labour or building a high-tech plant isn't enough.

An ecosystem is an enabling environment, but in India there are some big beasts to deal with: Land reform; labour reform; ease of doing business; transparency; trust; and the biggest of all – infrastructure.

To be sure, Prime Minister Modi's government has made dramatic progress: the new Goods and Services Tax coming into force in April 2017 will give the whole economy, including manufacturing, a huge boost through streamlining the existing regime of cascading state taxes. New laws on bankruptcy have been broadly welcomed. There is a strong sense that political leadership is driving growth in a way not seen for years.

Land and labour reforms are vital to enable mass industrialization in India. The central government has opted to pass these political hot potatoes on to state governments. The hope is that progress in 10 or 12 states will be sufficient, since investment will flow into those states at the expense of others. The pressure is now on India's 29 states to deliver – the central government is also obliging them to compete on ease of doing business.

Lack of transparency and trust are still liabilities on India's balance sheet.

"Think about a world where we are teaching compassion and empathy at a very early age so young people see what problems exist and want to go out and solve them."

Akshay Kothari
Managing Director, LinkedIn, India

States Compete in Ease of Doing Business

Intense rivalry has broken out among states over the Indian government's latest initiative: ranking their performance in ease of doing business. The initiative is the brainchild of the Department of Industrial Policy and Promotion (DIPP). The World Bank is working with the government to rank India's states and rankings change in real time on a website run by the DIPP. Rankings are based on the progress that states make against a time-bound action plan agreed with the central government. Ramesh Abhishek, Secretary of Industrial Policy and Promotion of India, said: "States realize that, unless they do this, investors won't come."

But more needs to be done. While India climbed 16 places in the Forum's Global Competitiveness rankings (to 39th) for 2016-2017, factors such as rigid regulations and centralized wage determination; a domestic market hindered by fiscal regulations; inefficiencies in the economy due to large, publicly owned enterprises; and lack of infrastructure and ICT use mean that the country has to tackle bottlenecks to ensure growth. Improving the ease of doing business would be a great step forward.

01: India Means Business: Yusuff Ali, Chairman and Managing Director, Lulu Group International, United Arab Emirates; Ramesh Abhishek, Secretary of Industrial Policy and Promotion of India; Martin Soong, Anchor, CNBC Asia, Singapore; Rachel Whetstone, Senior Vice-President, Policy and Communications, Uber Technologies, USA; Srivatsan Rajan, Chairman, Bain & Company India

Developers continue to suffer cost overruns due to corruption, said one. Corruption and non-completion can cost up to 20% of the project value, destroying the developer's margin. These practices slam the brakes on potential investment. The government says it's committed to complete transparency in the way business is done and has introduced some new measures. Dedicated commercial courts are being set up to fast-track contract enforcement, while the government recently agreed to settle 75% of all pending construction arbitration awards.

Infrastructure underpins everything. For India to embrace inclusive growth and lift millions more people out of poverty, the economy must sustain growth of 8% or more for several decades. Many factors will contribute to this growth, but better infrastructure is at its heart. "You can't do it if you have 200 million people without electricity," said John Rice, Vice-Chairman of GE in Hong Kong SAR and one of the Summit Co-Chairs.

The good news is that India has a great story to tell: a rapidly urbanizing population making huge demands on infrastructure, a hunger and talent for technology and innovation, and above all, a government with the political will to get things done. By 2030, 600 million Indians will be living in urban areas. Investing in building this infrastructure is "the biggest opportunity in the world," according to Rana Kapoor, Founder, Managing Director and Chief Executive Officer of YES BANK, India, because the returns on investment of 7%-8% are among the best anywhere.

And infrastructure doesn't just help investors. According to Kapoor, every 1% invested incrementally in infrastructure (as a percentage of GDP) creates 3.4 million jobs in India, compared to just 1.5 million in the United States. "Infrastructure as a catalyst is probably the biggest economic job growth multiplier," he said.

Of the $100 trillion of assets held by institutional investors around the world, 65% want to increase their allocation in infrastructure, according to Nick Chism, Global Chair, Infrastructure, Government and Healthcare, and Deputy Head, Global Sales and Markets, KPMG, United Kingdom. All they need is to find bankable projects. The government certainly has a long wish list: doubling national highways to 200,000 kilometres, creating 175 gigawatts of renewable energy by 2022, transforming India's waterways into freight corridors – including 1,680 kilometres along the River Ganges from Varanasi to Haldia. The opportunity in upgrading India's railway system is valued at $100 billion over the next decade. The list goes on, but are these projects bankable? Finance for infrastructure ground to a halt in 2010-2011, when sky-high interest rates and delays due to blocked clearances shook the entire system.

The government is working hard to convince investors that things have changed. Take roads, for example. Investors were not in a good position and most of the mistakes were on the government side, admits Nitin Jairam Gadkari, Minister of Road Transport, Highways and Shipping. So now, the government won't float a tender for any new road project without first securing 80% of the land. Gadkari has introduced a new hybrid annuity model to reinvigorate public-private partnerships in the transport sector, whereby the government grants 40% of the finance and investors provide 60% on an annuity basis.

Furthermore, the government will take responsibility for all land permissions, environmental clearances and utility shifting. The minister has already sanctioned $15 billion of projects under this new model. But even though the government is priming the pump by investing in infrastructure, according to Srivatsan Rajan, Chairman of Bain & Company, India, "it's very clear that the private investment cycle has not started."

Overall, however, observers are optimistic about the direction India is now taking. Naushad Forbes, President of the Confederation of Indian Industry (CII) and Co-Chairman, Forbes Marshall, India, is bullish both about India's achievements and its future. "The reforms of the past 25 years have led India to this point" in the process reducing both the proportion and absolute numbers living in poverty, he said. "But", added Forbes, "the best is yet to come."

01: Future of Work: Soumitra Dutta, Dean, College of Business, Cornell University, USA
02: A.H.M. Mustafa Kamal, Minister for Planning of Bangladesh

01: Suresh Prabhakar Prabhu, Minister of Railways of India
02: Hari S. Bhartia, Founder and Co-Chairman, Jubilant Bhartia Group, India
03: Digital Enterprises of India
04: Ibrahim Baylan, Minister for Policy Coordination and Energy of Sweden
05: Ritesh Agarwal, Founder and Chief Executive Officer, OYO Rooms, India
06: Smriti Zubin Irani, Minister of Textiles of India
07: Kavin Bharti Mittal, Founder and Chief Executive Officer, Hike, India
08: Ravi Shankar Prasad, Minister of Law and Justice, and Electronics and Information Technology of India
09: Jayant Sinha, Minister of State for Civil Aviation of India

India's Big Jump

India 39th / 138

Global Competitiveness Index
2016-2017 edition

Key Indicators, 2015

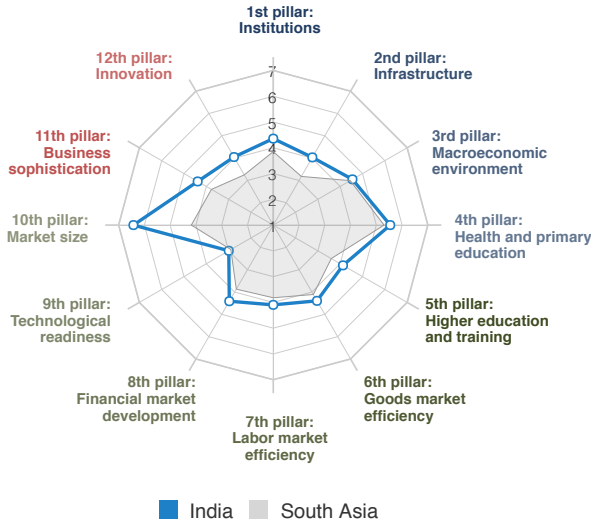
Source: International Monetary Fund; World Economic Outlook Database (April 2016)

Population (millions)	1292.7	**GDP per capita** (US$)	1617.3
GDP (US$ billions)	2090.7	**GDP (PPP)** % world GDP	7.02

Performance overview

	Rank / 138	Score (1-7)	Trend	Distance from best
Global Competitiveness Index	39	4.5		
Subindex A: Basic requirements	63	4.6		
1st pillar: Institutions	42	4.4		
2nd pillar: Infrastructure	68	4.0		
3rd pillar: Macroeconomic environment	75	4.5		
4th pillar: Health and primary education	85	5.5		
Subindex B: Efficiency enhancers	46	4.4		
5th pillar: Higher education and training	81	4.1		
6th pillar: Goods market efficiency	60	4.4		
7th pillar: Labor market efficiency	84	4.1		
8th pillar: Financial market development	38	4.4		
9th pillar: Technological readiness	110	3.0		
10th pillar: Market size	3	6.4		
Subindex C: Innovation and sophistication factors	30	4.2		
11th pillar: Business sophistication	35	4.4		
12th pillar: Innovation	29	4.0		

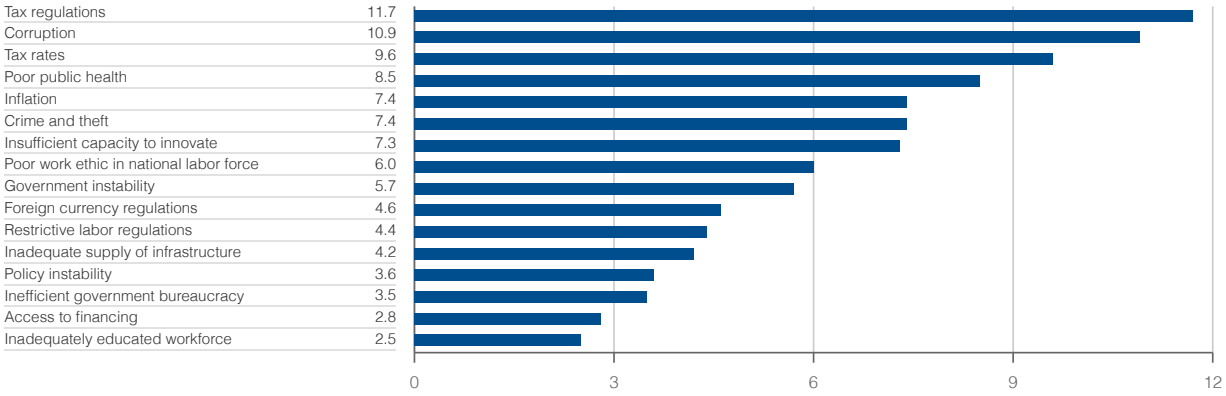
Edition	2012-13	2013-14	2014-15	2015-16	2016-17
Rank	59 / 144	60 / 148	71 / 144	55 / 140	39 / 138
Score	4.3	4.3	4.2	4.3	4.5



India climbs for the second year in a row, to 39th. Its 16-place improvement is the largest this year. India's competitiveness has improved across the board, in particular in goods market efficiency, business sophistication, and innovation. Thanks to improved monetary and fiscal policies, as well as lower oil prices, the Indian economy has stabilized and now boasts the highest growth among G20 countries. Recent reform efforts have concentrated on improving public institutions (up 16), opening the economy to foreign investors and international trade (up four), and increasing transparency in the financial system (up 15). Still, a lot needs to be done. The labor market is segmented between workers protected by rigid regulations and centralized wage determination (112th), especially in the manufacturing sector, and millions of unprotected and informal workers. The efficiency of the domestic market (81st) is hindered by fiscal regulations that allow federal states to levy different levels of value-added taxes; large, publicly owned enterprises further reduce the overall efficiency of the economy, especially in the utilities sector and the financial market, where there is growing concern about the incidence of non-performing loans. Finally, lack of infrastructure (68th) and ICT use (120th) remain bottlenecks. Improvement has been slow in recent years and further investment will be necessary, especially to connect rural areas and make sure they can equally benefit from and contribute to the country's development. See Box 6 of Chapter 1.1 of the Global Competitiveness Report 2016-2017 for an analysis of India's performance over the past decade.

Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2016



Note: From the list of factors, respondents to the World Economic Forum's Executive Opinion Survey were asked to select the five most problematic factors for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

The Global Competitiveness Index in detail

India

	Rank / 138	Value	Trend
1st pillar: Institutions	**42**	**4.4**	
1.01 Property rights	101	3.9	
1.02 Intellectual property protection	42	4.5	
1.03 Diversion of public funds	34	4.5	
1.04 Public trust in politicians	31	4.2	
1.05 Irregular payments and bribes	49	4.5	
1.06 Judicial independence	54	4.3	
1.07 Favoritism in decisions of government officials	29	4.1	
1.08 Wastefulness of government spending	50	3.5	
1.09 Burden of government regulation	23	4.1	
1.10 Efficiency of legal framework in settling disputes	32	4.6	
1.11 Efficiency of legal framework in challenging regs	29	4.4	
1.12 Transparency of government policymaking	51	4.4	
1.13 Business costs of terrorism	122	4.0	
1.14 Business costs of crime and violence	81	4.4	
1.15 Organized crime	97	4.3	
1.16 Reliability of police services	53	4.7	
1.17 Ethical behavior of firms	37	4.5	
1.18 Strength of auditing and reporting standards	64	4.7	
1.19 Efficacy of corporate boards	94	4.6	
1.20 Protection of minority shareholders' interests	37	4.5	
1.21 Strength of investor protection 0-10 (best)	8	7.3	
2nd pillar: Infrastructure	**68**	**4.0**	
2.01 Quality of overall infrastructure	51	4.5	
2.02 Quality of roads	51	4.4	
2.03 Quality of railroad infrastructure	23	4.5	
2.04 Quality of port infrastructure	48	4.5	
2.05 Quality of air transport infrastructure	63	4.5	
2.06 Available airline seat kilometers millions/week	8	4324.2	
2.07 Quality of electricity supply	88	4.3	
2.08 Mobile-cellular telephone subscriptions /100 pop.	123	78.8	
2.09 Fixed-telephone lines /100 pop.	114	2.0	
3rd pillar: Macroeconomic environment	**75**	**4.5**	
3.01 Government budget balance % GDP	119	-7.2	
3.02 Gross national savings % GDP	15	32.0	
3.03 Inflation annual % change	101	4.9	
3.04 Government debt % GDP	98	67.2	
3.05 Country credit rating 0-100 (best)	47	-	
4th pillar: Health and primary education	**85**	**5.5**	
4.01 Malaria incidence cases/100,000 pop.	41	1312.4	
4.02 Business impact of malaria	57	3.6	
4.03 Tuberculosis incidence cases/100,000 pop.	111	167.0	
4.04 Business impact of tuberculosis	129	3.7	
4.05 HIV prevalence % adult pop.	60	0.3	
4.06 Business impact of HIV/AIDS	127	3.7	
4.07 Infant mortality deaths/1,000 live births	115	37.9	
4.08 Life expectancy years	106	68.0	
4.09 Quality of primary education	40	4.7	
4.10 Primary education enrollment rate net %	92	92.3	
5th pillar: Higher education and training	**81**	**4.1**	
5.01 Secondary education enrollment rate gross %	102	68.9	
5.02 Tertiary education enrollment rate gross %	93	23.9	
5.03 Quality of the education system	29	4.5	
5.04 Quality of math and science education	44	4.6	
5.05 Quality of management schools	43	4.6	
5.06 Internet access in schools	74	4.2	
5.07 Local availability of specialized training services	55	4.5	
5.08 Extent of staff training	30	4.6	

	Rank / 138	Value	Trend
6th pillar: Goods market efficiency	**60**	**4.4**	
6.01 Intensity of local competition	96	4.7	
6.02 Extent of market dominance	31	4.2	
6.03 Effectiveness of anti-monopoly policy	31	4.3	
6.04 Effect of taxation on incentives to invest	25	4.5	
6.05 Total tax rate % profits	123	60.6	
6.06 No. of procedures to start a business	132	13	
6.07 Time to start a business days	115	29.0	
6.08 Agricultural policy costs	44	4.1	
6.09 Prevalence of non-tariff barriers	47	4.6	
6.10 Trade tariffs % duty	123	13.0	
6.11 Prevalence of foreign ownership	72	4.4	
6.12 Business impact of rules on FDI	71	4.6	
6.13 Burden of customs procedures	37	4.6	
6.14 Imports % GDP	121	24.6	
6.15 Degree of customer orientation	71	4.6	
6.16 Buyer sophistication	17	4.5	
7th pillar: Labor market efficiency	**84**	**4.1**	
7.01 Cooperation in labor-employer relations	67	4.4	
7.02 Flexibility of wage determination	112	4.3	
7.03 Hiring and firing practices	15	4.8	
7.04 Redundancy costs weeks of salary	67	15.7	
7.05 Effect of taxation on incentives to work	37	4.4	
7.06 Pay and productivity	33	4.5	
7.07 Reliance on professional management	66	4.3	
7.08 Country capacity to retain talent	32	4.3	
7.09 Country capacity to attract talent	22	4.4	
7.10 Female participation in the labor force ratio to men	130	0.35	
8th pillar: Financial market development	**38**	**4.4**	
8.01 Financial services meeting business needs	45	4.6	
8.02 Affordability of financial services	38	4.3	
8.03 Financing through local equity market	31	4.4	
8.04 Ease of access to loans	39	4.4	
8.05 Venture capital availability	9	4.4	
8.06 Soundness of banks	75	4.7	
8.07 Regulation of securities exchanges	58	4.5	
8.08 Legal rights index 0-10 (best)	46	6	
9th pillar: Technological readiness	**110**	**3.0**	
9.01 Availability of latest technologies	78	4.5	
9.02 Firm-level technology absorption	81	4.4	
9.03 FDI and technology transfer	54	4.6	
9.04 Internet users % pop.	102	26.0	
9.05 Fixed-broadband Internet subscriptions /100 pop.	106	1.3	
9.06 Internet bandwidth kb/s/user	117	5.7	
9.07 Mobile-broadband subscriptions /100 pop.	127	9.4	
10th pillar: Market size	**3**	**6.4**	
10.01 Domestic market size index	3	6.4	
10.02 Foreign market size index	4	6.4	
10.03 GDP (PPP) PPP $ billions	3	7965.2	
10.04 Exports % GDP	112	20.2	
11th pillar: Business sophistication	**35**	**4.4**	
11.01 Local supplier quantity	36	4.8	
11.02 Local supplier quality	59	4.4	
11.03 State of cluster development	27	4.5	
11.04 Nature of competitive advantage	36	4.2	
11.05 Value chain breadth	26	4.6	
11.06 Control of international distribution	28	4.4	
11.07 Production process sophistication	45	4.3	
11.08 Extent of marketing	61	4.5	
11.09 Willingness to delegate authority	56	3.9	
12th pillar: Innovation	**29**	**4.0**	
12.01 Capacity for innovation	39	4.6	
12.02 Quality of scientific research institutions	36	4.6	
12.03 Company spending on R&D	28	4.3	
12.04 University-industry collaboration in R&D	24	4.5	
12.05 Gov't procurement of advanced tech. products	7	4.5	
12.06 Availability of scientists and engineers	36	4.6	
12.07 PCT patent applications applications/million pop.	64	1.6	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Country/Economy Profiles and Rankings at http://gcr.weforum.org/

Ten years of competitiveness in India

India's GDP per capita in PPP terms almost doubled between 2007 and 2016, from US$3,587 to US$6,599. Growth slowed after the 2008 crisis, hitting a decade's low in 2012–13. This experience triggered India to rethink its policies and engage more firmly in the reforms necessary to improve its competitiveness. Growth rebounded in 2014 and last year surpassed that of China, making it the fastest-growing large emerging market in that year.

India's competitiveness score stagnated between 2007 and 2014, and the economy slipped down the GCI rankings. Since the new government took office in 2014, India climbed back up the rankings to 39th in this edition of the *Report,* from 48th in 2007–2008. What has made India so successful in recent years?

The overall trend masked some diversity over the years on the different pillars, as shown in Figure 1. For example, health and basic education improved throughout the decade.[1] Improvement in infrastructure, by contrast, was small and faltering during most of the period, but picked up after 2014 when the government increased public investment and sped up approval procedures to attract private resources. The institutional environment deteriorated until 2014, as mounting governance scandals and seemingly unmanageable inefficiencies saw businesses lose trust in government and public administration, but this trend was also reversed after 2014. Macroeconomic conditions followed a similar path, as India managed only in recent years—thanks also to the drop in commodity prices—to keep inflation below the target of 5 percent while rebalancing its current account and decreasing public deficit. Financial market development has also improved since 2014, but—unlike the case of institutions and the macroeconomic environment—not enough to recover to 2007 levels.

Table 1: Change in pillars' contribution to India's competitiveness between 2007 and 2016

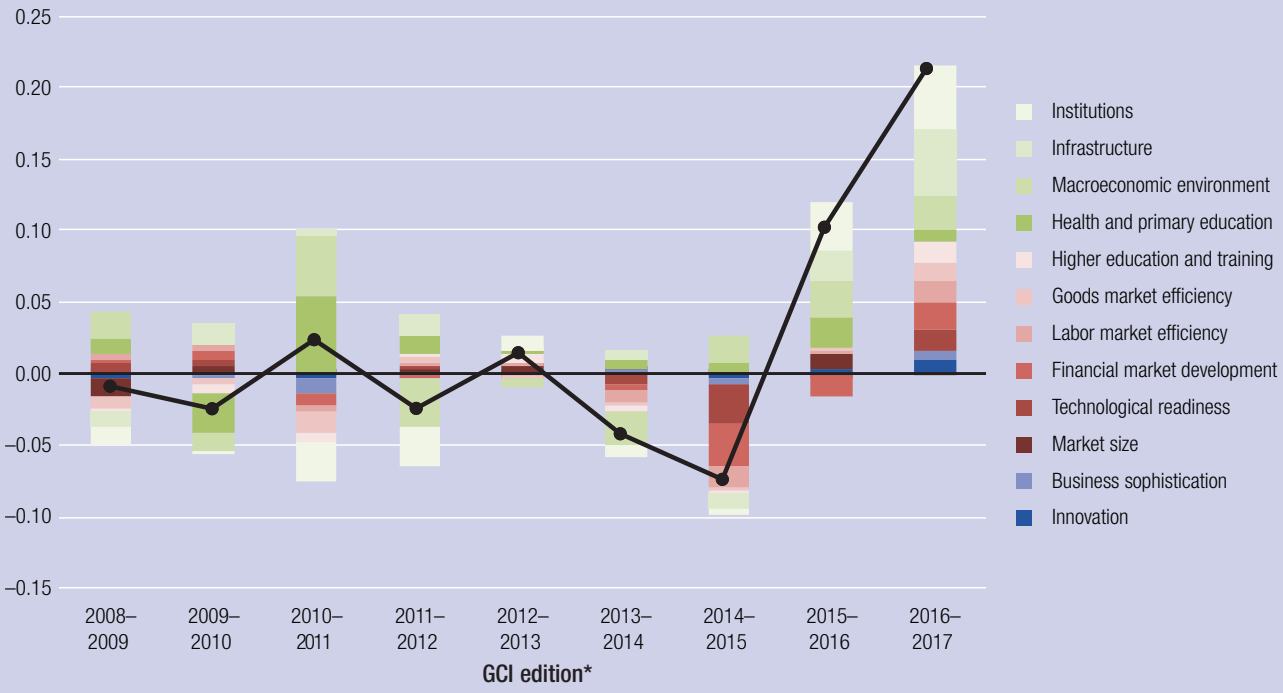
Pillar	Weighted contribution to change in GCI	Change in pillar score	Pillar weight	Pillar score 2016
Health and primary education	0.09	0.62	15%	5.54
Infrastructure	0.09	0.59	15%	4.03
Macroeconomic environment	0.05	0.34	15%	4.55
Market size	0.02	0.27	6%	6.43
Institutions	0.00	0.03	15%	4.36
Innovation	0.00	0.15	3%	4.05
Labor market efficiency	0.00	0.02	6%	4.10
Higher education and training	0.00	0.00	6%	4.12
Technological readiness	–0.01	–0.18	6%	2.99
Business sophistication	–0.01	–0.43	3%	4.39
Goods market efficiency	–0.02	–0.26	6%	4.39
Financial market development	–0.03	–0.52	6%	4.41

Source: Authors' calculations.

Table 1 illustrates which pillars improved or deteriorated over the 10 years from 2007 to 2016. Thanks to the 2015 and 2016 rebound, India's overall competitiveness score in this period increased by 0.19 points. The two most significant improvements are in infrastructure and in health and primary education: for example, India almost halved its

Figure 1: Pillar contribution to India's competitiveness over time

Contribution to year-on-year GCI change, point change in score



Source: Authors' calculations.

* Each column corresponds to the change with respect to the previous GCI edition.

rate of infant mortality (62 per 1,000 in the 2007–2008 edition of the GCI versus 37.9 today). Life expectancy increased to 68, up from 62 10 years ago, while primary education has become almost universal (up to 93.1 percent from 88.8 percent). Macroeconomic environment is another basic requirement where India's performance has improved significantly (+0.34).[2]

At the other end of the spectrum, financial market development is the pillar most dragging down India's competitiveness compared to 10 years ago. Here the efforts of the Reserve Bank of India have increased transparency in the financial market and shed light on the large amounts of non-performing loans, previously not reported on the balance sheets of Indian banks. Banks have not yet found a way to sell these assets, and some need large recapitalizations.

The efficiency of the goods market has also deteriorated, resulting from India's failure to address long-running problems such as varying goods and services tax (GST) levels within the country (this is set to finally change as of 2017 if the Central GST and Integrated GST Bills currently in Parliament are fully implemented). Another area of concern is India's stagnating performance on technological readiness, a pillar on which it scores one full point lower than any other. These three pillars will be key for India to prosper in its next stage of development, when it will no longer be possible to base its competitiveness on low-cost, abundant labor. Higher education and training has also shown no improvement.

What areas should India prioritize today? India has made significant progress on infrastructure, one of the pillars where it ranked worst. As the country closes the infrastructure gap, new priorities emerge. The country's biggest relative weakness today is in technological readiness, where initiatives such as Digital India could lead to significant improvements in the next years. India outperforms countries in the same stage of development, mostly those in sub-Saharan Africa, in all pillars except labor market efficiency.

Even on indicators where India has made progress, comparisons with other countries can be sobering: although life expectancy has increased, for example, it is still low by global standards, with India ranking only 106th in the world; and while India almost halved infant mortality, other countries did even better, so it drops nine places this year to 115th. Huge challenges still lie ahead on India's path to prosperity.

Notes

1 The deterioration in health and primary education performance reported between 2008 and 2009 was the result of a revision of previously available data on the incidence of malaria, which was corrected upward.

2 The adoption of new PPP estimates by the IMF in 2014 also contributed to the increase in the measure of market size used in the GCI.

01: Digitize India
02: Chandrajit Banerjee, Director-General, Confederation of Indian Industry (CII), India
03: India Social Entrepreneur of the Year Winner Neichute Doulo of Entrepreneurs Associate
04: Shamina Singh, President, MasterCard Center for Inclusive Growth, MasterCard, USA
05: Chetna Sinha, Founder, Mann Deshi Foundation, India
06: (Em)Powering Growth in India
07: Building Blocks for Infrastructure Investment
08: Future of Work: Soumitra Dutta, Dean, College of Business, Cornell University, USA

01: Neelam Chhiber, Managing Director, Industree/Mother Earth, India
02: Breaking Down Diversity Barriers
03: Rachel Whetstone, Senior Vice-President, Policy and Communications, Uber Technologies, USA
04: Shaping the Future of Energy Systems: India
05: Naushad Forbes, President, Confederation of Indian Industry (CII); Co-Chairman, Forbes Marshall, India
06: Srivatsan Rajan, Chairman, Bain & Company India
07: Opening Plenary: Vikram Chandra, Presenter and Editor, New Delhi Television (NDTV), India; John Rice, Vice-Chairman, GE, Hong Kong SAR; Gita Gopinath, Professor of Economics, Harvard University, USA; Vijay Shekhar Sharma, Founder and Chief Executive Officer, Paytm, India; Nirmala Sitharaman, Minister of State for Commerce and Industry of India; Anil Agarwal, Executive Chairman, Vedanta Resources, United Kingdom; Amitabh Kant, Chief Executive Officer, NITI Aayog, India; Johan C. Aurik, Global Managing Partner and Chairman of the Board, A.T. Kearney, USA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Agenda in Focus: India 2016

For more background on the issues discussed at the summit and to find out what the Forum's community of thought leaders has to say, go to Agenda, the Forum's public platform for sharing insights and ideas, with a global audience of 2.3 million readers.

India's growth is outpacing China's. Here's how they did it
India's GDP per capita almost doubled between 2007 and 2016. Growth slowed after the 2008 crisis, but this provided the country with an opportunity to rethink its policies and engage more firmly in the reforms necessary to improve its competitiveness. Growth rebounded in 2014, and last year surpassed that of China. For insight into how India has achieved this growth, read more here.

India has 7 unicorns – and they're just part of the country's growth story
Unicorn: a single-horned mythical creature. Or a private company valued at over $1 billion. In India, and around the world, both were once nothing more than fantasy. Now, as India's economy grows and tech start-ups pop up everywhere, India can boast seven. (That's private companies, not mythical creatures.) Who are they? Find out here.

By 2060, this country will have the world's largest population
Based on current trends, the list of the world's most populous nations could look very different by 2060. Take a look at an animation by Aron Strandberg of UN data showing the population growth of the 12 most populous countries between 1950 and 2060 here.

Inequality in India: what's the real story?
India is hitting the headlines as one of the most unequal countries in the world, whether one measures inequality on the basis of income or wealth. Nisha Agrawal, Chief Executive Officer of Oxfam India, takes a look at the background behind the headlines.

This is how India can build its own Silicon Valley
Can India list itself alongside US and China as a start-up nation? The next few years will tell. Kartick Hosanagar of The Wharton School at the University of Pennsylvania explores how India stacks up against other countries here.

India's astonishing start-up boom – all you need to know in 5 charts
Investment in India is rising, with the surge generating employment and providing solutions in areas from healthcare to agriculture. These five charts explore the Indian start-up boom.

This is how India created its first 'smart village'
Global Shaper Utkarsh Amitabh explains why empowering villages through technology and creating rural innovation clusters will be critical to reconciling India's "super power-super poor" conundrum and realizing the potential of Digital India.

Why India should sign a free-trade deal with itself
Five hurdles stand between India and its ambition to join the club of developed economies, according to Samir Saran, Vice-President of the Observer Research Foundation, India. Read more here.

India will have 7 megacities by 2030, says UN
To qualify as a megacity under the UN definition, an urban area must have a population of 10 million people. Learn about some of the challenges and opportunities of this demographic shift to urban living here.

Indian workers are ready for the robot revolution. But are their managers?
Rekha Menon, Chairman and Managing Director of Accenture in India, explores how workers feel about the new era of robots, which is set to reshape entire economies. Learn more here.

To achieve gender equality in India, build more toilets
Discussions on gender equality tend to focus on equal wages. But Indian women, particularly in rural areas, face more basic challenges.

4 ways India can survive its digital dawn
John Rice of General Electric outlines the four big challenges facing India if it is to sustain its rapid growth – jobs, manufacturing, healthcare and training.

How to double the income of India's smallholder farmers
The Indian government has set an ambitious target to double farmers' incomes by 2022. Not impossible, but it will require an infusion of entrepreneurship, smart public-private partnerships and a lot of investment, writes Saswati Bora of the Forum's New Vision for Agriculture.

India needs to build more infrastructure. Here's how
The country's investment in infrastructure has lagged behind the economy's growth and that needs to change. Changes to planning, a greater priority on infrastructure in the Ministry of Finance and openness to foreign investors could soon turn that situation around, argues KPMG's Nick Chism.

India loses billions of rupees to traffic jams. Is ride-sharing the solution?
India is home to three of the 10 worst cities for traffic in the world. And with urbanization on the rise, that could get a lot worse unless there is big investment in new roads and transport. Or would ride-sharing be a far simpler solution?

Outcomes of the Summit

- The summit initiated a new approach for engaging regional constituents by formally establishing the **South Asia Regional Strategy Group (RSG)**, the highest level multistakeholder body to govern the Forum's strategy and activities in India and the region.

- The (Em)Powering Growth in India session launched a **new project to build a practical, searchable, digital knowledge bank** of successful policy models and corporate or multistakeholder partnership practices from around the world. The Forum's project – in collaboration with IDRC – will catalyse a series of public-private strategy dialogues to shape national, regional and global action agendas.

- At the summit, **three Indian states committed to accelerating sustainable agricultural development** through public-private partnerships in collaboration with Forum's New Vision for Agriculture (NVA) initiative:
  - In **Maharashtra**, the NVA has helped support and catalyse an agriculture partnership since 2012, reaching 500,000 farmers and improving farmers' income by 10%-30% within the first three years.
  - The **Andhra Pradesh** government has launched a partnership platform with Forum support that has mobilized more than $175 million in private sector commitments since early 2016.
  - In **Karnataka**, the government launched a platform in 2015 to improve horticulture value chains, with five projects currently underway.
  - **Additional states** have expressed interest in the model and are exploring its potential. The Forum is working with its partners to establish the local capacity to support interested states.

- Accelerating Internet for All was identified as a priority for all Indians, and leaders at the summit agreed to proceed with a World Economic Forum/CII-led **programme to develop new models of public-private collaboration** in one state by March 2017.

- The World Economic Forum, the Government of India and external experts are working on an **Innovation Index** to rank individual Indian states on their innovation capability. A proposal will be made to include new stakeholders in the initiative.

- A **new report** launched during the summit, Accelerating the Growth of Digital Payments in India: A Five-Year Outlook, outlines how digital payments can save the Indian economy trillions of rupees by bringing down the cost of cash. The report, by Visa Inc. examines how to transition India to a digital payment system over the next five years and outlines a roadmap for lowering the cost of cash to 1.3% of GDP from today's 1.7%.

- India's Minister of Textiles Smriti Irani launched a white paper on the **Kota Handloom Value Chain** prepared by the Forum's Global Agenda Council on India, in collaboration with the Mastercard Center for Inclusive Growth, Industree Foundation and Dalberg.

- In leadership discussions at the summit, almost 60 global and Indian leaders from five state governments, together with CEOs, heads of international organizations, civil society, farmer leaders and experts, aligned on a **shared agenda for sustainable farmer livelihoods** through an integrated value chain approach. A panel discussion on the future of food highlighted the importance of leveraging new technology and innovation, ensuring sustainable means of production and making farming attractive and aspirational for youth.

- The Schwab Foundation for Social Entrepreneurship, a sister organization of the World Economic Forum, in partnership with the Jubilant Bhartia Foundation announced Neichute Doulo, Entrepreneurs Associate (EA) as the winner of the **2016 India Social Entrepreneur of the Year award**. The awards were conferred in the presence of Nitin Gadkari, Minister of Road Transport, Highways and Shipping of India.

- The Global Shapers Hub in New Delhi launched a new project, **Feed the Need**, which salvages uneaten food that would otherwise be wasted by catering companies and restaurants and supplies it to homeless shelters. Global Shapers participating in the India Economic Summit supported the launch through a meal service at the NGO Aashray Adhikar Abhiyan's shelter in Pahargunj, Delhi, and discussed opportunities to scale and replicate the model across India.

- Prominent government leaders, investors, and businesses mandated the Forum to form a **Business Working Group (BWG) on Infrastructure Financing in India**. Over the next year, the World Economic Forum will collaborate with the US India Business Council (USIBC) to provide a platform for the BWG to prioritize critical bottlenecks and drive solutions for bridging India's infrastructure funding deficit.

01: Vineet Nayyar, Vice-Chairman, Tech Mahindra, India
02: Ashvin Dayal, Associate Vice-President and Managing Director, Asia, Rockefeller Foundation, Thailand
03: Manish Sisodia, Deputy Chief Minister of Delhi, India
04: Samir Saran, Vice-President, Observer Research Foundation (ORF), India
05: Shikha Sharma, Managing Director and Chief Executive Officer, Axis Bank, India
06: Sergio Picarelli, Regional Head, Italy, Eastern Europe, Middle East and North Africa, and India, Adecco Group, Switzerland
07: Participant in the closing plenary, India's Take-Off
08: Rahul Bajaj, Chairman, Bajaj Auto, India
09: Get Up, Skill Up
10: Building Blocks for Infrastructure Investment: Shekhar Gupta, Editor-in-Chief, ThePrint, India; Fred Hochberg, Chairman, Export-Import Bank of the United States, USA; Nitin Jairam Gadkari, Minister of Road Transport, Highways and Shipping of India; Nick Chism, Global Chair, Infrastructure, Government and Healthcare, and Deputy Head, Global Sales and Markets, KPMG, United Kingdom; Sunil Kanoria, Vice-Chairman, SREI Infrastructure Finance, India; Rana Kapoor, Founder, Managing Director and Chief Executive Officer, YES BANK, India


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Further Information

The event page of the India Economic Summit provides more information from the meeting, including photographs, press releases, social media and webcasts of selected sessions.

http://wef.ch/ies16

This report is also available to download:
http://wef.ch/india16report

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Upcoming Meetings

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Dubai, United Arab Emirates 13-14 November

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