Future of Jobs in India - 2.0
Rise of Disruption

The world is at the cusp of fourth industrial revolution. Disruptive changes brought in by technological advancements are fundamentally revolutionizing the current job landscape with the impact ranging from job creation to job displacement and increased labour productivity to widening skill gaps.
Technology has been reshaping work since the first Industrial Revolution, which can be traced back to the 1700’s when manufacturing was pegged with the emergence of ‘industries’ as Mechanical Technology powered the first factories. This revolution demolished guilds and replaced artisanal craftsmanship with assembly line production. In the 1800’s, with the discovery of electricity, the electrical impetus made possible the division of labour and mass production. The third industrial revolution of the 1900’s brought with it automated, IT enabled solutions which streamlined the programmatic work and limited the reliance on manual labour. Today, the fourth industrial revolution has augmented connectivity between cyber-physical systems, powered by exponential technologies and skilled data experts to create a fully interconnected society.

Currently emerging disruptive technologies such as Artificial Intelligence (AI), Machine Learning (ML), Robotics, 3D Printing, Internet of Things (IoT) and Blockchain – are giving way to innovations in business models that have never been envisioned before. Technological breakthroughs have altered consumer behaviour and expectations - most notably experienced among the millennial generation. What marks these technologies distinct is the pace at which upcoming start-ups are disrupting traditionally well-defined industries. Sharing economy that encompass everything from taxi services such as Uber and DiDi, and peer-to-peer lending platforms such as Lending Club and Prosper to hospitality aggregators such as Airbnb has revolutionised the business ecosystem in less than a decade. These start-ups are disrupting the conventional business models by offering affordable, accessible and scalable services.
Globally, the sharing economy is estimated to grow from USD 14 billion in 2014 to USD 335 billion by 2025. Similarly, the automotive industry is on the verge of a major disruption with innovators such as Tesla Motors trying to redefine the underlying dynamics of industry competition.

Exponential technologies are also facilitating the emergence of an online labour economy popularly known as the ‘gig-economy’. The gig-economy is facilitating outsourcing and offshoring of jobs beyond the boundaries of corporate towers in the form of short-term, part-time contractual or freelance work arrangements.

In today’s world, industrial disruption has commonly come to mean a transformation of business models and value networks driven by technology or business innovation. However, recent incidence of transnational events such as Brexit, China’s Belt and Road Initiative, US walking out of Trans-Pacific Partnership trade deal and Paris Climate Agreement, etc., that carry ripple effects across the globe, signal that disruption can also be a result of changing nature of public policy, macroeconomic trends, geopolitical events and other socio-economic developments.

Globalization and technology have collectively been disrupting businesses in the recent decade, however, a much bigger disruption is expected to appear with changes in demographic patterns across the globe. A rising middle class, and millennial-dominated workforces are embarking to reinvent the world economy. Another demographic phenomenon that is impacting economic systems and industries’ structures is the aging of population across much of the world. By 2020, for the first time in human history, world’s population of people aged 65 years and older will exceed the number of children under the age of five years.

The aforementioned forces are posing an increased threat of human workforce replacement and leading to drastic changes in the skills that firms are looking for. The phenomenon of technological innovations presenting a risk to human jobs and skills is not new or unexplored, but what makes the current transformation unique is that technology is not only impacting routine and manual tasks, but in-fact non-routine, cognitive, and social job profiles too. It is expected that not all jobs will be affected and not all affected jobs will be eliminated – as always, deployment of technology will both replace and supplement human labour.

It is necessary for us to be aware that unless we have a strategy in place to prepare ourselves for the upcoming transformation, the gains will not be widespread. A part of the solution, which is the most tangible for the near future, is development of education and skilling infrastructure across all sectors, corresponding to the emerging industrial set-up. As the new job roles emanating out of upcoming disruptions are entrepreneurial, scientific, creative, and emotional in nature, it is necessary for us to reform the education and skilling ecosystem.
Future of Jobs in India – A 2022 Perspective

FICCI and NASSCOM had partnered with EY to roll-out the ‘Future of Jobs in India - A 2022 Perspective’ in 2017. This report was the first research study exclusive to the Indian context on the future of jobs in five key sectors of the Indian economy in detail: IT-BPM, retail, textiles & apparel, automotive and BFSI. The report was based on extensive surveying of over 100 Indian CXOs across these 5 industrial sectors.

The ‘Future of Jobs in India - A 2022 Perspective’ report provides a vision of change in the Indian job market over the next few years. It also provides an overview of the projected job creation rates for the next five years, new job roles that will emerge and the skills and expertise that will be required for success in this emerging dynamic environment.

This report took a holistic perspective and analysed the primary causes of disruption and their impact on giving rise to a range of megatrends that are transforming the Indian job landscape. Based on multiple rounds of interactions with relevant stakeholders, the report analysed the fundamental causes of the emerging transformative trends and consequently, identified three primary forces behind the current disruption: globalization, adoption of exponential technologies by Indian industry and demographic changes. The interplay of these three primary forces is giving rise to a range of twelve megatrends which are shaping the future of jobs in India. The survey responses indicated rising middle class, creation of highly optimised supply chains, and launch of smart connected products and services as the top megatrends significantly impacting the job landscape in India.

Overall, the report presents a positive outlook for India to utilize the time window of the next 2-3 years to affect large scale reforms in general, technical and vocational education system in mission mode. The report, which was highly acknowledged, has been used as a reference point by various stakeholders such as the government, industry players and academia, in their quest to be prepared for the anticipated disruption.
Study Framework

Based on our analysis, we identified three forces that are primarily steering the transformation of the Indian economy – what we refer to as the ‘primary forces’. These forces are globalization, adoption of exponential technologies by Indian industry, and demographic changes.

EY framework for the future of jobs study

Source: EY analysis

Globalization

- Level of exports of India based companies
- Increasing/shrinking overseas job market for Indian workforce
- Rapid adoption of exponential technologies in the advanced markets and its impact on offshoring

Demographic changes

- High proportion of young population including millennials
- Expanding domestic Indian market
- Rising middle-class
- Increasing urbanization

Adoption of exponential technologies by Indian industry

- Launch of smart connected products/services
- Creation of highly optimized supply chains
- Business innovation
- Exponential technologies like robotics, AI, IoT, machine learning, social media, analytics, cloud, 3D printing

Future of jobs in India

- Level of FDI flows into India
- Demand for resourceful planet & sustainability

Source: EY analysis
Based on our analysis, we identified three forces that are primarily steering the transformation of the Indian economy — what we refer to as the ‘primary forces’. These forces are globalization, adoption of exponential technologies by Indian industry, and demographic changes.

**Globalization** has been upending the status quo for centuries. Globalization has accelerated in recent decades, accruing to trade liberalization and emerging market growth. However, phenomena such as the recent rise of nationalist sentiments in the west, scraping of the Trans-Pacific Partnership (TPP) trade deal, Brexit and so on, are leading to the emergence of a more multipolar world. These trends disrupt existing business models by creating new competitors, reordering supply chains and lowering price points. The next waves – including the emergence of BRICS as a major economic block and a more multipolar world – will augment complexity and require flexible business models to respond to global shifts.

**Adoption of exponential technologies** has been disrupting competitive strategy and business models for centuries. The Industrial Revolution, for instance, eliminated guilds and created massive labour displacement. In our lifetime, successive waves of the IT revolution (PC, online, mobile, social) have democratized data, empowered consumers and spawned scores of new industries. The next waves of technological disruption – the IoT, Virtual Reality (VR), AI, ML, Big Data, Robotic Process Automation (RPA) – are proving themselves to be even more revolutionary.

Throughout human history, **demographic changes** have determined evolutionary restructuring. In the decades ahead, relatively higher birth rates will make Asia and Africa engines of economic opportunities. Aging populations will transform and mature everything from health care to real estate in majority of developed nations. Millennial-dominated workforces are reinventing the workplace. Similarly, urbanization is increasing the cities’ economic and public policy clout, even as it strains their ability to grow in a sustainable manner. Migration and immigration will also have profound impact on workforces and economic development. All these demographic shifts will require new strategies and business models.
Key Findings

Workforce mix - 2022

9% would be deployed in new jobs that do not exist today
37% would be deployed in jobs that have radically changed skill sets
54% will fall under unchanged job category

Source: EY future of jobs respondent analysis

A snapshot of the future of job in the organized sector - 2022

<table>
<thead>
<tr>
<th>Sector</th>
<th>Workforce that would be deployed in new jobs that do not exist today (projected for 2022)</th>
<th>Workforce that would be deployed in jobs that have radically changed skill sets (projected for 2022)</th>
<th>Workforce that will face an existential threat to their jobs (for 2017)</th>
<th>New Job roles</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT-BPM</td>
<td>10%-20%</td>
<td>60%-65%</td>
<td>20%-35%</td>
<td>VFX artist, Computer vision engineer, Wireless network specialist, Embedded system programmer, Data scientist, Data architect, AI research scientist, RPA developer, Language processing specialist, Deployment engineer, 3D modeling engineer, 3D designer, Cloud architect, Migration engineer, Android/iOS app developer, Digital marketing</td>
</tr>
<tr>
<td>Automotive</td>
<td>5%-10%</td>
<td>50%-55%</td>
<td>10%-15%</td>
<td>Automobile analytics engineer, 3D printing technician, Machine learning based vehicle cybersecurity expert, Sustainability integration expert</td>
</tr>
<tr>
<td>Textiles &amp; apparel</td>
<td>5%-10%</td>
<td>35%-40%</td>
<td>15%-20%</td>
<td>Apparel data analyst/scientist, IT process engineer, E-textiles specialist, Environment specialist, PLC maintenance specialist</td>
</tr>
<tr>
<td>BFSI</td>
<td>15%-20%</td>
<td>55%-60%</td>
<td>20%-25%</td>
<td>Cyber security specialist, Credit analyst, Robot programmer, Blockchain architect, Process modeler expert</td>
</tr>
<tr>
<td>Retail</td>
<td>5%-10%</td>
<td>20%-25%</td>
<td>15%-20%</td>
<td>Customer experience leader, Digital imaging leader, IT process modeler, Digital marketing specialist, Retail data analyst</td>
</tr>
</tbody>
</table>

Source: EY future of jobs respondent analysis
Future of Jobs in India-2.0

Moving forward FICCI envisages to analyse five more sectors in the second phase of the study. These sectors together form the foundation of India’s socio-economic development. The proposed sectors include:

Healthcare

Construction

Tourism & Hospitality

Education

Transportation & Logistics

The proposed study will be an endeavour towards analysing the aforementioned five sectors in detail and presenting a holistic perspective on three counts: analysing the major trends impacting the sectors, identifying the key skilling needs, and recommending a strategy towards developing the workforce of the future.
# Healthcare Sector

## Snapshot of the Indian Healthcare Sector

### SECTOR OVERVIEW

<table>
<thead>
<tr>
<th>~USD 160 billion</th>
<th>CAGR 16-17% expected during 2017-2022</th>
<th>USD 22.41 billion cumulative FDI inflow from April 2000 to March 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>market size of Indian healthcare sector in 2017</td>
<td>Sector to reach USD 372 billion by 2022</td>
<td></td>
</tr>
</tbody>
</table>

**2X GROWTH IN GOVERNMENT EXPENDITURE EXPECTED FROM 2017 to 2025**

- 1.2% of GDP in 2017
- 2.5% of GDP in 2025E

### EMPLOYMENT SCENARIO

1. **4th largest employer**
   - Accounting for 4% of the total employment across sectors in India

2. **1.2 million people** employed as of December, 2017 (in organized sector)

### Healthcare needs for tomorrow

- **1.54 million** additional doctors and **2.4 million** nurses required by 2025 to meet the growing demand for healthcare
- **3 million** additional beds needed for India to achieve the target of 3 beds per 1,000 people by 2025
- **~USD 200 billion** is expected to be spent on medical infrastructure by 2024

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**Ayushman Bharat - Government of India's initiative**

- World’s largest government funded health care program
- To cover over 100 million poor and vulnerable families
- Bringing about a **transformative change** in healthcare by shifting focus from ‘healthcare’ to ‘wellness’

**Two components of scheme**

<table>
<thead>
<tr>
<th>Health and Wellness Centre</th>
<th>National Health Protection Scheme (Pradhan Mantri Rashtiriya Swasthya Suraksha Mission)</th>
</tr>
</thead>
<tbody>
<tr>
<td>✷ 0.15 million centres to bring healthcare system closer to doorsteps of millions</td>
<td>✷ Healthcare coverage upto USD 7,000 per family per year for secondary and tertiary care</td>
</tr>
<tr>
<td>✷ Provision of all-inclusive healthcare, free essential drugs and diagnostic services</td>
<td>✷ Over 500 million people to be covered</td>
</tr>
<tr>
<td>✷ ~USD 166 million allocated budget</td>
<td>✷ ~USD 1.4 billion allocated budget</td>
</tr>
</tbody>
</table>
Key Emerging Trends

Higher penetration of mobile phones has spurred increasing usage of mHealth apps such as Mobiwebtech, Mobisoft Infotech and Peerbits, which are facilitating easy remote diagnosis and treatment through disease and drug intake tracking with analysis, reminders and notifications

Telemedicine in Indian healthcare landscape has been a disruptive business model, wherein major hospitals like Apollo, AIIMS, Narayana Hrudayala have adopted telemedicine services and entered into a number of PPPs. Telemedicine market in India is expected to rise at a CAGR of 20% during FY2016-FY2020, reaching USD 32 million by 2020.

Increase in medical expenses around the world has led to India emerging as a preferred destination for medical tourism.

As of April 2017, medical tourism market in India was USD 3.0 billion in size and is expected to double to reach USD 6 billion by 2018 due to the easier norms for medical visa approvals.

Introduction of National Health Stack (NHS) by Government of India would interlink the continuum of healthcare across primary, secondary and tertiary care. This will enable interoperability of data and portability of insurance cover.

Disruption and Convergence

Patient centered care approach

Demand for Digital

Support from supply side

Adoption of IoT enabled platforms is supporting players with a new foundation for gaining insights into operational management across organizational verticals thus enabling optimization of assets and reduction of operational costs.

With the rise of Internet of Medical Things (IoMT), mobile and wearable devices are being used to identify the risk factors and provide preventative treatment to the patients.

Healthcare providers in India are looking at deploying the Blockchain technology, enabling transparency, reduction of administrative costs and improvement in interoperability of data.

Electronic Health Record (EHR) promises to offer reliable access to patient’s complete healthcare information to enable diagnosis of problems at an early stage. It would also provide information such as new medication or upcoming diseases.

AI powered robots like IBM Watson are getting deployed in health care delivery as Surgical Assistants and in research including genomics, drug discovery, oncology and stem cell therapy. Robots and AI would assist as Care Managers for rehabilitating patients, caring of elderly patients, and measuring and delivering medication.
Snapshot of the Indian Education Sector

**SECTOR OVERVIEW**

- **USD 91.7 billion** market size
  - # Schools: **1.52 million** (FY2016)
  - # Universities: **850** (FY2018)
  - # Students enrolled (FY2016)
    - Schools: **260.2 million**
    - Higher Education: **33.3 million**
  - FDI inflow of ~**USD 1.67 billion** between 2000-2017
  - Digital Learning market **USD 2 billion** (2016)
    - Expected to reach **USD 5.7 billion** (2020)
  - **18.2 million** individuals employed in the sector as of FY2018
# Key Emerging Trends

## India’s Education landscape of the future is characterized by blurring of boundaries

<table>
<thead>
<tr>
<th>2018</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Levels of education</strong></td>
<td><strong>Higher education and industry</strong></td>
</tr>
<tr>
<td>Move to a culture of lifelong learning</td>
<td>Rise in industrial contribution to educational development</td>
</tr>
<tr>
<td><strong>Geographies</strong></td>
<td><strong>Education spaces</strong></td>
</tr>
<tr>
<td><strong>Teacher-student interaction</strong></td>
<td>Limited face-to-face interaction between students and teachers, with rise of online learning</td>
</tr>
</tbody>
</table>

## Increasing use of technology

- Increased use of **big data** to analyze student information and customize online content
- Digital platforms weaving path for **MOOCs** such as edX, Udemy, Coursera, SWAYAM (MHRD’s platform where online course are offered by premier institutes such as IITs, IIMs, etc.)
- Highntened internet penetration leading to the emergence of **mobile-Education (mEducation)**, which has the potential to revolutionize India’s vast network of rural and semi-urban school network, that are currently facing challenges in quality teachers and infrastructure
- Blockchain technology has given way for **microcredentials and badges**. Microcredentials have grown in popularity among both brick-and-mortar institutes and digital education platforms such as Coursera, edX, etc.
- **Gamification and simulation based** teaching-learning ecosystem is emerging leveraging the strengths of technologies such as Augmented Reality, Virtual Reality. E.g. Google Cardboard, Microsoft HoloLens and Eon Reality
- **AI based facial recognition** softwares like SAFR are being deployed in schools for analysing students’ behaviour for better monitoring
- Data driven decision making is redefining education management and administration through enabling creation of class schedules, maintaining student attendance, processing grades and report cards
- Learning outcomes are getting supplemented by technological tools such as **AI and RPA** that are being utilized in assessment softwares such as eLumen, WEAVEonline and EvaluationKIT

## Megatrends driving the Indian Education Sector

- **Setting up of satellite campuses and student exchange programs** by foreign universities
- Broadening geographical presence to include socioeconomic groups with low participation
- Increasing collaboration with industry, to boost the research and development initiatives
- **Tutoring in the K-12 market** is emerging as a major segment, which is expected to grow from USD 8 billion in FY2011 to USD 26 billion in FY2020

## Expanding net of education

- **Emergence of tutoring market**
Snapshot of the Indian Construction Sector

SECTOR OVERVIEW

- **9% contribution to GDP**
- **Growing at a **CAGR of 15.7%** to reach USD 738.5 billion by 2022**
- **2nd largest employer**
  - 44 million workers employed
- **USD 24.8 billion** cumulative FDI inflow from April 2000 - March 2018

Key Emerging Trends

**TECHNOLOGICAL TRENDS**

- **IoT**
  - Increasing use of IoT devices in Smart Buildings for collecting and analysing data from sensors to understand signals and patterns, deploy real-time solutions, cut costs, prioritize preventative maintenance, and prevent unplanned downtime

- **Building Information Modelling (BIM)**
  - Indian firms such as HCC, Tata Project have initiated use of BIM to establish transparency in design, costing, and progress visualization; to improve on-site monitoring of materials, labor, and equipment productivity; e.g. use of BIM by Nagpur Metro Rail Corporation, IBIS Hotel Chennai

- **Robotics**
  - Off-the-shelf robotic applications are getting utilized to work in parallel to manual labours at construction sites e.g. WALT, a robot developed by Hyderabad based Endless Robotics can paint walls about 30 times quicker than a human

**OTHER EMERGING TRENDS**

- **Smart City Mission**
  - India’s ‘Smart City’ mission is implementing a vision of advanced and modern urban localities by leveraging Cloud Computing, Big Data, Mobility and IoTs.
  - Under this 100 Smart Cities are envisaged to be developed by 2020

- **Government Priority Green Infrastructure**
  - Rapid degradation of environment has given rise to development of eco-friendly end-to-end construction mechanisms, from materials, methods to equipment, with parameters of reduced carbon footprint, energy efficiency and water conservation

- **Schemes like Atal Mission for Rejuvenation and Urban Transformation (AMRUT), Heritage City Development and Augmentation Yojana (HRIDAY), Pradhan Mantri Awas Yojna, Bharatmala, Delhi Mumbai Dedicated Freight Corridor**
  - Providing major growth thrust to the sector
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## Transportation and Logistics Sector

### Snapshot of the Indian Transportation and Logistics Sector

<table>
<thead>
<tr>
<th>Roads &amp; Highway Segment</th>
<th>Railway Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The road network of India is one of <strong>largest in the world</strong> spanning over a total 5.6 million kms in FY2018</td>
<td>India has the 4th <strong>largest rail freight carrier network</strong> and the largest <strong>passenger carrier network</strong> in the world</td>
</tr>
<tr>
<td>More than 65% of freight and 80% of the <strong>passenger traffic</strong> in the country is handled by roads</td>
<td>Indian Railway runs <strong>13,329 trains</strong> carrying ~22.4 million passengers daily</td>
</tr>
<tr>
<td>The market for roads and highways is projected to exhibit a <strong>CAGR of 36.16% during 2016-2025</strong></td>
<td><strong>Single largest employer</strong> in India employing close to 1.3 million people</td>
</tr>
<tr>
<td>During FY2018, Government allocated <strong>USD 10.97 billion</strong> for development of national highways</td>
<td>Capital expenditure on railways has been pegged at <strong>USD 22.85 billion</strong> in FY2018</td>
</tr>
<tr>
<td>Overall annual freight traffic in the country is estimated to reach ~13,000 <strong>billion tonne km</strong>, whereas, overall annual passenger traffic is estimated to reach ~168,000 <strong>billion passenger km</strong> by 2030</td>
<td>Passenger traffic is expected to advance to <strong>15.20 billion</strong> by FY2020 from <strong>8.29 billion</strong> in FY2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aviation Segment</th>
<th>Ports &amp; Shipping Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td>India is the 9th <strong>largest civil aviation market</strong> in the world</td>
<td>India is the 16th <strong>largest maritime country</strong> in the world</td>
</tr>
<tr>
<td>Aviation industry is expected to witness <strong>USD 15.52 billion</strong> worth of investments in the next five years</td>
<td>Total investment in Indian ports by 2020 is expected to reach <strong>USD 43.03 billion</strong></td>
</tr>
<tr>
<td>By 2020, passenger traffic at Indian airports is expected to increase to <strong>421 million</strong> from <strong>308.75 million</strong> in 2017-2018</td>
<td>In Q1 FY2019, cargo traffic increased <strong>3.91% year-on-year</strong> to <strong>174.02 million tonnes</strong></td>
</tr>
<tr>
<td>The industry witnessed a <strong>13.4% growth in the Foreign Tourist Arrival</strong> in 2017-2018</td>
<td>The industry boasts of a <strong>fleet strength of 1301 vessels</strong></td>
</tr>
<tr>
<td>The domestic aviation passenger traffic grew year-on-year by <strong>18.28% in FY2018</strong>, while the international aviation passenger traffic grew year-on-year by <strong>10.43% in FY2018</strong></td>
<td>Freight capacity of the industry is expected to increase to <strong>1,451 million tonne</strong> by FY2018 end from 965 million tonne from FY2016</td>
</tr>
</tbody>
</table>
Key Emerging Trends

**Augmented Reality** is getting used in Warehouse Planning, Pick-and-Pack Services and Last Mile Delivery, has shown significant improvements in productivity by shortening the learning curve, better workflow before implementation in warehouses and by providing constant picking validation that updates in real-time.

**IoT** is enabling real-time integration of data across supply chain partners for real-time tracking

**Robots and Automated Guided Vehicles** are already solving picking and sorting challenges in the warehouses

**Social media and mobile applications** are being used to generate one-on-one interaction with customers to obtain feedback and provide customer services.

**Big Data analytics** is being leveraged for long-term demand forecasts, transportation fleet capacity optimisation, planning and yield management

Government’s initiatives such as **BharatMala, SetuBharatam, SagarMala, Eastern Dedicated Freight Corridor** and **Western Dedicated Freight Corridor** will significantly fasten and organize the movement of freight traffic.

Robust growth in the e-commerce market is providing a major thrust to the logistics business in India. **Third-party logistics (3PL)** is experiencing a rapid growth backed by this rise in e-commerce sector and logistical efficiencies brought in by **GST implementation**.
Tourism and Hospitality Sector

Snapshot of the Indian Tourism and Hospitality Sector

SECTOR OVERVIEW

USD 230 billion market size
9.4% contribution to GPD

Expected to reach USD 424 billion by 2027

44 million workers (as of 2016)
9.3% of the total jobs in India

Foreign Tourists Arrival: 8.8 million
Domestic Tourists Visits: 1.6 billion (2016)

Key Emerging Trends

- RPA is increasingly being embraced as a tool for business travel management in the booking reservation system 24 hours and 7 days.
- AI based Guest Management System is being deployed to provide personalized experience to customers regarding their tastes or consumption by accessing real-time information.
- Hotels and multiplexes are including amenities like Augmented Reality to allow tourists to engage in a close to real life experience through multimedia resources characterizing the destination.
- Companies have started using private Blockchain to handle internal processes and manage distribution of hotel and restaurant inventory, and other assets. Also, it is being used to streamline their loyalty management programs.
- Big data is being used by the hospitality industry players, exploiting analytics for targeted marketing of their services through data collected via social media channels.
- India is emerging as the preferred destination for Medical Tourism as it offers advanced facilities, skilled doctors, and low cost of treatment to foreign patients.
- E–Tourist Visa, launched by the Government of India, has resulted in increase in the number of tourist visas issued in the country to a large extent. The arrivals through e-visa have increased by 57.2% to 1.69 million during FY2017.
Key Emerging Trends

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## Approach and Methodology for the next Phase

### Phase

<table>
<thead>
<tr>
<th>Impact Assessment</th>
<th>Strategic Foresight</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perform deep dive, quantitative and qualitative analysis to identify the impact of the megatrends on the Indian economy.</td>
<td>Identify and finalize the groups of top leaders and employers in selected sectors for the study.</td>
<td>Validation of study analysis and findings (obtained through primary and secondary research) with industry associations, thought leaders, etc.</td>
</tr>
<tr>
<td>Review the existing research done in the area of future of jobs in India and other countries.</td>
<td>Develop survey questionnaire and conduct primary survey for each of the 5 sectors based on the Future of Jobs framework.</td>
<td>Arrive at various risks that might exist in the future, analyse the steps taken by other countries to mitigate these risks and recommend on how various sector leaders, policymakers, etc. should take steps for risks mitigation.</td>
</tr>
<tr>
<td>Conduct the secondary data collation and analysis to find the quantitative impact on job numbers over the next 5 years.</td>
<td>Analyse the information collated through primary surveys to study the impact.</td>
<td></td>
</tr>
</tbody>
</table>

### Details

- **Impact Assessment**
  - Perform deep dive, quantitative and qualitative analysis to identify the impact of the megatrends on the Indian economy.
  - Review the existing research done in the area of future of jobs in India and other countries.
  - Conduct the secondary data collation and analysis to find the quantitative impact on job numbers over the next 5 years.

- **Strategic Foresight**
  - Identify and finalize the groups of top leaders and employers in selected sectors for the study.
  - Develop survey questionnaire and conduct primary survey for each of the 5 sectors based on the Future of Jobs framework.
  - Analyse the information collated through primary surveys to study the impact.

- **Validation**
  - Validation of study analysis and findings (obtained through primary and secondary research) with industry associations, thought leaders, etc.
  - Arrive at various risks that might exist in the future, analyse the steps taken by other countries to mitigate these risks and recommend on how various sector leaders, policymakers, etc. should take steps for risks mitigation.

### Output

‘Future of Jobs in India – 2.0’