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CHAPTER 6

FUTURE TRENDS IN TECHNOLOGY AND BUSINESS IN INDIA

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ABSTRACT

India is going through the technological revolution with rapid advancement that is transforming the landscape of business. The integration of technologies like Blockchain, Internet of Things and Artificial Intelligence with the government policies is creating an unmatched growth in the different sectors. These technological innovations and advancements are changing the traditional industries and providing new opportunities to them along with some fresh challenges. The synergy from the combination of technology with business is enhancing its efficiency and productivity and also promoting innovation in entrepreneurship. As the country understands and navigates its transformative journey, it is important for it to understand and anticipate the future trends which is very important for the individuals, businesses and the policy makers to flourish in the fast evolving economy. This chapter will explore and understand the key trends that define the technology and business in India. It will also throw light on the importance of continuous adaptation,

innovation and strategic foresightedness in exploiting the potentials of these advancements.

6.1 INTRODUCTION TO FUTURE TRENDS IN INDIA

India is a diverse and dynamic country that is going through a transformation phase. It is growing rapidly. It is shaping its economy globally with the passage of time. The future trends will drive the speed of growth and transformation at a fast speed.

6.1.1 ECONOMIC GROWTH AND DEVELOPMENT

India's economy is outpacing many major economies of the world. Following are the major trends that can be seen:

- **Digital Economy:** The digital economy of India is expected to reach $1 trillion by the year 2025. Expansion of internet use, initiatives of the government like Digital India has led to the increase of digital services in India.
- **Economic Diversification:** India is diversifying its investment in many different and hi-tech industries, bio-tech industries, renewable energy etc.
- **Urbanisation:** Increased Urbanisation has boosted the economic growth of India. Urban areas of India are expected to house approx. 600mn people which will require heavy investment in infrastructure, services etc.

6.1.2 TECHNOLOGICAL ADVANCEMENT

Technology is the most important part for the future growth which helps in the advancement of the various sectors:

- **Artificial Intelligence and Machine Learning:** India has become the hub of AI and ML which is transforming industries like finance, healthcare, and agriculture with high productivity and innovation.
- **5G Technology and Internet of Things:** Introduction of 5G technology and IoT devices has revolutionised automation and connectivity across industries and sectors in India.
- **Fintech Innovation:** India is using a lot of digital technology in finance such as digital banking, mobile payments etc. It has changed the way India manages its financial services.

6.1.3 DEMOGRAPHIC SHIFT

India's demography has changed in the past years making it both an opportunity and a challenge for the country.

- **Population of Youth:** The population of India mostly consists of the young people which is the youngest population in the world. 50% of the population is below the age of twenty five which gives an opportunity for economic growth by making an adequate investment in employment, education, skill development etc.
- **Ageing Population:** India also has an increase in ageing population which requires the need of healthcare, infrastructure, social security etc for its living and growth.
- **Migration and Dispersal:** The socio economic structure of the country is changing with the migration and dispersal of the population in the country. The movement of people affects the labour market, international relations, urban planning etc.

6.1.4 ENVIRONMENTAL SUSTAINABILITY

It is important to focus on the sustainable development of the country.

- **Renewable Energy:** India is planning and aiming to be a global leader in the renewable energy sources like wind, solar, bioenergy to reduce its dependence on fossil fuels and decrease the emission of carbon.
- **Climate Change:** India is having change in climate and is heavily vulnerable to extreme weather conditions. The country is planning to manage the climate with water management, sustainable agriculture and planning of the infrastructure.
- **Sustainable Agriculture:** Sustainable agricultural practices organic farming and water efficient farming are promoted for environment sustainability.

6.1.5 SOCIAL & CULTURAL EVOLUTION

India's cultural variation is changing with the changing norms and the values of the society.

- **Digital Literacy & Education:** Digital penetration and revolution is changing education in India. Introduction of e-learning platforms and digital classes have made education more accessible and fun.

- **Gender Equality:** Women are also now participating in the crucial areas such as in the workforce, politics, education etc.
- **Cultural Revival:** Indian culture is getting the platform to express itself through tourism, creative industries, and digital media. The focus is to prevent the traditional art and promote cultural innovation.

6.2 OVERVIEW OF INDIA'S TECHNOLOGICAL LANDSCAPE AND BUSINESS ENVIRONMENT

The technological landscape and business environment of India has changed drastically in the last decade with the innovation and proliferation of technology and integration of the global market in a single market. Following is the overview of this development:

6.2.1 ECONOMIC LANDSCAPE

Diverse and growing economy of India is growing and offering many opportunities to the business:

- **GDP Growth:** The GDP growth rate of the country is 6% - 7% on average in the past 10 years. The growth depends upon the investment, spending, and the consumption in the country.
- **Sectoral Diversification:** Indian economy is diversifying from agriculture to other sectors now like telecommunication, renewable energy, information technology, pharmaceuticals etc.
- **FDI:** India has attracted billions of dollars as a Foreign Direct Investment annually. Government initiatives like Make in India aims to increase the manufacturing of India and make India the centre of innovation and investment.

6.2.2 REGULATORY FRAMEWORK

The aim of the regulatory framework is to promote the growth of the business and innovation.

- **Ease of Business:** India is taking all the measures to provide the ease of doing business. Modification in taxation, business registration, insolvency resolution have improved the climate of doing business.
- **Startup India:** It aims to provide a favourable ecosystem through simplified regulations, access to funding, tax incentives which will promote start-ups across the country.

- **Cyber security:** Data protection and cyber security has become a critical part with the increased digitization in the country. The Personal Data Protection Bill and National Cyber Security Policy has been formed to provide a secure environment for digitization.

6.2.3 INVESTMENT AND FINANCING

Abundant opportunities are available in the Indian Business Environment.

- **Venture Capital and Private Equity:** Investment funds like venture capital and private equity are actively financing startups and innovative businesses in india.
- **Public Markets:** BSE and NSE are the Indian stock markets which offer different avenues for raising the capital. Initial Public Offerings are leading the way for many tech companies in India.
- **Government Funding:** The government supports the businesses through various funding schemes like Atal Innovation Mission (AIM) and National Investment and Infrastructure Fund (NIIF) in the sectors like manufacturing, infrastructure and technology.

6.2.3 CHALLENGES & OPPORTUNITIES

There are multiple challenges and opportunities in the business environment.

- **Problem of Infrastructure:** There are many gaps in the infrastructure such as gaps in transportation, logistics and energy. Continuous modernization and investment are important for the improvement of infrastructure.
- **Regulatory Complexity:** Regulatory landscape is challenging for the business. It is important to simplify the regulations and increase the transparency for a conducive environment for business.
- **Skill Development:** There is high demand for skilled labour due to the high growth of technology in business. The gap of skill can be bridged through training and education which is important for the growth of the business.

6.3 IMPORTANCE OF ANTICIPATING AND ADAPTING TO FUTURE TRENDS SPECIFIC TO INDIA

For a vast and rapidly growing economy like India, it is important to anticipate and adapt the future trends on the global stage to understand and respond to these trends for development and growth. Following are the important things to stay ahead:

- **Youth:** Majority of the population under the age of 25 years which is a demographic advantage for India for its economic growth. Education and vocational training will improve the literacy and the skills of the youth for the future jobs.
- **Ageing Population:** With the increase in the age of elderly, the requirement of elderly care products also increases. Business can introduce new methods to enhance the care of elders with the help of technology.
- **Digital Transformation:** Technology is the important and integral part of the digital transformation. Artificial Intelligence, Machine Learning, Blockchain etc can boost productivity along with the privacy of data and cyber security.
- **Emerging Technologies:** Emerging technologies like Artificial Intelligence, IoT, renewable energies can lead to economic development. Research and Development, Academic and Industry collaboration can accelerate technological development.
- **Economic Growth & Diversification:** It is necessary to diversify the economy from the agriculture sector to high growth sectors. Policies that promote ease of doing business and promote innovation and investments can encourage entrepreneurship and diversification.
- **Globalization & Trade:** Integration of the global economy has given the opportunity for investment, trade and collaboration. It is important to strengthen the trade relations and adapt the global trade dynamics to improve the capabilities and compete in the international market.
- **Sustainable Development:** Adaptation of sustainable practices can improve the environmental impact and promote green growth. Investment in sustainable infrastructure and clean energy and environment conservation can boost the long term development.
- **Urbanisation and Infrastructure:** speedy urbanisation helps to improve innovation. Development of modern infrastructure and smart cities and improve the standard of living and hence can attract more investment. Improvement of connectivity and public services will boost urban expansion.
- **Inclusive Growth:** Policies that reduce disparities and give equal opportunity for growth are beneficial for the country. It includes rural development, social equity and gender equality, access to healthcare, education and financial services etc.
- **Cultural Innovation:** India's cultural heritage and creativity offers many opportunities in various sectors like media, entertainment, tourism. Digital

platforms can improve innovation and preserve the culture. Tourism and innovation can also promote the culture along with the boost in the economy.

- **Regulatory Reforms:** Simplifying the process, more transparency and less bureaucracy can improve the environment of the business and can more easily attract investment. It is important for the business to stay updated and connected with the policy makers regarding the changes in the policy so that they can frame the strategies accordingly and attain favourable benefits from it.
- **Government Initiatives:** Initiatives like Make in India and Digital India are providing platforms and opportunities for the growth of the business. If a business aligns its business strategies and there is partnership between public and private sectors then it can drive more growth of the business and the economy.

6.4 DIGITAL TRANSFORMATION ACROSS INDUSTRIES

Digital transformation has brought a drastic change in the way businesses handle their operations. Inclusion of optimum technology, the decision making skills in businesses have enhanced which has brought innovations in business models. Various sectors like education, agriculture, healthcare, telecommunication, finance and banking, retail and manufacturing, transportation and logistics, government and public services use technology to improve its efficiency, flexibility and customer experience, and adapt faster to market trends. The major transformations in these sectors are:

- **Finance and Banking**: As a part of progressive strategy, banks are entering in partnership with Fintech startups and IT companies, developing new financial products and services like crowdfunding websites, neobanks (digital-only-bank) like (Airtel payments Bank , Jio Payment Banks, Paytm Payments Bank , Indian Post Payments Bank etc.) and robo-advisors for automatic investment management. The basic operations like account opening , loan processing , customer service, accounts management, risk management etc. have been automated to expedite the processing time. Big data and analytics is used to gain better understanding of consumer behaviour, analyse risk and detect frauds in real time. Data transformation support banks in providing individualised financial advice and proactive customer care services through chatbots.
- **Education Sector**: Inclusion of digital transformation in the field of education, holds great promise in moulding the traditional practices and helping students by providing personalised learning rather than following the one-size-fits all

approach. Learning patterns of students can be analysed and their strengths and weaknesses can be identified providing them with the personalised solution ,administrative tasks like grading , scheduling and admission tracking can be easily streamlined, lifelong learning can be provided including the micro certification courses, which can update the skills and knowledge of professionals throughout their lives, promoting the holistic education many online platforms provide interdisciplinary education, digital transformation in expand the reach of students globally allowing them to collaborate on various projects with foreign students and universities , technology also enhances the communication between teachers students and parents by allowing them to use various forums and platforms for online discussion and video conferencing. Inclusion of technology in education also paves the way for inclusive education such as speech to text for hearing impaired students and text to speech for visually impaired students.

- **Agricultural sector**: Integration of digital technologies brings precision in agriculture by analysing data related to crop health, soil condition, weather pattern through variable rate technology (VRT) , remote sensing and soil health monitoring can be used to detect issues of nutrients deficiency , moisture level and soil composition. Automated machinery like AI driven tractor and harvesters will improve the efficiency and reduce the cost of production. Robotic weeding can be used to remove harmful weeds from crops. AI technology can also predict crop yields, market fluctuations , irrigation schedule, weather pattern and also provide online platforms for farmers to connect with buyers directly without the interference of intermediaries.
- **Healthcare sector**: Digital transformation is revolutionising the healthcare sector by integrating technologies like Electronic health records of patients, online consultation, telemedicine, automation of administrative tasks like scheduling appointments, billing and inventory management, mobile health apps enhances patient interaction, wearable technology like fitness truckers and smart watches motions real time data of patients. Digital technologies have made easier and faster the treatment of patients through robotics surgery, online platforms provide opportunities to doctors and medical students to connect with each other globally and share their knowledge over digital platforms. Clinical Robotic Surgery Association (CRSA) has proposed the inclusion of robotic surgery in the medical curriculum .
- **Telecommunication sector:** Digital transformation in telecommunication provides advanced Connectivity by offering 5G technology and networks slicing which provides customised network services for specific uses. The IoT

integration by telecom providers enables smart connectivity and builds opportunities for new revenue streams. Inclusion of AI and Machine Learning can reduce the security threats. Operational efficiency can be increased by automation of routine tasks and leveraging cloud computing for flexible operations and faster services. This will improve the service quality, increase agility, reduce cost, enhance customer satisfaction and open ways for new innovations.

- **Retail and manufacturing sector:** The retail and manufacturing sector contributes substantially in the economic growth, it involves inclusion of digital technologies in all the aspects of business, changing the way how various sectors operate and serve their customer base. Online shopping platforms like Myntra , Flipkart, Amazon , Meesho , BlinkIt etc. allow customers to shop anything from anywhere 24*7, eliminating the geographical constraints. AI driven technology provides personalised recommendations to targeted customers. Omnichannel strategy provides click and collect facility to customers, support services through various channels like chatbots, phone, email etc. To enhance customer experience, latest technologies provide visual try-ons to check how the product looks on them without physically trying them on, visual tours of the showroom, smart mirrors and interactive display. Tracking real time inventory, forecasting demand and automatic reordering makes inventory management easy and reduces the manual work of labourers. In the manufacturing sector, industry 4.0 has integrated smart factories by adding sensors, connected devices, AI and Machine learning to optimise production and predict maintenance needs, this has reduced the downtime and lowered the maintenance cost increasing the lifetime of the equipment. In addition to this, robotics and automation have increased productivity, lowered the chances of human error and improved the quality of the product or service.
- **Transportation and logistics:** Integration of digital technologies in transportation and logistics shall reduce the operating cost, increase consumer satisfaction and efficiency of employees at work. Real time tracking is possible due to IoT sensors which help in monitoring the location, condition and status of goods. GPS shall support in knowing the optimising routes and reducing the delivery time. In long haul transportation, automatic trucks can be used, drones shall help in last mile delivery, predictive analytics, automated warehousing shall help in managing the warehouse operations. Supply chain transparency provides supply immutable ledger, smart contracts, freight marketplace, integrated transportation management system. Latest technology uses electric or

hybrid vehicles, customisable delivery options, make it easy to take data driven decisions and identify opportunities and take proper risk management steps.

- **Government and public services:** Digital technologies improve the accessibility of public administration. Government now provides an online portal to citizens from where they can easily pay taxes, renew licence , and report for any grievances reducing the need to physically visit the offices. Mobile Applications have been developed making it easier to access the services 24*7 from anywhere. Big data analytics are used to analyse trends, identify issues and make informed decisions. As part of open data initiatives, government data is available publicly encouraging researchers and businesses to develop new solutions. Traffic lights, waste management and energy grids shall be managed through IoT sensor networks to provide seamless and efficient urban experience. Robust data security measures have been developed to ensure ethical data usage. Digital platforms are set-up for public consultation, social media can be used to disseminate information in real time. Secured and transparent transactions can be ensured using blockchain technology. Electronic - identity systems provide secured and easy access to government services, biometric authentication ensures security check.Various other work like environmental monitoring, digital skills training, expanding healthcare services like keeping electronic health records, and telemedicine etc can be managed with the use of digital transformation, AI and Machine learning.

6.5 FUTURE OF WORK AND SKILLS DEVELOPMENT

India is going through the transformation phase in its work due to the fast advancement in Artificial Intelligence and Automation and other technologies. The upskilling and reskilling of the workforce is required to be ready for the future roles in technology.

6.5.1 IMPACT OF AUTOMATION AND AI ON INDIA'S WORKFORCE

Automation and AI has created many new jobs and redefined the existing jobs.

- **Manufacturing and Industrial Sector:** The manufacturing sector is adopting automation and AI powered technologies for tasks like assembly, logistics and quality control. The routine and repetitive tasks are automated which has reduced the need of labour especially low-skilled labour. There is demand for highly skilled labour who can manage, operate and maintain advanced

technologies. Many automobile industries like **Tata Motors and Tech Mahindra** are using robotics in the production process of the cars which has created the demand of technology skilled workforce.

- **Service Sectors:** The service sectors such as finance, healthcare, customer service support sector has transformed with the penetration of Automation and AI. Chatbots, Digital and AI based Data Analysis are becoming more common these days. It has become easy for routine entry of data, processing of transactions with the help of automation. Banks like **HDFC and ICICI** have started using AI for customer service and detection of fraud which has led to the requirement of a new skill set among the employees.
- **Information Technology Sector -** Indian IT industry has also started adopting AI and automation technology for software development, delivery of service, management of infrastructure. This has reduced manual work and the demand of AI, ML, cloud computing and cybersecurity has increased. Big names like **TCS and Infosys** are now focusing on these technologies and reshaping the skills requirement of the workforce.

6.5.2 EMERGENCE OF NEW JOBS

Though AI and automation has affected many jobs but it has also created many new jobs.

- **AI and Data Science:** AI is used in Data Science to increase the operational efficiency and strategic decision making. AI researchers, Data Scientists, Business Intelligence Analysts, Machine Learning Engineers are some of the key emerging roles in this area. Organisations like Amazon, Reliance and Flipkart are heavily investing in this field which gives multiple opportunities to the experts of Data Science.
- **Digital and Cybersecurity**: The role of Cybersecurity has increased with increase in data flow and digital transactions. Jobs like Information Security Manager, Ethical Hackers, Cybersecurity analysts are highly demanded to secure the digital assets of the companies and ensure the privacy of their data. Companies such as **Tech Mahindra and Wipro** are expanding their divisions of cyber security which requires skilled professionals of this domain.
- **Renewable Energy and Green Technology:** For sustainable development, the companies are shifting towards the Renewable energy and green technology which is also creating jobs in this sector. Jobs like sustainability consultants, solar energy engineers, wind energy engineers are the emerging roles in this

sector. With the strong emphasis of the government on renewable energy, the jobs in this sector are increasing rapidly.

- **Workforce Challenges:** There is a gap and mismatch between the skills required by the workforce and skills possessed by them. In the technology driven economy, technological skills are required by the workforce for future roles but many are still not prepared adequately for these new roles which leads to under employment or potential unemployment. This mismatch can be corrected through training and education.
- **Need for Continuous Learning:** In this dynamic and advanced environment it is important to stay updated with the help of continuous learning of tools, skills and methodologies. Continuous learning and possession of new skills is essential for the sustainability of the career. Workers need continuous training and education to stay updated with the market.

6.5.3 INITIATIVES FOR UPSKILLING AND RESKILLING THE WORKFORCE FOR FUTURE TECH ROLES

To reduce the threats and the challenges of automation and AI, upskilling and reskilling of the workforce is required for the future roles. The government of India is actively promoting skill development programs through different schemes.

- **Skill India Mission:** This mission was launched in the year 2015 which aims to train more than 400 million workforce in different skills. Pradhan Mantri Kaushal Vikas Yojana provides short term training of skills with certification and National Skill Development Corporation takes initiatives of partnership to facilitate skill development.
- **Digital India Initiative:** The objective of this initiative is to make India digitally empowered and educated. Government has introduced many digital literacy programs and e-learning platforms like Pradhan Mantri Gramin Digital Saksharta Abhiyan with the aim to provide digital literacy to around 60mn rural households.
- **National Education Policy:** It was introduced for the holistic and flexible education of an individual. It integrates the technology and encourages lifelong learning. It comprises vocational training, data science, coding at school and colleges for digital economy.

6.5.4 INDUSTRY LED INITIATIVES

Companies of the private sector have also taken various initiatives for the development of the workforce.

- **Corporate Training Programs:** Many companies like **TCS and Infosys** have implemented extensive training programs for reskilling of its employees in the era of Artificial Intelligence, cybersecurity and cloud computing. These training programs keep the employees competitive and updated with the latest skills that are required for technological advancement.
- **Partnership with Educational Institutions:** Companies like **Microsoft, IBM, Google** partner with educational institutions to impart specialised training & certification programs like Data Science, Artificial Intelligence etc. These training and educational programs enhance the quality of education and provide industry relevant skills to the students.

6.5.5 ONLINE LEARNING PLATFORMS

It provides access to education and skill development opportunities.

- **E-Learning and MOOCs:** There are many online platforms like **Udemy, edX, Coursera** that offer a variety of certification courses in collaboration with educational institutions. It is a flexible learning option which helps in upskilling as per the convenience of the individuals. It diversifies the learning of an individual to advanced technical skills.
- **EdTech Startups:** Startups like **Unacademy, Great Learning, Byju's** are also offering courses in Data Science, Coding, Artificial Intelligence. It makes the quality education more accessible to a larger audience including the population of remote areas. It makes the workforce ready for the future.

6.5.6 INITIATIVES BY COMMUNITY AND NON GOVERNMENT ORGANISATIONS

- **Skill Development NGOs: Pratham and American India Foundation** are the foundations that provide digital skills and vocational training to the communities that are underserved. It empowers the youth and women. It helps to bridge the gap of skills and motivates the marginalised groups to skill up and be a part of the digital economy.

- **Tech Communities and Meetups: Google Developer Groups, Women Who Code, PyLadies** are the communities that organise the workshops, meetups, hackathons for the promotion of the networking and continuous learning of the tech savvy enthusiasts. It develops a learning culture by providing a platform to the individuals to stay updated and enhance their skills.

6.6 GOVERNMENT POLICIES AND REGULATIONS

Government has a major role in shaping the technology adoption and business environment of the country with the help of the following policies:

- **Startup India Initiatives:** Government has simplified the regulations, provides funding and gives tax incentives to make India a innovation hub. Numerous tech startups have emerged such as edtech fintech, health tech etc. **Ola, Byju's, Zomato** are some of the examples that are benefitted from these initiatives.
- **Make in India Campaign:** The aim of this initiative is to make India a global manufacturing hub. These policies attract Foreign Direct Investment and encourage the manufacturing in different sectors like automotive, electronics, renewable energy etc. **Foxconn and Samsung** are the companies that have expanded their manufacturing in India because of these policies.
- **Digital India Initiative:** The objective of this initiative is to empower the society with digital technologies and knowledge. Government has expanded broadband connectivity, established **Common Service Centres** in the rural areas which promotes digital usage and digital payments and makes the cities smart. Programs such as **BharatNet** have enhanced the connectivity in remote and rural areas.
- **National Broadband Mission:** Government is trying to develop broadband infrastructure and increase fiber optic connectivity for the proliferation of digital services like telemedicine, online education, e-commerce.
- **Atal Innovation Mission:** Research and Development is important for technological innovation and development. **Atal Innovation Mission** was introduced to promote innovation in Entrepreneurship in India. **Atal Tinkering Labs** were established in schools and **Atal Incubation Centers** for startups to overcome the challenges and earn awards. It encourages young minds to solve problems creatively and develop technology. It fosters innovation at the grass root level.
- **National Policy on Electronics:** It was introduced in 2019 to make India a global hub for Electronic System Design and Manufacturing. Government

provides incentives for the manufacturing of the electronics, supports Research and Development of Electronics and helps in the Establishment of the Centers for Excellence for the emerging technologies like Artificial Intelligence and Internet of Things. The policy has boosted the manufacturing and the companies like **Apple and Xiomi** are now expanding their manufacturing unit in India because of the benefit of these policies.

- **Development of Skills: Pradhan Mantri Kaushal Vikas Yojana** was introduced and Skill Development Centres were established to equip skills with the workforce and foster employability in the tech era. It helps in the economic growth of the country.
- **Education: National Education Policy** was introduced in 2020 to provide vocational training and integrate technology in education. It laid emphasis on digital literacy, data science and coding from an early age. It makes sure that the young minds are prepared for the future tech roles.

6.7 IMPACT OF REGULATORY CHANGES ON TECH-DRIVEN SECTORS

Following are the impacts of regulatory changes on different technology driven sectors:

- **Data Regulation and Data Protection:** It is important to build trust in digital services by ensuring the individual's data privacy and implementing the regulations that process and protect the personal data. For the protection of data , localization of data, consent of user and establishment of the Data Protection Authority is required. Its aim is to enhance the security and privacy of data which can build trust of customers in digital services. The companies face challenges in terms of management and compliance of data. They invest in measures to protect the data and adapt their operation as per the new regulations of data protection.
- **E-Commerce Regulations:** It aims to ensure the protection of consumer and fair competitions among the companies by localising the data and implementing the measures of anti-counterfeiting. It creates a field for the domestic players and protects the interest of the consumers. It may create challenges for the multinational companies in terms of compliance with local regulations and management of data. Companies like Snapdeal and Flipkart have got the benefit from these measures.
- **Fintech Regulations by RBI:** RBI is a lending platform that regulates digital payments and provides other fintech services. It regulates the licensing

requirements, gives guidelines for digital lending and frames standards for cybersecurity. The regulations ensure the security and stability of the fintech ecosystem and builds confidence in the customers. It necessitates the compliances for fintech companies. Paytm and PhonePe are the companies that are influenced by these regulatory frameworks.

- **Telecom Regulatory Authority of India Guidelines:** It is the body that regulates the telecom sector and ensures fair competition which protects the consumers. TRAI has given the guidelines for 5G rollout, allocates spectrum and provides rules for net neutrality. It aims to improve connectivity and promote advanced technologies like 5G networks. It ensures high quality services with fair practices. Companies like JIO and Airtel are the big names in this field that have boosted the innovation in digital services.
- **Renewable Energy Policies:** It aims to promote security of energy and sustainable development. The National Solar Mission was introduced by the government to promote solar energy and achieve 100 GW of solar capacity. Government provides tax incentives, subsidies and support for manufacturing and installation of solar energy products. Such policies have accelerated the adoption and usage of solar energy in India. Tata Power Solar and Adani Green Energy are the companies that are expanding their solar projects with the help of these policy incentives.

6.8 CONCLUSION

The future of technology and business can be seen by speedy advancements in the digital technologies and changes in the policies by the government which has brought important changes in the traditional sectors like education, healthcare and agriculture. Artificial Intelligence and Automations are reshaping the requirement of skills and the workforce which creates novel opportunities while displacing some job roles. It necessitates upskilling and reskilling of the workforce. Many government policies like Digital India, Startup India, NEP 2020 are promoting innovation, building digital infrastructure and supporting the development of the skills. As the environment is dynamic therefore the continuous adoption of technology and innovation is necessary to stay competitive, drive growth and ensure inclusivity in the digital age.

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