

POLICY MONKS

A White Paper on

Regulating Artificial Intelligence An Indian Approach

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Introduction.....	3
Impact of AI on Indian Governance	5
Initiatives by Government of India to Regulate AI	7
Conclusion	12
References.....	13
Legal statement	14

Introduction

Artificial intelligence has the potential to transform our lives positively, but it is composed to disrupt the world. With AI, the world can improvise their healthcare, agriculture, finance, transportation, and also enable high-level cognitive processes like thinking, learning, problem solving, perceiving, and coupled with advances in data mining and computer processing power. However, it also necessitates the fundamental questions about data privacy, gender-based or other kinds of discrimination, and mass surveillance.

India, being among the top five growing economies in the world, plays a pivotal role in transforming economies and strategizing its approach. The budget report of 2018-19, presented by our Honourable minister, approached AI with a view in the emergence and development of technologies. Since the year, 2018, India has collaborated with several leading AI technology players to implement in the under-developing fields with potential to improve the quality of life significantly. To have a progressive transition in the economy, India should democratise access to and further development of AI.

As with any major advancement in technology, it brings with it a spectrum of opportunities as well as challenges. In order to identify the sectors that may have the potential of great externalities, the government should play a leading role. For example, the agriculture sector in India needs cooperation and technological support for survival. The private sector seems to give a wide berth to the agricultural community particularly in finance and government intervention. Hence, AI in India should aim for the optimisation of public goods, rather than maximisation of top-notch growth. Through the implementation of AI, India can tackle the common economic and social challenges to ensure a sustainable economy.

A national AI strategy should enable India to empower and significantly improve the lives of citizens. It should be capable of making India a progressive, secure and dynamic country. AI has the potential to drive growth of the traditional factors of production. AI rather than creating an economic impact, it should also solve the non-incremental challenges such as, helping farmers financially to increase their productivity, building efficient economies to meet the demands of the growing urban population are some of the examples. Even though it creates a major impact in the Indian economy, it is said that AI can modify the opinions of the public through its enhancing potentiality. India needs to improve the AI that exists currently, to transform the sectors primarily healthcare and agriculture. Education plays an important role in developing countries. AI technologies have the potential to impart knowledge to India's diverse population that could easily solve the issues in other developing nations since India is a provider of opportunities.

Challenges

The 21st century is a decade of digital economy, as it is the core part of the Indian economy. "In India, the latest National Institution for Transforming India (NITI Aayog) report states that AI will add US\$957 billion (S\$1.3 trillion) to the country's economy by 2035". According to the United Nations report, AI refers to the replacement of human intelligence and it generally optimises machines to act with higher levels of intelligence. Since AI accumulates a large chunk of data of the users, further questions are raised up over the kinds of possible risks such as, risks of data theft, misuse, and use of data for discrimination purposes. It should be noted that most of the machine language is written by men. Women play a stereotypical role as virtual assistants which precisely states that men have a dominant role in the field of AI.

AI can potentially harness the political process and it can cause destruction to the ecosystem of trust in the technology. It should provide an environment where all technology can thrive without severe risks and impacts on the human capabilities and the economy. This is reflected in the recent paper on Artificial Intelligence published by the EU, where the status of development of AI has been compared with China and the United States.

If we delve deeper into the focus sectors— Healthcare, Agriculture, Education, Smart Cities and Infrastructure, and Transportation, the challenges seems to be are:-

- Lack of understanding in fundamental technologies
- Lack of creating a data ecosystem of excellence
- High expenditure for adopting AI in business activities
- Presence of security and privacy issues
- Unawareness to incentivise research and adoption of AI
- Disconnection with stakeholders and policy makers

These challenges can be handled with the cooperative efforts from the both stakeholders and government by building fundamental rocks to realising the full potential of a disruptive technology like AI.

Challenges and regulatory approaches differ from countries to countries. Some countries are still in the process of formulating and enacting a detailed regulation on data usage and privacy to optimise efficiency or social justice. AI should be regulated in regard with the both pros and cons that the technology can be used for. Since AI depends on large amounts of data, it becomes even more of a threat to the privacy of the users. For example, the current debate of facial recognition software reflects the dilemma. Though regulation is agreed upon, there is a presence of disagreements too. The implementation of regulation of AI should be designed in such a way that it contributes to the human betterment and development of the economy. Governments and policy makers must align the regulations in each sector to have a sense of solving a specific problem. This shows that India has been vocal about the use of AI in various sectors, but it is far from adopting a regulatory approach. The Indian startups have not yet built principles to regulate AI.

AI is a challenge to human rights, which is evident in cases such as public services. It may amplify gender discrimination and even in health care, it may lead to opaque decisions due to lack of intensive knowledge of the inner functioning. Since AI is algorithm-based, the hospital enables the data in such a way that it flags only privileged people. In the hospitals of India, the data is organised to notice the upper caste names and hire them more frequently leads to the scenario of caste discrimination. There is a probability of destruction of the health care sector too. There are many ways in which the data set of Artificial Intelligence can increase their discriminatory potential, according to the reports of the UN. In the method of data collection of Aadhaar system, it will exclude the faded fingerprints of the marginalised sections of the state. AI systems are designed and structured to cause harm and societal biases, which eventually is put into practice. Lack of transparency and accountability is another aspect. For example, facial recognition captures his/her iris without any acknowledgement. Similarly, the latest reports of an AI bot that reportedly turns photographs into nudes created a ruckus in the IT industry. It is evident that the IT sector lacks comprehensive AI learning. Furthermore, the suppression of the marginalised sections by denying the right to speech due to lack of literacy. AI should also be looked into safety and liability issues.

Impact of AI on Indian Governance

Law Enforcement - The law administration uses AI in the form of facial recognition, speech recognition, drones, Robot cops, autonomous patrol cars and predictive analytics. The use of big data analytics and algorithms to generate predictive policing models is still in the nascent stage. It is being conceptualized in Kerala, Maharashtra, Haryana and Tripura. The National Crime Records Bureau is working closely with Hyderabad based Advanced Data Research Institute (ADRIN) to develop the predictive policing processes. States are making a set of guidelines for the police officials to collect robust data. Workshops are being conducted on data analytics, dashboarding and the use of AI in the Policing.

Using the features of speech and facial recognition, the police can locate a suspect and click his/her picture. The application installed on the device of the police officer will compare the photograph of the suspect with that of the data stored. The app will then check the criminal background of the individual within minutes and send the information to the officer. The use of 'Robo-Cops' will play a crucial role in handling the law and order at malls, airports and handling the traffic.

1) Defence - Using AI for intelligence, surveillance, building robot soldiers, cyber defence, risk terrain analysis, and intelligent weapons system, most of the projects are in pilot stages and there is lack of support from different government organizations. The Centre for Artificial Intelligence and Robotics (CAIR) along with DRDO is working on a project to develop a Multi Agent Robotics Framework (MARF) which helps in the production of an array of robots, similar to human soldiers.

Under the risk terrain analysis, the military is working on a Military Geospatial Information System that helps in generating terrain trafficability maps. Other applications include Terrain Feature Extraction System that will determine the land usage and classify it under a multilayer perceptron for generating multiple themes. The Terrain Reasoner System develops alternative routes to achieve a pre-specified mission and the Terrain-Matching System will integrate the complex case-based reasoning into a cohesive whole.

2) Agriculture - AI is being used for harvesting crops and estimating more precise treatment for each crop. Projects include developing a technology to improve the accuracy of weed sprayed on the cotton plants using computer vision. In this way, the amount of chemicals sprayed can be reduced by 80% and the expenditure will reduce by 90%. The smart-tractors will collect the data and suggest the farmer about each crop using algorithmic analysis of the data. Using drones and satellites, soil health can be evaluated which can depict the defects and nutrient deficiencies in soil quality.

MSME Sector

With 56 million MSME entrepreneurs in India and the sector contributing around 40% to India's GDP, AI will revolutionize the participation of Indian and international tech companies. The common applications might include advertising, marketing, customer engagement, customer profiling, segmentation, predictive maintenance etc. The AI intervention will minimise the human intervention, result in agility, and reduce the risks at the workplace. It will further help in warehousing, manufacturing, logistics, budgeting, and marketing. AI built applications can micro-segment the customers and recommend the optimal utilisation of marketing efforts and discounts. AI can also deal with the cyber security problems and vulnerability to hacking.

The only hurdle will be data poverty because data availability can either make or break the ecosystem. While the government must strive hard to make the database accessible to even the start-ups, MSMEs also should adopt the enterprise resource planning (ERP) platforms and work with their team to collect the data for future. The companies can consider shifting to the cost-effective cloud-based SaaS ML tools. As of now, the companies can easily make the full use of chatbots on their websites and use the digital marketing tools to expand their business.

Impact of AI on unemployment

According to a McKinsey report, 30% of all jobs will be siphoned off by 2030 but it will also lead to creation of a new set of jobs that the workforce has to be ready for. Approximately 14% of the workforce will be required to change their skillset. It is not restricted to the tech-savvy people but those with the knowledge business and keen desire to learn can also make themselves comfortable with the new technology. There is a huge surge in the hiring of candidates in the field of AI. An increase of 57% jobs for profiles like Machine Learning, Natural Language Processing, Neural Networks, Analytics, Cloud Computing & Pattern Recognition.

Impact of AI on Indian Society

AI can help in automating the repetitive tasks and customize the products and services for customers by learning from the previous experiences and preferences. It can minimise almost all the possibilities of the 'human error' by defusing the bomb and can be used by the Indian army as bots. According to a survey, 71% people believe that AI will help them solve complex problems and operations while 67% would surely prefer AI assistance over humans as office assistants. The survey also concluded that AI can help the government in social issues like climate change, health and education. It will also help in cyber security and privacy.

The only hurdle while applying AI in above mentioned fields is sharing the data. 93% people are cautious about their personal data being shared for AI applications like sharing their personal health records.

Impact of AI on businesses

Following categories of AI-powered roles will be introduced in the organisations

1. Machine learning
2. Decision support systems
3. Virtual private assistants
4. Predictive analytics
5. Robotics
6. Automated research and information aggregation
7. Automated data analyst
8. Automated sales analyst
9. Automated communications
10. Automated operations and efficiency analyst

Machine Learning is the most popular AI-powered solution that will replace most of the manual jobs in the IT/ITES sector. The banking, financial services and insurance (BFSI) industry seems to tilt more towards robotics, along with heavy use of machine learning and data analytics, to improve the user experience of their customers.

Artificial Intelligence could have a huge impact on the daily lives of Indians. While making the regulations, it is important not to limit the progress of AI through imposing boundaries that could severely damage the progress. The approach to regulation should be in a manner that is balanced so to promote more innovations in the field without damaging the flow. To ensure this outcome all the three parties, the government, the industry, and the AI users could find a middle ground to promote their own interests and at the same time ensure rights and safety for every citizen. This is particularly important to make sure that AI does not negatively impact the society and cause unprecedented problems. The regulation on AI should be such that it does not act when the problem strikes rather act as a precautionary measure. This will go a long way in ensuring that the whole ecosystem of AI is inclusive for every citizen.

A report by the Brookings Institution, the Indian AI industry states that between the period 2012-2017, an investment of over \$150 million was invested in 400 companies. Most of these investments came in the last two years of the period. Though large investments are coming into India for AI the country lacks any government guidelines or laws to regulate AI (Ravi and Nagaraj 2018). In 2008 the government chose a different route and introduced various strategies and roadmaps related to AI (Sinha, Hickok and Basu 2018).

Initiatives by Government of India to Regulate AI

1. Artificial Intelligence Task Force Report

The Ministry of Industry and Commerce formed an eighteen-member Task Force to understand the impact of AI on India's Economic Transformation on August 24, 2017. The members constituted of academicians, experts of the field, and researchers/industry leaders with the active involvement of Government bodies such as the NITI Aayog, Ministry of Electronics and Information, UIDAI, Defence Research, and Development Science, and Department of Science and Technology (Press Release, Ministry of Commerce and Industry, Government of India 2017). The report was finally submitted its findings in January 2018 (The Artificial Intelligence Task Force 2018).

The report by the task force looked into the usage of AI in various sectors, the challenges, and the solutions to the problems in each of the sectors. The sectors the reported ventured into were FinTech, Healthcare, Technology for differently-abled, Manufacturing, Public Utility Services, Retail and Customer Relationship, Education, Environment, Agriculture, and National Security. These sectors were identified as "domains of relevance to India" (Hickok, Mohandas and Barooah 2018). The taskforce came with various recommendations for the government.

'Artificial Intelligence should not be seen as only to boost the economic growth of India but it should also be seen as solutions to many of India's problems' the task force pointed out. The recommendations provided are listed below.

- a) To form inter-ministerial coordination to promote Artificial Intelligence related activities in the country.
- b) Setting up digital banks, marketplaces, and exchanges to enable the availability of data and information across the industry.

- c) Formulation of policies that could enable the facilitation of developing and deploying AI-based products. These could include ownership of data, the usage and rights of data, and incentives to promote innovation in the field.
- d) Active participation in the expansion of AI-based systems operations.
- e) To have adequate human resources with the necessary skills of AI, the government should bring a new AI education strategy.
- f) Invest in reskilling the existing workforce for the workforce to adapt to the new changes.
- g) Involve in international policy discussion on the processes of governance of AI technologies.
- h) Developing AI solutions for socio-economic problems and sharing the best practices in regulating AI through bilateral partnerships with like-minded countries (GIP Digital Watch 2018).

2. The Discussion Paper by NITI Aayog on National AI Strategy

The former Finance Minister, Arun Jaitley in February 2018 said that the NITI Aayog should “lead the national program on AI” and that “the government would encourage start-ups and centres for excellence needed for AI training and research activities” (Nair 2018). In the Committee of Secretaries, NITI Aayog was tasked with the responsibility of the formulation of ‘National Strategy Plan for AI’. The committee was supposed to come with a strategy with a consultation with various departments and Ministries, private and academia. NITI Aayog on June 4 came with the discussion paper on a ‘National Strategy for AI’. The paper focused on promoting socio-economic development and inclusive growth of AI in India.

The paper emphasized on Health, Agriculture, Smart Mobility, Transportation, and Smart Cities/Infrastructure (NITI Aayog 2018). The five sectors as per NITI Aayog can have the most social impact and could help benefit millions in India.

Along with the social impact. The paper presents more than 30 policy recommendations, this includes, ‘investing in scientific research’, training and reskilling of the workforce, acceleration in the adopting AI across sectors, and promotion of privacy, ethics, and security in AI. AI policy researcher, Tim Dutton summarizes the NITI Aayog recommendation as, “Its flagship initiative is a two-tiered integrated strategy to boost research in AI (Dutton 2018). First, new Centres of Research Excellence in AI (COREs) will focus on fundamental research. Second, the COREs will act as technology feeders for the International Centres for Transformational AI (ICTAIs), which will focus on creating AI-based applications in domains of societal importance. In the report, NITI Aayog identifies healthcare, agriculture, education, smart cities, and smart mobility as the priority sectors that will benefit the most socially from applying AI. The report also recommends setting up a consortium of Ethics Councils at each CORE and ICTAI, developing sector-specific guidelines on privacy, security, and ethics, creating a National AI Marketplace to increase market discovery and reduce time and cost of collecting data, and several initiatives to help the overall workforce acquire skills. Strategically, the government wants to establish India as an “AI Garage,” meaning that if a company can deploy an AI in India, it will then apply to the rest of the developing world”.

3. Committees formed by the Ministry of Electronics and Information Technology

Four committees have been set up by the Ministry of Electronics and Information Technology to promote research in the field of AI. These committees are currently headed by directors of the Indian Institutes of Technology (IITs), eminent researchers, and NASSCOM (Gupta 2018). The committee formed has been listed below:

- a) Committee on platforms and data for AI,
- b) Committee on leveraging AI for identifying National Missions in key sectors,
- c) Committee on mapping technological capabilities, key policy enablers, skilling, reskilling, and R&D
- d) Committee on cybersecurity, safety, legal and ethical issues (Press Release, Ministry of Commerce and Industry, supra note 61).

These ongoing committees are presently researching various aspects of AI and their usage in the present Indian society including requirement for new skills for various sectors, citizens centric service, legal regulatory, data platforms, cybersecurity, and research and development.

4. AI and Defence

The government of India formed a multi-stakeholder task force in February 2018 consisting of Academia, Industry, Professionals, Start-ups, and Government to study strategic and national security outcomes of AI for India (Library of Congress 2020). The task force submitted their report by June 2018. The report provided recommendations on ways to establish India as a significant defence power in AI. They emphasized both defensive and offensive capabilities of India in areas such as naval, land, cyber, aviation, nuclear among various others. The report also suggested institutional and policy interventions to encourage and regulate technologies based on AI in the defence sector. The report also suggested working with commercial industry/ start-ups for appropriate strategies (Press Release 2018).

Regulatory Framework: The Four Key Pillars

To reap the maximum benefit of AI, India should look into various positives and negatives. For example, AI might have a positive impact on productivity but it might have an adverse outcome on the labour market. It is important to understand that AI requires a huge amount of data which makes it more crucial for the government to bring in measures that could protect an individual's privacy, alleviate potential biasness and at the same time enhance cybersecurity (Intel 2018). The government needs to bring in regulations based on the four-pillars listed below. These pillars would ensure that India could reap the maximum benefit through competitiveness, and ensure India's leadership in various areas such as academia, healthcare, defence, industry, and government functioning.

1. Cultivate Innovation & Development in the field of AI (Intel 2019). The government needs to have a broad long-term plan of how it wants to develop vibrant research in the field.

- a) Allocation of Fund for AI Research and Development. In the current circumstances, countries such as China, the USA, and European countries are doing much more in the research and development of AI (Castro, McLaughlin and Chivot 2019). To catch up with these countries, India needs to allocate a certain amount for its research and development. The separate allocation of the fund could help accelerate India's position in AI.

The government should form an expert committee consisting of individuals from the public sector, private sector, and academia. The committee's responsibility would be to identify the sectors which could have the most impact with the introduction of AI and could promote the usage in other sectors. For example, the committee could look into areas such as healthcare, education, cybersecurity, data analytics, or robotics. These impact investments in these sectors could take India leaps ahead. Another important function of the expert committee would be to directly invest in the research which promotes AI's development in the country.

- a) Introducing Progressive Government Policies for AI. Many times, regressive policies by the government results in ruining the whole ecosystem of a promising new sector. To ensure AI benefits India to its potential the government needs to involve individuals from the industry,

academia, civil society, and government in framing the policy framework for AI. This could help India frame a policy that could promote the usage of AI to its potential without compromising with citizens' privacy.

b) Encourage Development and Adoption of AI. The government and the private sector both should adopt AI in their daily operations. This would pave the path for further development of AI. Initiatives such as public-private partnerships and cross-sector partnerships should also be promoted as it could further accelerate the process of development.

c) Introducing Programs of Public Awareness. It is also important to take the public into confidence for the smooth adoption of AI. These programs will not only help spread awareness in the Indian public but also help them understand AI's importance.

d) International Collaboration for Development of AI. The government should take initiatives for partnerships with likeminded countries. This would help in accelerating the research and development of AI in the country.

2. New Employment Opportunities and Ensure Citizens' Welfare (Intel 2019). A report by McKinsey Global Institute states that the current technology prowess has the potential to replace 45 percent of work activities and machine learning, a subset of AI could automatize 80 percent of these activities (McKinsey Global Institute 2016). Though workforce disruptions are not new as it is generally seen that technology tends to enhance productivity but it is important to carry out research that could show the impact of AI on the economy and labour market. The current AI technology deployed is classified under 'augmented intelligence' meaning that their role is to assist human users rather than replace them (Mehta 2019).

The Indian government must cultivate a labour force that could carry on with the changing labour market realities. It is more than essential for the government to invest in the development of a competent labour force for AI, promote the usage of AI in workplaces, and lessen the negative impact of AI on the job market (Mehta 2019). The following actions are explained in much greater detail below.

a) Investment in developing a competent labour force. To ensure that the new generation of the lab or force is competent enough to handle AI it is essential to have a vibrant education curriculum. The New Education Policy is a step in the right direction. The policy ensures that all students are exposed to AI at all levels through contemporary subjects such as artificial intelligence. The policy also promises to introduce subjects on AI, big data analysis, machine learning, and 3D machining among many as early as possible in undergraduate courses. This could help shape the future of AI in India. India also needs to stand tall on its 6 percent of GDP contribution each year to education as promised in the New Education Policy.

b) Promote the Usage of AI in Workplaces. In India over 58 percent of companies are using AI at scale. The number is better when compared to countries such as Australia (49%), Germany (42%), United States of America (32%), United Kingdom (35%), and France (21%). The world average is 36 percent (Capgemini 2017). India has an advantage on these grounds but it also very true that no such numbers are available when it comes to the government's usage of AI in its functioning.

c) Lessen the Negative impact of AI on the Job Market. India must do thorough research on the negative impact of AI in society. This would help in paving the way for action to tackle these upcoming problems. The government should upgrade the current Pradhan Mantri Kaushal Vikas Yojana (PMKVY) so as to accustom the needs for skilling the labour force in Artificial Intelligence.

3. Liberate and Share Data Responsibility (Intel 2019). 'Developing AI systems require vast amounts of data that is used to identify patterns, extract insights, and ultimately train a system

that can act intelligently in the target domain. Generally speaking, the more data available, the more “intelligent” an AI system can become. Furthermore, adding data to these systems over time enhances their ability to understand new situations and opportunities as data generation and collection continues to build. Therefore, data must be made broadly available in a usable format. Nations that promote open data sources and data sharing are the ones most likely to see rapid advancements in AI capability.’

a) Introduction of Strict Legislation on Data Privacy. It is important to protect the citizen’s fundamental right to privacy. To protect these rights strict measures should be introduced through legislation. It is also important that the legislation is both ethical and fair. The Fair Information Practice Principles have inspired privacy legal frameworks around the world and withstood the test of time and the evolution of new technology. Accountability obligations outlined in the Principles require organizations to put the right people, policies, and processes in place to effectively protect privacy.

b) Incentivize Data Sharing. The benefits of data sharing have been highlighted in the Non-Personal Data Report present in the public domain. The government needs to incentivize the sharing of data through taxation on sharing. This would result in fastening the process of data sharing which could help in increasing the efficiency of AI.

c) Setting up AI Research on Privacy. A dedicated research body should be set up to constantly look at the lapses in privacy while using AI. ‘Research should be accelerated in academic and industrial labs on methods for training AI algorithms on datasets without requiring direct access to the training data. For example, federal learning approaches allow for training on edge devices without sending the original data to the cloud.

4. Remove Barriers and Create a Legal and Policy Environment that Supports AI (Intel 2019). Developing AI systems requires vast amounts of data that is used to identify patterns, extract insights, and ultimately train a system that can act intelligently in the target domain. Generally speaking, the more data available, the more “intelligent” an AI system can become. Furthermore, adding data to these systems over time enhances their ability to understand new situations and opportunities as data generation and collection continues to build. Therefore, data must be made broadly available in a usable format. Nations that promote open data sources and data sharing are the ones most likely to see rapid advancements in AI capability.

a) Focus on Regulating Objectives or Uses of AI (Intel 2019). The government should emphasize regulating the objectives and usage of AI rather than regulating algorithms generated by organizations. Regulating algorithms could discourage innovation in the industry hence damaging the AI ecosystem. The enactment of Non-Personal Data could go a long way in giving the required guidelines to organizations to operate without violating the privacy of citizens.

b) Feasibility of Current Legal System to Adopt AI. The government should also look at major legal hindrances in adopting AI in the country. This could be done through creating an expert committee which would be tasked with feasibility of the deterrents and providing legislative solutions to the problems.

c) Protection of Intellectual Property Rights. The government should guarantee protection of algorithms, source codes, and other such innovations. This could help in building confidence in the market but strict guidelines should be put in place to monitor the objectives and usages.

Conclusion

The regulation of AI in India will shape the way the country visualizes the whole AI ecosystem. It is expected that the ecosystem has the potential to revolutionize many key areas such as defence, agriculture, and law enforcement among various others. According to various reports, the IT industry of India is among the front runners in the world adopting the technology but there are various challenges the country needs to address. AI innovation in India seems to lack behind. It is important for the Indian government to introduce measures to promote AI research in the country.

Many of our Asian neighbours such as Japan and China are way ahead of us when it comes to the research on AI. It is also important for India to work on creating an adequate infrastructure that could sustain the whole ecosystem. It also expected that many would lose their jobs as AI might replace the labour force in many sectors. This could be tackled if the Indian forms a committee to study the impact of AI induction and its impact on the labour force and accordingly upgrade the skills of the affected labour force.

The country also needs to address some key legal challenges such as assigning accountability to various stakeholders. For instance, if tomorrow Ola decides to operate driverless cars in the street of Bangalore and the car malfunctioned resulting in the cost of lives in such case who is responsible Ola or the car manufacturer. The other major legal challenge AI might cause is its impact on the Right to life and privacy.

These fundamental rights are guaranteed under the Constitution of India which makes the government responsible for ensuring the protection of these rights. India needs to decide whether it should regulate the usage of data or the algorithm used by the private players. This is particularly very challenging as the private sector might argue that regulating algorithms might damage the ability of the organization to innovate and provide better services to their customers. This can be seen as going against the market and this might pose a serious challenge for the government. It is important for the government to bring all the stakeholders to the table to find a sustainable ground in formulating the regulation for AI.

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