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Approved by

Abhivardhan, Chairperson



About Us

Indian Society of Artificial Intelligence and Law wants to spread our message of hope and compassion. We believe that a single action can make a difference in the community, and that collective action can greatly impact the world. The Indian Society of Artificial Intelligence and Law is the only society in India, which conceives of the incorporation of Artificial Intelligence into the field of Law, wherein it is a multidisciplinary collaboration between Law and Information Technology (particularly Data Science and AI).

Our Philosophy

Artificial Intelligence has a primordial importance in human society. It renders a suitable relativity with mankind, and reflects a cultural backstop to human nature and its bliss. It dates back to the possibilities of what a machine could realize under Alan Turing, in his paper, 'The Imitation Game'. Nevertheless, the advent of Law, from its traditional positivist approach to a generic synthetic yet positive approach, has affected the directional utility of a globalized world. The use of machine learning as a component of data dimensionality has sincerely affected and led to generic consequences and is deemed fit enough not be ignored by international and domestic legal systems. The Society, which we term as ISAIL as well, focuses on its 3-fold approach; Academic Innovation, Learning Opportunities and Social Entrepreneurship. As AI is a deemed possibility to exist, it is an imperative ground that its legal modalities empower an anthropomorphic future for the natural ecosystem, to regard its decisions and relevance. This is not a question, which is about an Artificial General Intelligence, above every stigma of intelligence. It renders a possibility of major reality where international law and its domains are capable to understand, disseminate, secure and recognize the present and future of AI.

Recommendations Report on Trends Involving AI Ethics Boards and their Comparative Developments

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Synopsis. This is a special recommendations report on the trends that involve AI Ethics Boards and their comparative developments in certain global north countries across the globe, in the Americas and Europe, especially.

Artificial Intelligence and its related technologies are relatively new for the legislations and regulatory bodies of most countries, and pose critical challenges for the entire legal system. Therefore, it is necessary to establish widely recognized legal and ethical principles to govern and regulate these technologies. The ethical issues associated with the design, development, deployment and use of big data, artificial intelligence, and machine learning and dynamic. We do not have an existing exemplary field of data ethics which is robust and comprehensive enough to address these emerging issues. Reliance can be made on ethical principles, such as responsibility and liability while developing an ethics code. However, concerns relating to strict compliance, monitoring and enforcement still exist. In this context, a collaborative approach between social and ethical perspectives can be beneficial. This approach might consider various areas of concerns, multiple perspectives, and areas of expertise.

This report aims to shed light on the intricacies involved in the governance of AI, and explores the idea and nature of AI ethics boards or AI ethics oversight committees within corporate entities. These committees can be an important component of organizational capacity for avoiding and addressing risks, managing ethical concerns, shaping data collection, and promoting responsible data uses. In furtherance of the same, this report explores the AI ethics boards/ AI ethics oversight committees in play at various companies throughout the European Union, the United Kingdom, and the United States.

Executive Summary by the Chairperson

The authors of the report have indeed committed to the veracity and context the report provides. This is a seminal work, and must be regarded as one of the initial reports on the conduct, liability and accountability of AI Ethics Boards. We must understand that unlike Privacy Policy regulations, which are 1-dimensional, AI Ethics Boards involves the intersectionality of apolitical issues and problems, which should never be mixed with any political content. Second, the idea of AI Ethics Boards is a multi-dimensional oversight framework, where risk management, entitlement and shaping data governance will be in the hands of companies, and not the governments. Indeed the principled aspect of a small government is reasonable – but affirming rule of law under an uncertain circumstance of these oversight bodies is a state responsibility, and should be therefore a matter of grave concern. The report therefore is a prelude to the issue of Black Box AI and the explainability of AI as collateral issues, where developers and relevant (not unforeseen) stakeholders to the AI system or service or product will be treated with more checks and balances, compared to the freedom they used to have for 10-15 years since the globalization of internet.

My best wishes are for Saakshi and Sameer – and will stay in. Much accolades await them.



Abhivardhan
Chairperson & Managing Trustee
Indian Society of Artificial Intelligence and Law

1 The Context of United Kingdom

As countries race towards the adoption of artificial intelligence, the United Kingdom expects to hold a prominent position among the world leaders in the development of artificial intelligence and its effective regulation. Certain primary requisites, such as leading AI companies and start-ups, vigorous research culture, and a strong legal framework are part of the UK's AI ecology. This section of the report will trace incorporation of AI Ethics Boards in corporate entities that are involved in the development of artificial intelligence. The basic set of principles that these boards use can also be of assistance to the Government in drafting a general code for AI governance.

1.1 Report by the Select Committee on Artificial Intelligence, House of Lords

This report outlines the prevailing status of AI in the United Kingdom by inquiring into various aspects of its development. The basics of artificial intelligence including its general engagement, design and development, risk assessment and the plan to shape its future course have been covered. The report recognizes the need for an ethical framework within AI companies to ensure safe development of artificial intelligence. It has been observed that many AI deploying companies are trying to establish their own ethical code of conduct for research and development. However, it is necessary for the existence of a common draft code for wider awareness, consistency and better coordination among the members of the UK's AI-ecology. The report recommends that a core set of ethical standards and widely recognised principles should be adopted by companies in the form of an AI ethics code. The recommendations are:

1. Development of artificial intelligence for the benefit and common good of humanity.
2. Establishment of principles of intelligibility and fairness as the basis for AI operation.
3. Protection of data rights and privacy of individuals and communities.
4. Right to education for all citizens to ensure human development alongside AI.
5. Prohibition of autonomous AI tools that are capable of hurting or deceiving humans.

In continuation of the above-mentioned principles, Lord Bishop of Oxford has proposed 'The Ten Commandments of AI', that have also been partly adopted in the report. Five of the principles have been adopted in this report as part of the core recommendations. The other five commandments that have been excluded are:

1. AI should never be developed or deployed separately from consideration of the ethical consequences of its application.
2. The application of AI should be to reduce inequality of wealth, health, and opportunity.
3. AI should not be used for criminal intent, nor to subvert the values of our democracy, nor truth, nor courtesy in public discourse.

4. The primary purpose of AI should be to enhance and augment, rather than replace, human labour and creativity.
5. Governments should ensure that the best research and application of AI is directed toward the most urgent problems facing humanity.

The report does not specifically discuss AI ethics boards or committees, but it has recommended the essential underlying principles for the functioning of such committees. These recommendations may be incorporated as ethics code within companies that develop AI-enabled products or services.

1.2 Report by Accenture in association with Northeastern University Ethics Institute

The report titled, ‘Building Data and Ethics Committees’, aims to discuss the benefits of a committee-based approach to govern data and AI ethics in corporate entities, describe the essential components of a committee-based approach, and identify the questions that the organization needs to clarify in the process of developing the data and ethics governance committee.

1. The need for data and AI ethics- Currently, legal compliance for privacy regulations is the dominant regulatory framework for data collection and its use. The pace of innovation in the field of technology has always been much higher than the legal and regulatory mechanism that can govern it. As a result, legal guidance regarding data collection and management lags behind innovation. A robust data ethics capacity can help companies in managing and forecasting the risks and liabilities associated with data negligence and its misuse. Moreover, it will also assist companies cater responsible development and shape good governance.
2. Essential elements for building organizational capacity in ethics and data- Certain elements essential for building organizational capacity to anticipate and address legal and ethical issues surrounding artificial intelligence are:
 - Appointing Chief Data/ AI Ethics Officer(s)- appointment of persons in the aforementioned role with ethics as a dominant part in their responsibilities.
 - Assembling ethics advisory groups- these organizational level advisory groups will focus specifically on data and AI ethics.
 - Incorporating ethics-oriented risk and liability assessment- incorporation of such assessment into decision making and internal governance structures.
 - Training for employees- providing training and establishing guidelines for employees to ensure responsible data management and practices.
 - Including members responsible for representing legal, ethical and social perspective on technology research and development projects.
 - Establishing ethics committees- these committees will be capable of providing guidance not only on data policy, but also on decisions regarding data collection, use, storage and overall management.

3. Ethics Committee- Committee-based oversight model has proved to be successful in the following areas of research:
 - Protecting human subjects in medical research.
 - Providing policy perspectives in clinical and medical contexts.
 - Hospital ethics committees.
 - Institutional Animal Care and Use Committees.
4. Committee-based oversight models have certain features in common that can be applicable in the development and deployment of data and AI ethics committees within organizations. A well-built ethics committee may contain the following features:
 - Bringing people together with a range of expertise- legal, technical, and ethical.
 - Being responsive to rapid changes and advancements in technology and ethics.
 - Capable of developing standards to be used in decision-making processes.
5. Roadmap/ Checklist for Building an Ethics Committee- There are no existing data or AI ethics committees that can serve as successful models. Therefore, to build a well-structured and thoughtfully designed ethics committee it is essential to refer to the structure and elements from the above-mentioned committee examples. While no single element is perfect, together they provide a comprehensive roadmap for building data or ethics committees.
 - Why is the committee being created?
 - What should guide the committee in decision making?
 - What are the basic values that the committee is meant to protect and promote?
 - What are the primary guiding principles in support of the above-mentioned values?
 - What is required in-practice to satisfy the core principles?
 - Inclusion of experts from legal, technical, ethics and society in the committee.
 - What should be the selection process and tenure of the committee members?
 - What should be the ethics committee review process?
 - When should the committee be consulted?
 - What are the standards by which the committee must make judgments?
 - What should be the preferable timeline for committee reviews?
 - How should the committee be audited and evaluated?

The report provides strong reasoning for suggesting a committee-based model for the effective governance of data and AI ethics in companies developing and deploying such technologies. Further, the report also provides a comprehensive roadmap for the building and establishing such committees.

1.3 Machine Intelligence Garage’s Ethics Committee: Ethics Framework

The Ethics Framework was created by the Machine Intelligence Garage’s Ethics Committee in the year 2018 with the aim to assist individuals and companies that develop and deploy AI-enabled products and services. This Framework emphasises on © Indian Society of Artificial Intelligence and Law, 2020
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concepts based on questions rather than principles because questions help to illuminate the position of principles in practice. During the research phase of this project, Machine Intelligence Garage's Ethics Committee found a multitude of references, such as the Framework by the High-Level Expert Group on Artificial Intelligence of the European Commission in 2019, the OECD's Principles on Artificial Intelligence, and the Beijing AI Principles. As a result, the Ethics Framework by the Machine Intelligence Garage's Ethics Committee aligns heavily with such previously published material. This Framework has proposed certain essential concepts with a corresponding list of questions for each, these are:

1. Clarity on the intended benefits of the product or service- The benefits of the AI-enabled product or service should outweigh its potential risks, as it is important to critically evaluate the risks associated with the product or service with its expected benefits. These benefits should also be evaluated on the basis of its targeted user groups while addressing its effect on the non-user groups. The list of corresponding questions under this point is as follows:
 - What are the intended applications of the product or service?
 - Who or what might benefit from the product or service?
 - Are those benefits common to the application type or specific to the implementation choices?
 - How to monitor the products or services to meet these goals and intended applications?
 - How to evaluate these benefits?
 - Can the benefits of the products or services be demonstrated?
 - Are these benefits certain or they might change over time?
2. Forecast and manage the associated risks- It is essential to forecast and consider the risks associated with the product's intended uses and also with its foreseeable uses. These risks have to be evaluated similarly to its benefits, assessing on the basis of its impact on its intended users as well as on various communities, society and the environment. The list of corresponding questions under this point is as follows:
 - What might be the risks of foreseeable uses of the product, including its misuse?
 - What potential groups are at risk?
 - Currently, is there a process or method to classify and assess these risks?
 - Are these benefits common to the application type or specific to the implementation choices?
 - How likely and significant are these risks?
 - Is there a mechanism to mitigate these and the potential risks?
 - How do external parties or the employees report these risks and is there a process to handle such reports or issues?

3. Responsible data use- Ethical and legally sound usage of data is necessary for any individual or company that develops AI-enabled products or services. Compliance with data protection legislations such as the UK Data Protection Act, 2018 or the EU General Data Protection Regulation, 2018 can be an appropriate start. There are various considerations under the realm of data protection that require the developers' attention. The list of corresponding questions under this point is as follows:

- How was the data obtained and was consent obtained as well?
- Is the training data appropriate for its intended usage?
- Is the data anonymised or de-identified?
- Is the data collection or usage in proportion to the issue being addressed?
- Are the potential biases evaluated in the dataset?
- Is there a mechanism to assist the developer in dealing with errors in the data?
- Can information regarding the purpose and process of data processing be communicated clearly?
- What mechanisms are in place to ensure data security?
- Are there appropriate systems to timely audit and delete the data, once it is no longer required?
- Can individuals remove themselves from the datasets?
- Is there a publicly available privacy policy?
- Can individuals access data about themselves?
- Is the data available for research purposes?

4. Being trustworthy- For a product or service to be trusted it needs to be understood by all the stakeholders who might be affected by the same. The developers should be able to explain the purpose and limitations of the products or services to their customers, so that the users are not confused or misled. Companies should establish procedures to report, investigate, and resolve issues as despite best efforts, things may go wrong. The list of corresponding questions under this point is as follows:

- Are there sufficient tools and mechanisms to ensure transparency, reliability and auditability?
- Is the nature of the product or service expressed in the form that can be easily understood by the intended users, third parties and the general public?
- Are all the potential errors and limitations shared with all the stakeholders?
- Does the company actively engage with all its members to effectively address issues and concerns? If not, why not?
- Is accountability determined in all possible situations? Are the accountable individuals equipped with the skills and knowledge required to take such responsibility?
- Are there adequate mechanisms for complainants to raise concerns with the company?

2 The Context of European Union

A prominent development in the European Parliament has been discussed in this section that addresses certain issues regarding AI's ethical governance by all the involved stakeholders. This briefing document for the members and staff of the European Parliament is prepared and addressed to assist them in their parliamentary work.

2.1 European Parliament Briefing- EU Guidelines on Ethics in AI

Policy-makers and developers across the world are looking for ways to avoid and address the risks associated with the development of artificial intelligence. In furtherance of the same objective, the European Union looks forward to leading the race by establishing a 'framework on ethical rules for AI'. The underlying principle of these guidelines is that the EU must develop a 'human-centric' approach towards the development of AI. These guidelines are addressed to all the involved stakeholders that design, develop, deploy, use or are affected by AI. It is pertinent to note that these guidelines are non-binding and completely voluntary in its implementation. Stakeholders may voluntarily opt to implement these guidelines while designing, developing, deploying or using AI systems in the European Union. The key ethical requirements for developing an ethical and trustworthy AI are:

1. Privacy and data protection- strict compliance with the General Data Protection Regulation is mandatory for all the stakeholders involved in the designing, development, deployment, and use of AI systems.
2. Technical robustness and safety- it is important to have secure, robust and reliable systems and softwares. This requirement revolves around cybersecurity and its ancillary safety practices.
3. Transparency- this is of paramount importance to ensure that the AI system is not biased. Transparency is required to be established in the entire AI industry through all the stages of design, development and deployment.
4. Diversity, non-discrimination and fairness- while designing and developing AI algorithms, it is important for the developers to focus on eliminating bias, if any, from their algorithms. The stakeholders that may be directly or indirectly affected by these systems should be consulted while designing and implementing these tools.
5. Societal and environmental prosperity- AI-enabled systems must be developed to encourage environmental responsibility and sustainability of the AI systems. The companies deploying such tools should assess the impact of these tools on the environment and the society while designing them. For instance, assessing the energy consumption levels and exploring more sustainable methods to generate the same, can be a responsibility arising from this guideline.
6. Accountability- adequate mechanisms must be placed to ensure responsibility and accountability of the outputs generated by such AI-enabled systems.
7. Human agency and oversight- respect for fundamental rights is an essential element and a prominent principle in these guidelines. Certain measures have been prescribed under these guidelines to ensure this requirement reflects in practice:

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- A fundamental rights impact assessment must be undertaken to ensure that the artificial intelligence enabled system does not impact EU fundamental rights.
- The intended users should be able to satisfactorily interact with AI systems.
- There should always be human oversight wherein humans should have the capacity to override a decision made by an AI-enabled system.

Implementing these guidelines will attract certain challenges that the stakeholders have already warned about. These guidelines have been widely criticised due to its lack of clarity in many aspects. Thomas Metzinger, professor of theoretical philosophy at the University of Mainz and a member of the Commission’s Expert Group on AI, warns that “the guidelines are short-sighted, deliberately vague and do not take long-term risks into consideration”. Furthermore, considering that these guidelines are non-binding, regulatory oversight to ensure their implementation is being questioned. Most of the principles listed in this document do not provide adequate mechanisms for enforcing compliance requirements with voluntary commitments. Without little to no incentive and the non-binding nature of these guidelines, experts fear that AI developing organizations might not adhere with these principles.

3 The Context of the United States of America

Cognizant had undertaken a study in 2018 regarding the position of AI in businesses in order to gauge upon their attitude, expectations and plans with respect to AI. The subjects of this research were 975 executives across several industries in the USA and Europe.

Their observations and inferences.

Businesses are rapidly adopting AI. However, its implementation is in the nascent stage. They have an overall enthusiastic approach towards them and see the potential that AI would hold for their ventures in the future. Investment in technology by the companies- especially the larger companies- is on an upward trend. They intend to put the efficiency and productivity increasing capabilities of AI to their advantage and get first-mover benefits vis a vis their smaller rivals. This makes it all the more pertinent that the ethics facet of AI usage be discussed.

There exists an overestimation of the method of implementation of the AI in the respective companies. They have little awareness regarding the strategy employed by their companies in the ethical implementation of AI. Only about half of the subjects expressed that their companies have policies and procedures for the identification and consideration of the ethical aspects of AI either in their initial design or post their launch into the public. Thus, a lacuna between the theoretical claims and the actual interaction of the companies with the AI.

An inflated sense of optimism in the responses by the subjects show that there is a general lack of understanding of the nuances and the challenges of the ethical questions that are posed as this technology continues to penetrate deeper into varied systems. As

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per their research, the net effect on the labour market would not be insignificant as certain kinds of jobs would be replaced by other kinds of them. About 21 million new potential jobs could be created by AI in the coming 10 to 15 years, with novel positions such as Ethical Sourcing Manager.

3.1 Suggestions

1. A more active initiation by the companies to redirect their focus on the ethical governance structure of their AI, which is not just limited to reduced costs through better innovation.
2. They should develop strategies which could enable the AI technology to function cordially with the humans, with the interests of the humans at the forefront. A “human-centric” view.
3. There seems to be a strong advocacy for promoting transparency in the AI-decision making for it to be trustworthy for the consumers.
4. The AI must strive to produce error free results by refraining from data-driven biases and the results so achieved must be personalized as per the requirements of the user.
5. A responsible AI which is perceptive of the ethical dilemmas that such a technology could raise. It is imperative that companies constantly monitor that their AI systems operate ethically and constantly keep updating themselves with the upcoming research about the same. These non-technical aspects are as critical to the successful and sustainable development of AI technology as the technical aspects.
6. AI technology would function best when collaborating with humans and their activities and decisions are augmented.

A study like this could boost the companies’ comprehension and trend of this technology. This would also assist them in taking more mindful and targeted actions as per the specifications of their respective companies. It promotes education about AI technology that is collective in nature so as to develop an ethical operation across companies and industries, so as to elevate a widespread course of principles in their implementation.

4 Suggestions for Indian Companies

Businesses across the globe are exponentially adopting AI technology. They have an overall enthusiastic approach towards them and see the potential that AI would hold for their ventures in the future. Investment in technology by the companies- especially the larger companies- is on an upward trend. With the rapid digitisation of the Indian economy, we are looking at increasing utilisation of this technology. The constant studies and research postulate that there are multiple aspects that have to be considered when employing this technology. As per a research undertaken by Cognizant, there exists an overestimation of the method of implementation of the AI in the subject companies. They have little awareness regarding the strategy employed by their companies in the ethical implementation of AI. Only about half of the subjects expressed that their

companies have policies and procedures for the identification and consideration of the ethical aspects of AI either in their initial design or post their launch into the public. Thus, a lacuna between the theoretical claims and the actual interaction of the companies with the AI. There is a serious requirement for an understanding of the nuances of the ethical questions that are posed as this technology continues to penetrate deeper into varied systems. Below are suggestions for the Indian companies in order to enable them to utilise the maximum efficiency and productive capabilities that this technology entails.

4.1 AI Ethics Committees

According to the experiences of the various companies across jurisdictions, the first step in the process must be to establish a committee dedicated to the analysis and evaluation of AI Ethics. An AI Ethics committee would maintain a system of checks and balances, weighing the decisions taken by the companies with respect to the technology against the principles of safe, secure and user-friendly technology. The paucity of information on this subject matter makes it pertinent to have an Ethics committee dedicated solely for this.

Companies like Accenture have become increasingly aware of the sensitivity the use of AI technology poses. In their attempt to make their AI more responsible, they have laid a considerable emphasis on setting up such a committee for the purpose of conducting studies and explorations to gauge the ethical nuances that do and could potentially arise from the use of this technology.

- The Advantages of having a separate Ethics committee would not only bring in the diverse perspectives of many people but also provide a definition to their responsibilities.
- The committee would be required to be responsive to the advancement and the novel application of the technology.
- It would be the governing repository of knowledge that constantly develops standards, cases and precedence.
- While dealing with information and data that belongs to the consumers, the threshold must be much higher than minimum legal compliance. The values of the organisation should be adhered to by the AI technology and the risks must be effectively managed.

An Ethics committee's role would be to constantly monitor the above, along with responsible development and shaping good governance. It is for these reasons that an Ethics committee would prove to be an essential component of the companies employing this technology for these reasons.

4.2 Transparency and Trust

Companies like Axon and IBM strongly advocate for companies to observe and promote the ethical principles of transparency and trust while employing their AI

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technologies. The companies should go beyond the narrow view of constant innovation in order to reduce costs and instead, take active initiative in the establishment of an AI ethical governance structure. They should be able to ensure that the users can trust the technology with their data. Their privacy should be maintained by devising ways in which the client's data belongs to the client itself. In spite of collaboration with the government, the companies should be mindful of not sharing their clients' data with the government agencies. Taking from the massive criticism that Google faced for its Project Maven, a valuable lesson for the Indian companies is to develop AI technology that doesn't cause harm and is socially beneficial. Albeit its continued collaborations with Government agencies, Google decided to not participate in building software that would be used in weapons or unreasonable surveillance. Thus, the companies must focus on approving of only those technologies wherein the social benefits would substantially outweigh the risks and incorporate the safety constraints. Building a system of accountability would go a long way in ensuring transparency in the decisions made by the AI. The focus should be on building a responsible AI which is perceptive of the ethical dilemmas that such a technology could raise. It is imperative that companies constantly monitor that their AI systems operate ethically and constantly keep updating themselves with the upcoming research about the same. These non-technical aspects are as critical to the successful and sustainable development of the AI technology as the technical aspects. The AI must strive to produce error free results by refraining from data-driven biases and the results so achieved must be personalized as per the requirements of the user. Constant testing and innovation through unambiguous training methods is the key for an AI system with minimal biases.

4.3 Human Collaboration

An important element of integrating AI technology is to remember that it has to function in collaboration with humans. AI mechanism does not replace human intelligence, it simply aids and augments it. Thus, while devising the AI principles the companies must develop a "human-centric" view. Their strategies should enable the AI technology to function cordially with the humans, keeping the interests of the humans at the forefront. The intended purpose must be to make the benefits of AI pervasive throughout the strata and available to all levels of users.

A paramount function of Technology companies that handle public data and information is to create and maintain the trust of their users with respect to their information. This sense of security or lack thereof could make or break the company. Thus, in the longer run paying attention to AI Ethics would have far reaching advantageous consequences for the company and the impact they have on their users. In short, technological integrity is the friend the companies need even if they don't want.