Ethical and Legal Implications of Artificial Intelligence on Human Rights

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Abstract— **Artificial intelligence has become an ever-increasing necessity in day-to-day life which makes this article focus on the different aspects of artificial intelligence particularly in the area of law and human rights. It discusses the issues of artificial intelligence, gaps and challenges particularly adverse effect on human rights value. Matter of concerns include algorithmic transparency, challenges of Cyber protection, injustice, bias and discrimination, negative effects on workers, privacy issues in protecting data, responsibility for loss and absence of answerability. Paper highlights the grey area of AI which requires immediate attention to protect human rights. There is no denial that artificial intelligence has worked a miracle in many areas but these areas require regular check and dynamic approach to make it in proportion to the mankind particularly vulnerable segment of the population and their human rights.**

Keywords— Artificial Intelligence, Human Rights, Cyber protection, Algorithmic Transparency.

I. Introduction

Artificial intelligence has become an ever increasing of the human society in multiple ways trained machines in houses and health care facilities automatic automobiles AI driven aircraft in transportation electronic agents in online shopping it is moving rapidly and contributing to the world at large.

The current and future effects of AI on individuals and society are generating both high expectations and serious concerns [1].

On the one hand, AI has the potential to improve human talents, increase security and efficiency, enable universal knowledge and skill provision, and promote scientific research, contribute to improving studies, medical care and environmental health through research. AI, on the other hand, may make space for bias, manipulation, discrimination, cyber insecurities [2].

The regulatory system on legal and human rights concerns serious issues of artificial intelligence in the present and future times. The area involves some vulnerable areas which need immediate address to avoid future repercussions [3].

Objectives

The article addresses the dilemma of present and future use of AI in legal and human rights protections. It highlights the possible violation of human rights in 21st century. The lacunas and challenges in this area and what are the best possible solutions in this context?

II. The Encroachment of AI in Human Rights

The present part of the article gives an overview of the use of Artificial Intelligence its issue, the significance to address the issue, possible solutions and concerned loopholes and lacunas. The section has limited examination as the intension is to give bird's eye to the usage of AI in gentle area of human rights and have sustainable approach in its usage to make is useful for future research endeavors [4].

The legal and Human Rights issues at the global level are well discussed in the policy documents of United Nation, the European Commission for justice, the parliament of the Europe, [5]

European Commission, European data protection. Artificial intelligence usage sometimes includes varied form of risk and challenges in academic domain and society at large. On the other hand, AI adversely affects specific areas like healthcare, defence, transport. Wherein some issues relate to Legal personality, IPR, Algorithmic bias, discrimination and unfairness, protection of labor force, cyber security and privacy, access to justice [6].

II. Algorithmic Transparency
The Problem and its Importance

Actions of algorithmic transparency are an issue that needs an immediate attention and it is one of the Limelight discussions of legal fraternity on AI. It highlights use of AI in high-risk areas which requires structuring and monitoring AI to be logically just and transparent [7]. Absence of transparency is a grey area which put up questions like people denied employment, denial of loans, denial of benefits without actually knowing the real cause as the decisions are processed through some or the other automated software.

Possible Solutions

Panel for future of science and technology discuss various policy proposed guidelines to regulate algorithmic transparency answerability taking into consideration the social, technical and regulatory challenges [8]. The policy outlines different areas of algorithmic transparency like awareness rising by way of basic education; spotter and whistleblowers accountability system in the area of public

working especially decision-making process, regulation framework and liability under the eyes of law [9].

III. SIGNIFICANT CHALLENGES WITH CYBER SECURITY

Various research Giants have mentioned in their reports the pressing issues connected with the application of AI like complete automation decision making process causing unparalleled loss and expensive errors, complete use of AI weapons without human intervention, deficiencies of AI causing risk in cyber security, mass scale political message on social platform at etc. The discussion in reports also talks about domestic level cyber security issues for example growing use of artificial intelligence for checking of civilians by regulatory authorities [10]. Unchecked use of AI has potential adverse effect on the fundamental rights of civilians [11] such issues need immediate attention and Management to avoid harm with dip effect on society and community at large causing a danger to life and human security and use of resources cyber security issues are potentially Dangerous as they are more hidden and revealed at later stages where damages have been done to a larger extent [12].

Possible Strategies to address the issue

Possible Blueprint and mechanism are proposed to work out the solution for cyber security vulnerabilities for example proper protection framework recovery system, Stage 1 checking and addressing issues in the process of design, human resource deployment in decision making process to handle critical issues; application of risk monitoring tools, programs and updating the software to check the by default deficiencies of artificial intelligence [13].

IV. TRANSGRESSING LAW BY INEQUALITY AND DISCRIMINATION

One of the most pressing challenges of the use of AI which has been identified by the major institutes and research joints including UN have been the practice of injustice, bias and discrimination [14]. The main challenge come with the use of algorithms and automatic decision-making applications like health sector employment, credit facility in the banking system, criminal justice and insurance [15].

Article 7 of Universal Declaration of Human Rights and article 21 of fundamental rights of the European Union clearly talks about the principle of nondiscrimination [16]. The writings from the UN agencies dealing with fundamental rights highlight the potential violation of the above mentioned right by the use of algorithms. Most recent cited example of such discrimination is scene in the automated selection programs for job seekers [17].

The report [18] given by the European parliament in 2017 highlighted that data sets and algorithm system used in the decision making and forecasting at different level of data filtering the use of big data main cause infringement of fundamental rights including indifferent behavior and unintentional discrimination two different demographic rebel having similar feature when recruiting for evaluating candidates for example in the new traits of consumer on social media usage.

Possible measures to address the issue

Several Suggestions have been given to inculcate fair system. For example human inclusive techniques and making algorithms open. The IEEE global workshop provides for software fairness to have ethics in place while using the artificial intelligence. The global IEEE initiative on the international level provides for system and framework to protect the human race from unintentional unbiased, differential results for different users [19]. The best example for the same is the open-source tool kit that helps the consumers to check ok report and avoid discrimination at the hands of machine learning models by the application of AI.

V. THE ISSUE OF INTELLECTUAL PROPERTY RIGHTS

Article 21 of Universal Declaration of Human Rights including the two protocols that is article 15 of international Covenant on economic social and cultural rights article 19 of international Covenant on civil and political rights and the Vienna declaration and programme of action 1993 clearly provides the human right status to the intellectual property rights. Due to its human right character, it has been included in different policy areas. AI infringes these rights in various forms like ownership of generated developed works for inventions. Liability issue for creation and innovation by AI incase conflict with the legal provisions [20].

Possible Measures to Handle IPR Issues

The upcoming laws are working to provide different measures for the issues related to generated works for example the laws of United Kingdom provide protection to the dramatic, musical, artistic work which is created by computer. Though there is not direct provision in the books of law protecting the computer-generated work. However, in such case the developer of AI I have the right except if the work was commissioned or developed in the process of employment.

VI. IMPACT ON HUMAN WORKFORCE

The Global report by various employment institute raise the issue of AI application news of robotics at the workplace. There are several problematic areas by the use of AI and some of them require immediate attention [21]. These include changing needs for future workforce decline in the demand for workers developing new criteria and structure for new jobs retrenchment of employees in differential treatment in the new employment industry, changes in the system of union collective bargaining issues pertaining to health and safety e-working hours adverse effect on earning structures, social security [22].

### Possible measures to address this issue

Several measures and mechanism are Putin news or at least have been proposed to address this dilemma

these include retraining employees and providing awareness to the Employees by adopting the education system [23]. These ethical issues and dilemmas can be addressed by providing modern system of education at all levels giving every individual to acquire the skills they need. The monitor the application, the changes it brings providing help desk to workers whose employment changes or lost [24]. Search system must include domestic games which are prerequisite for giving required skill and training. Last but not the least social security structure requires immediate amendment and reconsideration.

VII. Privacy and Data Protection Issues

Legal and data protection expert provides the Application of AI impose serious threat to privacy and data protection. These issues involve informed consent, scrutiny, violation of data protection drive like right of access to private information right to avoid access which is supposed to cause loss or damage, right not subject to automated decision, Privacy invasion or goodwill damage [25]. The use of big data, artificial intelligence and machine learning pose threat to transparency factor due to intrusive nature and low surveillance. One of the general issues is storage of personal data with payment gateways, medical care centers, and other business units which to an extent allow them access to personal data and endanger them.

Fig: 1
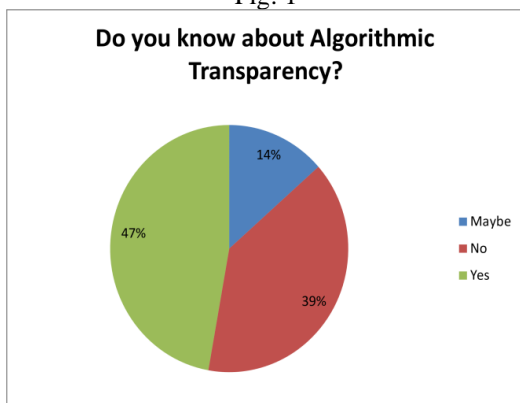
From the above Fig: 1 statistics, we can see that 13% audience do not have proper knowledge of AI, wherein 39% do not have any knowledge of AI. Wherein 47% of audience have knowledge of AI.

VIII. Research Methodology

The paper aims to examine the possible ethical and legal issues of Artificial Intelligence and in order to do so the researcher has adopted the Data collection method by way of survey questions and questionnaire. The researcher has target audience of 100 people from the diverse professional field like academicians, IT professionals, Medical, Lawyers etc. The statistical data has been analyzed using Microsoft excel and Google Analytics and tool.
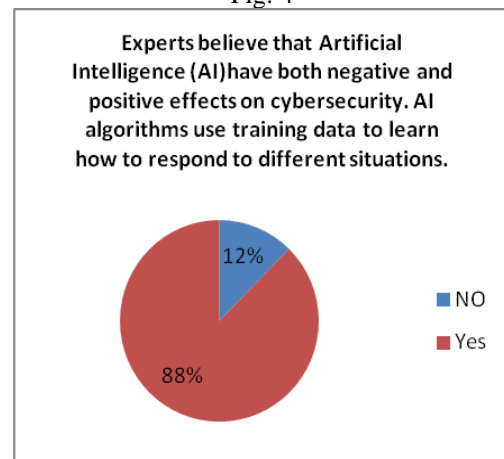
Fig: 2
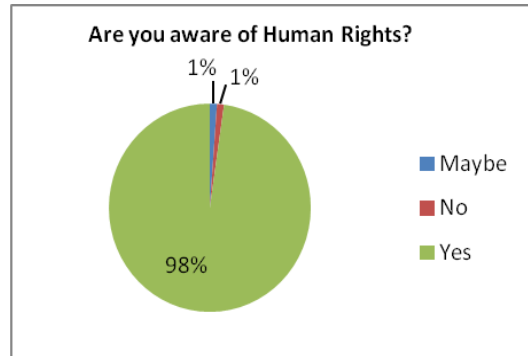
From the above Fig: 2 statistics Human rights are inherent rights and the above statistics shows 98% of population are aware of these rights.
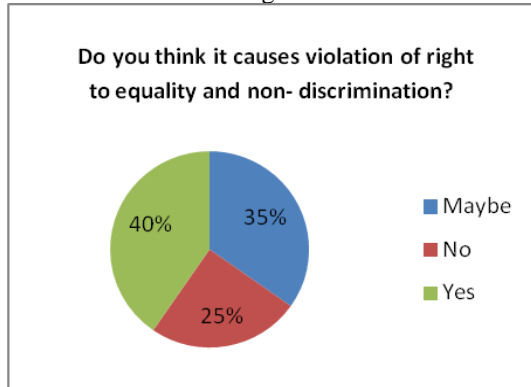
Fig: 3
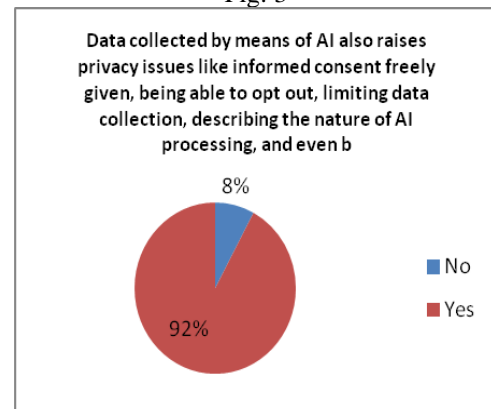
From the above Fig: 3 statistics shows that 92% of the people believe AI usage violates right to privacy, wherein 8% do not believes so.

Fig: 4

The above Fig: 4 statistics show that 88% of people adversely affect the cybersecurity and raise serious cyber concerns wherein 12% do not believe so.

Fig: 5

The above Fig: 5 statistics show that 40% people have witnessed inequality and discrimination issues. Wherein 35% are not aware and 25% do not believe that it violates right to equality and non-discrimination.

Fig: 6
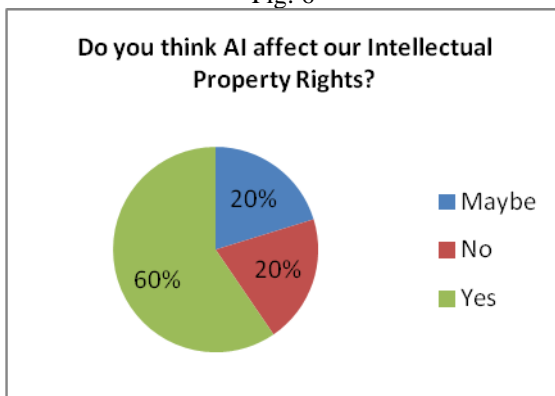
The above Fig: 6 statistics show that 60% of population believe that AI affects Intellectual Property Rights. Wherein 20% of population do not believe so and 20% are not aware of the same.

Fig: 7
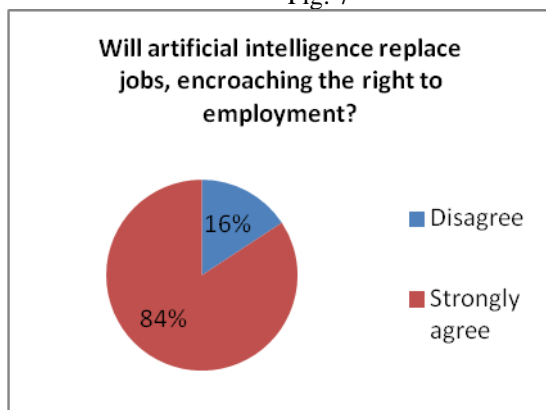
The above Fig: 7 statistics collected show that 84% strongly believe that excessive use of AI is causing serious threat to employment rates. Wherein 16% do not believe so.

IX. CONCLUSION

The article highlights the implications of artificial intelligence in wide parts of life. It gives an overview of the actual loopholes, challenges, legal rights violation affecting the ethical principles of mankind. There are several vulnerabilities seen at various levels of society affecting wide range of violations: data protection, discrimination, employment rates, and intellectual property rights. These deficiencies adversely affect humans in person, human dignity, human protection and last but not least very basic human rights.

The socio-legal impacts of AI require immediate need of innovative regulatory measures, municipal laws, intellectual debates, awareness on usages and dangers of Artificial intelligence. With the progress in the use of AI legal and ethical issues increase if proper research and check are not made. AI is a domain which is much in discussion but we must assure new regulatory measures and developments to balance the dilemmas faced by the legal and societal framework.

REFERENCES

[1] Greenstein, S. Preserving the rule of law in the era of artificial intelligence (AI). Artif Intell Law (2021). https://doi.org/10.1007/s10506-021-09294-4.

[2] Lorenzo Pupillo, Stefano Fantin, Afonso Ferreira ,Carolina Polito "Artificial Intelligence and Cybersecurity Technology, Governance and Policy Challenges", Final Report of a CEPS Task at Force Centre for European Policy Studies (CEPS) Brussels,2021 : https://www.ceps.eu/wp-content/uploads/2021/05/CEPS-TFR-Artificial-Intelligence-and-Cybersecurity.pdf

[3] Bartlett, M (2019). Solving the AI accountability gap. Hold developers responsible for their creations. Medium. Solving the AI Accountability Gap | by Matt Bartlett | Towards Data Science.

[4] Andorno, R. (2016). Is Vulnerability the Foundation of Human Rights?. In: Masferrer, A., García-Sánchez , E. (eds) Human Dignity of the Vulnerable in the Age of Rights. Ius Gentium: Comparative Perspectives on Law and Justice, https://doi.org/10.1007/978-3-319-32693-1_11

[5] European Parliament (2017) Resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL). European Parliament (2018c), Resolution of 12 September 2018 on autonomous weapon systems (2018/2752(RSP)). European Parliament, Resolution of 16 February 2017 with recommendations to the Commission on Civil Law Rules on Robotics (2015/2103(INL)), Official Journal of the European Union, C 252/239, 18.7.2018.

[6] Pagallo, U., Durante, M. The Good, the Bad, and the Invisible with Its Opportunity Costs: Introduction to the 'J' Special Issue on "the Impact of Artificial Intelligence on Law". J 2022, 5, 139-149. https://doi.org/10.3390/j5010011

[7] Cath, C (2018). Governing artificial intelligence: Ethical, legal and technical opportunities and challenges.

[8] United Nations (2019) United Nation Activities on Artificial Intelligence (AI). United Nations Activities on Artificial Intelligence (AI) 2019 (itu.int) Accessed on 16 March 2022.

[9] Ananny, M, & Crawford, K (2018). Seeing without knowing: Limitations of the transparency ideal and its application to algorithmic accountability. New Media & Society, 20(3), 973–989 https://doi.org/10.1177%2F1461444816676645

[10] Osoba, OA, &Welser IV, W (2017). The Risk of artificial intelligence to security and the future of work. *Rand Corporation,* https://www.rand.org/pubs/perspectives/PE237.html.

[11] Parliament (2017) Resolution of 14 March 2017 on fundamental rights implications of big data: privacy, data protection, non-discrimination, security and lawenforcement (2016/2225(INI)).

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[12] Cummings M.L. "Artificial Intelligence and the Future of Warfare" 2017-01-26-artificial-intelligencefuture-warfare-cummings-final.pdf (chathamhouse.org)

[13] Brundage M (2018) The malicious use of artificial intelligence: forecasting, prevention, and mitigation1802.07228.pdf (arxiv.org).

[14] Smith, L (2017). Unfairness by algorithm: Distilling the harms of automated decision making. Future of Privacy Forum..

[15] Human rights in the age of artificial intelligence. AIand-Human-Rights.pdf (accessnow.org)

[16] Sahajveer Baweja and Swapnil Singh, "Beginning of Artificial Intelligence, End of Human Rights," 2020 http://lse.ac.uk/humanrights/2020/07/16/beginning-of-artificial-intelligence-end-of-human-rights/

[17] Karnouskos, S. Symbiosis with artificial intelligence via the prism of law, robots, and society. Artif Intell Law 30, 93–115 (2022). https://doi.org/10.1007/s10506-021-09289-1

[18] Parliament (2017) Resolution of 14 March 2017 on fundamental rights implications of big data: privacy, data protection, non-discrimination, security and lawenforcement (2016/2225(INI)).

[19] Dickson, "What is artificial narrow intelligence (Narrow AI)?",2021: https://bdtechtalks.com/2020/04/09/what-is-narrow-artificial-intelligence-ani/

[20] European Parliament (2018a) Resolution of 12 February 2019 on a comprehensive European industrial policy on artificial intelligence and robotics (2018/2088(INI)).

[21] Smith, L (2017). Unfairness by algorithm: Distilling the harms of automated decision making. Future of Privacy Forum.

[22] Frontier Economics (2018) The impact of artificial intelligence on work: an evidence reviews prepared for the royal society and the British academy. https://royalsociety.org/ -/media/policy/projects/ai-and-work/frontier-review-the-impact-of-AI-on-work. pdf.

[23] Raymond, A. H., & Shackelford, S. J. (2013). Technology, ethics, and access to justice: should an algorithm be deciding your case. Mich. J. Int'l L., 35, 485.

[24] United Nations (2019) United Nation Activities on Artificial Intelligence (AI). United Nations Activities on Artificial Intelligence (AI) 2019 (itu.int) Accessed on 16 March 2022.

[25] Couchman, H (2019). Policing by machine. Predictive Policing and the threats to our rights. https://www.libertyhumanrights.org.uk/wpcontent/uploads/2020/02/LIB-11-Predictive-PolicingReport-WE