LIABILITY ARISING IN CASE OF MALFUNCTION OF ARTIFICIALLY INTELLIGENT DEVICES UNDER INDIAN LEGAL FRAMEWORK

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Abstract

This paper surveys all Indian laws to explore which laws would apply in cases of AI's malfunction. It suggests the application of consumer protection laws to deal with product defects, user responsibility in case of faulty handling, and information technology laws in malware or virus attacks. Criminal laws would apply where it is used as a tool to perpetrate a crime and in a factory environment the relevant laws to deal with accidents resulting due to machine malfunction, faulty handling or negligence.

Key words-
Artificial Intelligence Devices, Legal Personhood, Rights and Liabilities

1. INTRODUCTION

The fourth Industrial Revolution has taken the world by a storm. Technology has pervaded all spheres of life. There has been exponential growth and innovation in the field of robotics, Internet of things, genetics etc. so much so that the distinctions between the real and the virtual seem blurred. Artificial Intelligence.[1](AI) provides control to several systems within the tools we manage. It offers many features such as medical and legal assistance, entertainment, news, translation and interpretation etc. Almost all of these acts include the use of higher order cognitive skills and decision-making. Machines with the ability to execute cognitive tasks like learning, thinking and perceiving to achieve decision making and problem solving are referred as Artificial Intelligence. These tasks that are generally performed by humans are now being done by AI enabled products.

The technology of AI involves machine learning, deep learning, cognitive computing, neural networks, natural language processing, voice, image and speech recognition. The AI industry comprises of three domains, AI enablers, AI Platforms and AI services and products. AI Products range from autonomous cars, AI speakers like Alexa, LG Smart, digital voice assistants like Siri, natural language process-based voice query,

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[1]National Strategy for Artificial Intelligence in June 2018.

computer vision applied to photos, voice commanded speaker systems, facial verification software, predictions on preferences enabling target advertising. AI Services include monitoring and adapting learning patterns of students thereby improving learning, interpretative services like the 'GenieTalk', AI enabled X ray imaging and diagnosis, mobile wellness apps, AI in the legal sector - Bubby the chatbot that provides information on laws relating to real estate, lease, layoff and inheritance etc. Such AI enabled technologies have been used in transport, defence and security, hotel and tourism, manufacturing, education, healthcare and employment sectors.

Recently a chatbot, named Sophia, was manufactured at Hanson Robotics, Hong Kong. It uses visual data processing, speech to text technology, facial recognition and artificial intelligence to effectively communicate with humans. In the process it imitates human gestures and facial expressions. This humanoid robot is especially designed to be a suitable companion for elderly people. Saudi Arabia granted citizenship to Sophia and the United Nations Development Programme named Sophia as the Innovation Champion for Asia and Pacific. As such, Sophia has been assigned the task of innovation for achieving the United Nation's Sustainable Development Goals.

Such developments further fueled discussions on personhood granting and deciding the liability of such programs allowed by AI. If AI enabled products were making decisions, then they should be held liable for the decisions. The point of contention is that since AI enabled devices have sufficient autonomy of decision-making, they are persons in their own right. Legal research has been agog with discussions around establishing and claiming personhood for AI enabled products. The arguments supporting grant of personhood have been refuted on the ground that AI's cannot be termed as legal persons since they cannot shoulder legal rights and responsibilities. This paper analyses the arguments raised for and against the grant of personhood to AI programmed products or devices as brought forth from various published research works. It establishes that personhood cannot be granted to AI enabled products. It also argues that the humanoid form of robots and their capacity to make emotive gestures; attacks at the emotions of humans and cloud the rationale behind grant of personhood.

In India, an Artificial Intelligence Task Force for economic transformation of India was set up by the Commerce and Industry Ministry under the Chairmanship of V Kamakoti. In its report[2] the Task Force identified ten domains wherein AI enabled products and services could help better governance. These are National Security, Manufacturing, Environment, Fintech, Agriculture, Technology for Differently Abled, Health, Retail and Customer Relationships, Education and Public Utility Services. NITI Aayog has released a discussion paper on National Strategy for Artificial Intelligence[3] on June 2018. The paper highlights the importance of using AI technologies to improve governance. India will definitely see a spurt in the use of AI in various fields. Apart from

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[2] Department for Promotion of Industry and Internal Trade, Report of Task Force on Artificial Intelligence (March 2018), https://dipp.gov.in/sites/default/files/ Report_of_Task_Force_on_ArtificialIntelligence_20March2018_2.pdf last accessed February 2021.

[3] NITI Ayog, National Strategy for Artificial Intelligence, June 2018, http://niti.gov.in/writereaddata/files/document_publication/NationalStrategy-for-AI-Discussion-Paper.pdf, last accessed on April 2021.

the above-mentioned sectors AI has already permeated the individual arena through computers, mobile phones and various other electronic devices that are things of daily use. Hence the necessity of exploring the laws that would apply in case of any wrongs that arise out of the use of AI or any issue arising out of AI malfunction.

For the purposes of this research the author understands AI as that technology that uses machine learning to achieve cognitive tasks, as opposed to automation that merely does repetitive tasks.

VIII. PERSONHOOD

Legal Personhood is a subject of much debate to any student of Jurisprudence. Many jurists have offered definitions that lay down characteristics for the grant of legal personality. Primarily human beings are entities capable of holding rights and duties in the eyes of law. Thereby personality implies possession of the characteristics that are essential to humans, namely the ability to think, speak and choose. But law also concerns itself with organising rights and duties. There is an element of choice involved in both these aspects. A person chooses to enforce his right and compel the performance of a duty. The duty bearer chooses to do the duty or at times refrains from so doing. This is evident from the oft-repeated statement - that he ought to do his duty. Since there is an element of choice involved in the action of both the right holder and the duty bearer, personhood will inhere in any being that is capable of choice.

A. THE CAPACITY OF WILL AND FREE CHOICE

The German jurist Litelmana, believed "will" to be the foundation for grant of legal personality. "Personality is the legal capacity of will, the bodiliness of men for their personality a wholly irrelevant attribute".[4] How would the German jurist answer the issue of grant of personhood to AI's? The answer would depend on the answer to whether AI has a free will independent of the programmer? Where the AI is based on machine learning technology and deep learning, it is programmed to learn from its environment. It demonstrates some degree of autonomy, in learning on its own. That is surely a demonstration of will. But it will not do to refute, that this capacity of will is only on account of programming. So essentially it is the outcome of the will of the programmer that the AI learns and demonstrates a will of its own. Further it demonstrates the will in consonance with and in respect to the mission it is programmed for.

The Turing test[5] laid down to determine personhood, unfortunately does not measure the capacity of free will of an AI. Its purpose was only to identify and determine whether an AI device has the capability to exhibit intelligent behavior which is on par with human intelligence, so as to be indistinguishable from that of a human. Neither does the attributes of personhood laid down by Roger C. Schank,[6] help in determining the capacity of will. The following are the attributes laid down - (1) Communication, (2)

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[4] FITZGERALD P J, SALMOND ON JURISPRUDENCE, 12th, Edition, Universal Law Publishing Co. 1970 at pg. 229.

[5] https://www.britannica.com/technology/Turing-test; the Turing Test was proposed by Alan Turing, an English mathematician to determine whether a computer can think.

[6] Schank, R.C., 1987. What is AI, anyway?. AI magazine, 8(4), pp.59-59.

Internal knowledge, (3) External knowledge, (4) Goal-driven behavior, and (5) Creativity. A close examination reveals that the component 'goal driven behavior' makes an inquiry into the element of will that is only restricted to the goal mentioned in the AI programme.

B. THE CAPACITY TO HOLD LEGAL RIGHTS AND DUTIES

Paton defines legal personality as a juristic device by which the law creates units and allocates rights and duties to them.[7] Gray also defines legal personality in terms of attributing rights and duties. Similarly, Salmond defines a 'person' as, "any being whom the law regards as capable of rights or duties. Any being that is so capable, is a person whether human being or not and no being that is not so capable is a person even though he be a man".[8] All these definitions however different have one thing in common - the measurement criteria is the capacity to hold rights and duties. Applying these criteria to measure whether personality is attributable to an AI, one may have to delve into instances of grant of personality to non-living entities.

There have been such conflicting instances of grant of personality that it seems that legal systems do not follow any strict determining factor. Such decisions turn out to be a simple matter of sheer chance and political unpredictability.[9] In case of corporations the underlying factor seems to be financial transparency, efficiency and accountability, in case of idols,[10] the underlying factor seems to be cultural considerations and financial transparency, in case of rivers[11] the urgency to protect the environment and the ecosystem, in case of birds[12] and animals[13] an underlying ethic of care and in case of humans reference is made to their dignity, will, capacity to reason, consciousness, intrinsic worth even in the face of absence of consciousness and so forth. Political decisions have remained inconsistent to say the least, there seems no case of rejecting personhood to AIs. A political system may choose to confer personhood. But the problem of apportionment of rights and duties remains. Since laws are made by men to regulate men, and since the jural relationships between men necessitate the capacity to execute them, the capacity to handle rights and legal responsibilities becomes the most important element of personhood.[14]

C. THE HUMANOID COMPONENT

Where most legal systems regard AI enabled products as mere tools or devices that are to be used responsibly by their owners; AI applications like Sophia have challenged this

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[7] PATON G W., 1972. A TEXTBOOK OF JURISPRUDENCE.

[8] FITZGERALD P J, SALMOND ON JURISPRUDENCE, 12th, Edition, Universal Law Publishing Co. 1970 at pg. 299

[9] Pagallo, U., 2018. Vital, Sophia, and Co.-The Quest for the Legal Personhood of Robots. Information, 9(9), p.230.

[10] Pramatha Nath Mullick v. Pradyumna Kumar Mullick (1925) LR 52 Ind App 245

[11] Mohd Salim v. State of Uttarakhand, Writ Petition (PIL) No.126 of 2014

[12] People for Animals v. Mohazzim and others 2015 SCC OnLine Del 9508 held that birds have a fundamental right to fly.

[13] Nagaraja &othersv. Animal Welfare Board of India; see also Lavery and Stanley (2015) decisions where personhood was denied on the ground that animals are not capable of handling rights and duties.

[14] DIAS R W M, JURISPRUDENCE, 5th Edition, LexisNexis 2013 at pg. 251

traditional stance. It raises doubts on the credibility of abiding by the old interpretations of personhood and begs of a radical understanding and interpretation of reality. Should our present world notions dictate or limit the understanding and interpretation of the future world? Sophia demonstrates a capacity of cognition, thought and reasoning, has the capacity to befriend humans, (in fact it has been specifically designed to be favourable companions to the elderly) and can express emotions through facial gestures. It possesses the attributes identified by Schank.[15] Pagallo[16] asks - Do certain specimens of AI technology, such as smart humanoid robots, indicate that we should be ready to grant some of these robots full legal personhood and citizenship?

But it would be legally troublesome to hold AI liable for their actions. Their humanoid form and human-like behavior lead human minds to view them as their partners[17] and to pull their emotions, thus provoking an AI case for a personality status. It is easy to personify a robot in a humanoid form that appears to think and communicate. A number of popular science fiction[18] also asserts personhood of AI, thereby clouding further rational thought. Answering the problem is the suggestion to design AIs in such a manner that it only provokes reactions from the users that precisely mirrors the AIs' real moral status.[19]

Solum[20] asserts that it is a mere theoretical and a future question - whether AI can be a legal person? That human intelligence is computational and therefore in principle it can be modeled is the basic assumption of cognitive science.[21] Yet, Solum asserts three objections that stand in the way of granting constitutional rights to an AI at this stage. He extends the thesis that AIs are not Human,[22] The Missing-Something Argument[23]; and AIs ought to be Property.[24] Extending the 'missing something' argument Solum finds that AIs do not have souls, do not possess consciousness, have no intention, cannot have feelings, cannot possess interests and cannot possess free wills. But Solum does not rule out grant of personality to AI in the future. His objections to the grant of personhood are firstly the judgement objection[25]- that an AI cannot be trusted with judgements that humans can make particularly the ones of a moral or subjective nature. The second objection is the responsibility objection - that AI cannot handle legal rights and responsibilities.

Concluding thereby that even if our perception of the real and the virtual world seems to merge and blur, and even if there might be a possibility of a fully autonomous intelligent *Robosapien* exactly like a *Homosapien* in the future and though it may be the political decision of a legal system to grant it rights and duties, yet the fact remains that the AI's run-on programmes developed by humans and the programme can be tweaked to give the AI the autonomy that is desired. As long as that be true, AIs cannot be fully

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[15]Supra footnote 8.

[16]Supra footnote 11.

[17]Beck, J.,Can A.I. Ever Have Free Will?https://becominghuman.ai/can-a-i-ever-have-free-will-c18b4f489b45, last accessed on March 2021.

[18]Most stories like I, Robot's V.I.K.I., Battlestar Galactica (and Caprica)'s cylons, Agents of S.H.I.E.L.D.'s LMD's, or the Terminator's Skynet, deal with artificial intelligence rebel against humans on account of how humans treat them.

autonomous nor can have a will independent of its maker, they cannot handle legal responsibilities and consequently cannot be granted legal personality.

IX. LIABILITY

Given the existing state-of-the-art, with respect to AI, if Indian Courts are called upon to decide on the grant of legal status of AI, it may well be contended that such an argument would fail, because as of date an AIs capacity to hold rights and legal responsibilities, is akin to that of a chimpanzee.

Independently viewed, AI's can better qualify to be automated products manufactured to execute those operations. AI programs are written and orchestrated by humans. If it attains autonomous capabilities, it is because it has been so programmed; and hence should be the liability of the human involved. Liability can be defined as a bond that connects the wrongdoer and the various remedies of the wrong. Liability is what results from a mischievous act from a legal standpoint. Law lays down rights and duties and ensures fulfillment of the same. Actions or omissions are wrongful when they cause harm. A man can only be held liable for his own actions.

A. ISSUES ARISING OUT OF USE OF AI ENABLED PROGRAMMES AND PRODUCTS

Sometimes, the AI may have design defects, manufacturing defects or may be coded incorrectly leading to failure in a product. In certain cases, the AI may behave in an unpredictable manner. The Special Task Force[26] had identified one legal challenge that is of ensuring data security, protection and privacy. Additionally, AI enabled products will eventually pervade many other aspects in the private sphere, like the hotel industry, music and entertainment, health and tourism, retail and even in the manufacturing sector. In the event of an AI being held to be a legal person, it will put a strain on the traditional concept of liability. If AI is not a legal person i.e. it is merely a tool in the hands of humans to accomplish various jobs, then the laws will have to be reinterpreted to accommodate such contemporary developments. This section of the paper explores the various laws that would apply in case of wrongs emanating from the use of AI. The span of liability in the determination of liability is depicted by the following matrix.

B. LIABILITY OF THE MANUFACTURER

The legal framework with respect to product liability attempts to reasonably balance innovation and technological development and the inevitable social costs. Problems

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[19]Schwitzgebel, E. and Garza, M., 2015. A defense of the rights of artificial intelligences. Midwest studies in philosophy, 39(1), pp.98-119.

[20]Solum, L.B., 1991. Legal personhood for artificial intelligences. NCL Rev., 70, p.1231.

[21]For a more detailed reading, Friedenberg, J. and Silverman, G., 2011. Cognitive science: An introduction to the study of mind. Sage.

[22]Solum, L.B., 1991. Legal personhood for artificial intelligences. NCL Rev., 70, p.1232.

[23]Ibid at pg.1262.

[24]Ibid at pg.1276.

[25]Ibid at pg. 1278.

[26]Supra note 3.

that may arise out of AI enabled product and services may be broadly classified into - Manufacturing defects or Design defects. Recently there have been numerous incidents[27] resulting in personal injury that involved AI enabled product. Kingston[28] in his article discusses a few. It needs to be remembered that an AI enabled product and its functioning is different from the traditional engineering tool.

In the event of such events occurring in India the laws that would be called to handle will be as follows-

"Consumer Protection Act, 1986 -An AI enabled product is meant to be safe for consumers. In case the programme does not give desired consequences for which it is designed or there is an accident out of the use of it, a consumer case is likely to be instituted claiming defective good. The petitioner needs to prove product defect was the cause of the injury so that damage can be awarded. Suit would lie against the manufacturer/ programmer/ trader. The Act enables a consumer of any product or service to file a complaint in case of any unfair trade practice, restrictive trade practice, defect in goods, deficiency in service, sale of goods that are hazardous to life and safety or are in contravention of the standards laid down by the law with regard to the safety of such goods.

"Indian Contract Act, 1872 -A contract made for the sale or purchase goods enabled with AI or an AI enabled programme would be governed by the terms of contract and the warranty clause mentioned therein. Where an AI enabled programme is sold to a Bank, issues arising out of the compatibility of the programme with the software in use/ conformation to functional specifications/ software provider continues to maintain an information security process along with safeguards/ for a certain period of time/ that the programme will run and perform exactly as ordained. Warranty breaches under contractual obligation gives rise to the right to claim damages but not the right to repudiate or the right to reject the contract under the Indian Contract Act. Although, condition breaches not only give rise to the right to repudiate or right to reject the contract but also the right to claim damages.

"Fatal Accidents Act, 1855 - Section 1A provides for providing compensation to family members in cases where death is caused due to an actionable wrong. Under common law the vicarious liability is attached to the employer and he is held liable for the negligent act or omission of the employees in the course of employment.

"Factories Act, 1948 - Hallevey[29] cites the example of a Japanese employee, who was perceived as a threat by an AI robot working in a factory, which proceeded to crush him to death. Incidents like these may be common occurrence in the near future. The Act lays down the general duties of manufacturers[30] as regards to safety in usage of substances and other articles in factories

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[27] Accidents of autonomous cars of Tesla Inc. and Uber Technologies Inc.

[28] Kingston, J.K., 2016, December. Artificial intelligence and legal liability. In International Conference on Innovative Techniques and Applications of Artificial Intelligence (pp. 269-279). Springer, Cham.

[29] Hallevy, G., 2013. When robots kill: artificial intelligence under criminal law. UPNE

[30] Section 7B of the Factories Act, 1948 - "(1) Every person who designs, manufactures, imports or supplies any article for use in any factory shall - (a) ensure, so far as is reasonably practicable, that the article is so designed and constructed as to be safe and without risks to the health of the workers when properly used;....(5) Where a

C. LIABILITY OF A THIRD PERSON

In India, the Factories Act imposes general duties[31] on 'occupier' of a factory. Under the act the term "occupier" is defined as an occupier of a factory i.e., the person with whom the ultimate control of the affairs of the factory lies. Ensuring the health, safety and welfare of all the workers of the factory when they are present and working in the factory as far as practically possible is a legal duty of the occupier. This duty also extends to making various arrangements in the factory to avoid risks related to health issues that may be caused during the storage, handling, use and transport of various substances. If accidents occur due to malfunction, negligence or faulty handling of AI, the occupier would be held responsible.

The Information Technology Act, 2000 also lays down penalties for damage to computers, computer systems, tampering with source code etc.

D. LIABILITY OF THE PROGRAMMER

Criminal liability with respect to AI would lead to the enquiry of whether the harm has ensued as a result of some action of the AI. Since the actions of AI are governed by the programme it operates on and if external interference is ruled out, it leads to an inquiry into the mental attitude of the programmer. Criminal liability is generally depicted by the maxim -Actus non facit reum nisi mens sit rea. Criminal law represses acts that have harmful tendencies and therefore must be stifled by penal discipline. It believes that to render punishments would serve as an effective deterrence for the future. It is a matter for the criminal law to lay down the culpability. Generally, three types of wrongs are identified -

1. Intentional or Reckless wrongs depicted by the use of the words intentionally or recklessly.

2. Wrongs of negligence depicted by the use of the words negligently.

3. Wrongs of strict liability where mens rea is not required.

Having established that the AI is not a person and hence no liability or mens rea can be ascribed to it, the enquiry about liability essentially leads in the absence of external interference to the AI programmer. Hence in the first case, if the programmer has intentionally designed the programme for the advancement of a criminal act the liability would inevitably lie with the programmer. Consequently, if the AI enabled product is intentionally programmed to perform a criminal act or it is being used as a tool towards commission of an offence; the liability lies with the programmer.

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person designs, manufactures, imports or supplies an article on the basis of a written undertaking by the user of such article to take the steps specified in such undertaking to ensure, so far as is reasonably practicable, that the article will be safe and without risks to the health of the workers when properly used, the undertaking shall have the effect of relieving the person designing, manufacturing, importing or supplying the article from the duty imposed by clause (a) of sub-section (1) to such extent as is reasonably having regard to the terms of the undertaking."

[31]Section 7A of the Factories Act, 1948

In the second case of wrongs that are an outcome of negligence, it is necessary to determine the mental attitude of the programmer. The three key elements of negligence can be listed as duty, breach and the resulting damage.' The programmer shall be held to be liable if he has not observed the duty of care as is expected from a reasonable and prudent man. The Apex Court of India held as follows-

"For negligence to amount to an offence, the element of mens rea must be shown to exist. For an act to amount to criminal negligence, the degree of negligence should be much higher i.e. gross or of a very high degree…. The word 'gross' has not been used in Section 304A of IPC, yet it is settled that in criminal law negligence or recklessness, to be so held, must be of such a high degree as to be 'gross'."[32]

Applying the Bolam test analogy it may be asserted that in case of AI programming, the standard of care is a matter of professional judgement, that is higher than the standard of care expected from a reasonable and prudent man. Generally, with regard to negligence the point of enquiry would be whether the person had a duty of care, which would be answered in the positive. To the next point of enquiry as to whether there has been a breach and resulting damage, our enquiry would lead us to the causation. If it is proved that the programmer has negligently programmed and that has resulted in the damage - culpability will lie. In cases where it is proved that the programmer, even by reasonable foresightedness, would not have expected such consequent damage, then he cannot be held liable.

The third category of cases arises out of wrongs where no *mens rea* need be proved. In the event of an AI enabled product (robot), that perceives a threat in the human and proceeds to kill it, can the programmer be held liable? If there is an absence of the first two elements discussed hereinabove, then the liability of the programmer would have to be decided as per the Indian criminal law. The concept of Strict liability in Indian legal framework is open to serious objections. Strict liability is applied only in cases of less serious offences. It would be unjustified to punish a man for an unforeseen consequence of his act. He cannot aim at a consequence that is unforeseen. Such unforeseen acts can only be an accidental occurrence or a mistake. An AI enabled robot killing a man is only an accidental occurrence. It is not a mistake where the consequence is intended. An accident may be either culpable or inevitable. An accident is considered culpable when it is caused due to negligence, and it is considered to be inevitable if any amount of standard of care would not have prevented it. As in the present case at hand, the accident is inevitable.

What is this standard of care that is not known to best in the profession? The Thalidomide Baby case had presented such facts. It was not known that the drug Thalidomide could cause deformity in newborn children. The state of knowledge at a given point of time did not raise a doubt on the dangerous effect of the thalidomide molecule on fetuses. Simons[33] suggests that a non-negligent killing can be seen as wrongdoing because it may be factually unjustified, but it cannot be subject to criminal

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[32]Jacob Mathew v. State of Punjab(2005)6SCC1

[33]Simons, K.W., 1996. When is strict criminal liability just. J. Crim. L. & Criminology, 87, p.1075.

liability, due to the absence of culpability. The measurement of the standard of care expected of a professional can only be measured in relation to the extent of knowledge available at that given point of time.

Summing up, tracing criminal liability for an AI malfunction leads to an enquiry into the culpability of the act of the programmer, where the AI enabled product is used as a tool to further the criminal intent or the harm is a consequence of negligence.

Yet all cases of criminal liability may not be only of the programmer. Liability issues might arise out of malware or virus attack causing the AI programme to malfunction. There have been multiple instances of such attacks. This can be traced the person causing the attack and hence the liability of the external. "For instance, in the Therac 25- accidents[34] an error/ bug in a computerized therapeutic radiation machine caused it to administer incorrect dosages. Two people were killed and several others were seriously injured. In another case, a construction company alleged that a bug in a spreadsheet program caused the company to underbid a $3 million contract. The company sued the manufacturer of the program for $245,000, claiming it had lost that amount as a result of the incorrect bid. Yet in another case, Scott v. White Trucks (1983), the defendant's truck was equipped with computer- controlled anti-lock brakes. After the brakes failed and the truck crashed, the driver of the truck brought a product liability action alleging defects in the software."[35] In case of external interference with the safe use of the product and damage to the product the liability shifts to the external person. What defenses if at all would be available in such cases? Kingston states that there have been a number of cases where Trojan defense have been successfully used to defer liability.[36] The defense states that the computer has been taken over by a Trojan/ malware programme and the defendant has no knowledge of it. In another case the court even allowed the Trojan defense, which was a self-wiping virus after the defendant proved it was a reasonable possibility.

The Information Technology Act lays down offences with respect to damage to computer and computer systems. Where any person without the permission of the owner extracts data, introduces contaminants, damages data he would have committed an offence under section 43 of the Act. The Act imposes a duty on a body corporate to protect data and provides that any negligence in maintaining reasonable security shall be wrongful. It also lays down other offences such as tampering with source code, or violation of privacy. Here it can be noted that the Indian Apex Court recently affirmed privacy as a basic right[37] under the Constitution of India.

Section 4 of the Report of the Special Task Force discusses the ethical and responsible use of AI technologies with respect to the issues arising out of data ownership, privacy

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[34]For detailed reading of the case see Leveson, N.G. and Turner, C.S., 1993. An investigation of the Therac-25 accidents. Computer, 26(7), pp.18-41.

[35]Abdullah, F., Kamaruzaman, J.H., Mohamed, H. and Setia, R., 2009. Strict versus Negligence Software Product Liability. Computer and Information Science, 2(4), pp.81-88.

[36]Kingston, J.K., 2016, December. Artificial intelligence and legal liability. In International Conference on Innovative Techniques and Applications of Artificial Intelligence (pp. 269-279). Springer, Cham.

[37]K.S Puttaswamy & Anr. v. Union of India & Ors., (2017) 10 SCC 1

and secure sharing.[38] In the summary of the major challenges the report lists[39] out ensuring data security, protection, and privacy as the legal challenges.

E. USER LIABILITY

A user of the AI enabled product or programme shall be held liable for negligent handling of the product or making error in entry of commands.

X. CONCLUSION

As seen from the discussions above *firstly*, the possibility of grant of personhood to AI enabled programmes/ products seems remote. Complete autonomy and an individual distinct from its maker is not possible. In case of AI malfunction, it is recalled back and reprogrammed. That being so, the call for grant of personhood is an emotional argument at the most. Secondly, matters of determination of liability as seen goes back to the manufacturer, programmer, user or the person causing external interference with the product or the programme.

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[38]Department for Promotion of Industry and Internal Trade, Report of Task Force on Artificial Intelligence (March 2018), https://dipp.gov.in/sites/default/files/Report_of_Task_Force_on_ArtificialIntelligence_20March2018_2.pdf, last accessed in February 2021.

[39]Ibid at page 10.