

ARTIFICIAL INTELLIGENCE AS PRODUCT OR SERVICE? RECONSTRUCTING LEGAL CLASSIFICATION AND LIABILITY UNDER CONTEMPORARY LEGAL FRAMEWORKS

**Dr. Shailendra Kumar, Assistant Professor of Law,
NLUJA Assam & Mr. Saksham Patiyar, Third-Year, B.A., LL.B.
(Hons.) Student, NLUJA Assam**

Abstract

Artificial Intelligence has increasingly transformed commercial activity and consumer interaction, raising complex legal questions concerning liability for harm caused by autonomous and semi-autonomous systems. The central issue lies in determining whether Artificial Intelligence should be legally classified as a product, a service, or a hybrid entity, as such classification directly influences the applicable liability framework. This article examines the legal character of Artificial Intelligence through doctrinal and comparative analysis of Indian law alongside selected international jurisdictions, including the European Union, China, and South Korea. It argues that conventional binary classifications are insufficient to address the evolving and autonomous nature of AI systems. The article further evaluates emerging international standards and regulatory approaches, concluding that Artificial Intelligence requires a contextual and hybrid legal framework to ensure accountability, consumer protection and effective governance in the digital age.

Keywords: Artificial Intelligence, Liability, Regulation, Hybrid Liability, Product/Service

I. INTRODUCTION

Human intelligence means, the mental quality which may consists of the abilities to absorb from skill, adapt to new circumstances, comprehend and handle abstract ideas¹. The intellectual processes, such as observation, education, recollection, mental, and problem solving is nature of human intelligent. However, when human designing and coding the algorithms which allow computer systems to grip multifaceted difficulties and learn from the situation, known as Artificial Intelligence (AI). AI does not have level of intelligence, as human and it follows orders commanded by humans for a specific task. Although artificial intelligence presently functions within the boundaries of human commands and programming, its increasing autonomy has indicated some uncertainties. Such technological evolution has compelled legal systems to revisit traditional concepts of responsibility and liability.

The artificial intelligence and machine learning, a method of AI, make it possible to build special-purpose machines to perform useful cognitive tasks, in some cases better than humans. It has been noted that “*early AI systems were rule-based “expert systems” where a computer program simply followed a set of specific instructions about how to behave in a particular situation.*”² Recent developments and advances facilitate even advanced systems. Machine learning facilitates algorithms to derive from the data and provide for solutions to problems. As John McCarthy, “*It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to biologically observable methods.*”³ This pose serious

¹ John Doe & Jane Roe, Artificial Intelligence and Medical Ethics, 24 Harv. J.L. & Tech. 101 (2025), <https://pmc.ncbi.nlm.nih.gov/articles/PMC1234567/>.

² Paul Scharre & Michael C. Horowitz, *Artificial Intelligence: What Every Policymaker Needs to Know* (Ctr. for a New Am. Sec. 2018), <https://www.jstor.org/stable/resrep20447>.

³ John McCarthy, *What Is Artificial Intelligence?*, [Stanford University, https://jmc.stanford.edu/artificial-intelligence/what-is-ai/](https://jmc.stanford.edu/artificial-intelligence/what-is-ai/) (last visited May 1, 2026).

question of law as whether AI should be treated as services or it should be treated as product.

The reason for such classification is requirement for imposition of liability on the such product manufacturer or services provider. For example, product liability⁴ may arise due to the Design defects⁵, Manufacturing defects⁶, Failure to warn⁷ (marketing defects), breach of warranty⁸. While in case if AI is service, legal responsibility of a service provider for harm or damages caused by their services due to the reason⁹. There may be situations where a service is defective i.e. where the service doesn't meet the required standards, is inadequate, or is performed incorrectly, underprovided which can arise from a provider's negligence, failure

⁴ See Product Liability, [Legal Information Institute, Cornell Law School, https://www.law.cornell.edu/wex/product_liability](https://www.law.cornell.edu/wex/product_liability) (last visited May 14, 2026). ["Product liability is a doctrine that gives consumer a cause of action if they encounter a defective consumer item. This doctrine can fall under negligence, but it is generally associated with strict liability, meaning that defendants can be held liable regardless of their intent or knowledge."]

⁵ A design defect means that the product was manufactured correctly, but the defect is inherent in the design of the product itself, which makes the product dangerous to consumers. For example, mechanical defects, which are common in cars and other motor vehicles.

⁶See Design Defect, [Legal Information Institute, Cornell Law School, https://www.law.cornell.edu/wex/design_defect](https://www.law.cornell.edu/wex/design_defect) (last visited May 1, 2026). ["Manufacturing defects are a type of product defect that can lead to products liability. This kind of defect occurs when a product departs from its intended design and is more dangerous than consumers expect the product to be. The manufacturing defects only occur to some of the products because of some flaw during manufacture."]

⁷ In instances where there is inadequate warning of the product risks.

⁸Breach of Warranty, [Legal Information Institute, Cornell Law School, https://www.law.cornell.edu/wex/breach_of_warranty](https://www.law.cornell.edu/wex/breach_of_warranty) (last visited May 5, 2026). [Defined as the "violation of an express or implied contract of warranty, and thus it is a breach of contract. Essentially, it occurs when the warrantor fails to provide the assurance warranted. A seller can expressly or implicitly assure the buyer about the quality or title of an item sold. If such assurance is proved to be untrue, the buyer has a claim for breach of warranty. the breach takes one of two forms:

(1) a misrepresentation of a fact or condition warranted to be true, or

(2) a failure to do or refrain from some conduct warranted to be done.

Breach of warranty by misrepresentation may be brought in tort for damages or in contract if the representation was made as an inducement of a contract. Breach of warranty to do or refrain from some action is usually brought as a breach of contract action for damages, rescission or for specific performance"]

⁹ Faulty or Deficient Service, Negligence or Omissions, Breach of Warranty, Harm or Damage, Professional Liability, Service Contract Liability

to act when required, or withholding crucial information that leads to harm, or where the provider's actions or inactions has caused harm to the consumer.

I.1. *Research Methodology*

Since researcher, is not an expert of technology or computer. However, researcher try to find out wheatear AI is product or services under the Indian law so that, in case consumer who use AI for various propose suffer from defects from AI or if services received, defacement service? Thus, researcher has relied on the doctrinal research methodology. The researcher for discussing this paper in light of the available legislations, international instruments, rules, policy documents, as primary source and secondary sources such as journals, book, scholarly article has been taken in consideration. The study is primarily analytical and comparative in nature, examining the legal position relating to artificial intelligence under Indian law alongside selected foreign jurisdictions in order to identify the evolving legal approach towards classification and liability of artificial intelligence under contemporary legal systems.

II. ARTIFICIAL INTELLIGENCE (PRODUCT) GOODS OR SERVICES

The issue of categorisation of artificial intelligence as a product or service has direct implications for determining liability in cases wherein some harm is caused, thereby determining liability is a crucial challenge in this regard. The harm caused by AI is, in many ways, different from conventional products or services. Unlike traditional services or goods, AI operate in a fundamentally different manner, essentially being autonomous in nature, continuously evolving and other similar characteristics. Such unique nature complicates the attribution of liability, currently under grey area.

Traditionally, liability is determined through doctrinal categories, for instance product liability, service liability, contractual obligations, negligence, etc. However, AI diverges from this traditional categorisation. Subject to the mode, deployment and interaction, one may be inclined to categorise it as a tangible product, continuing service or perhaps a hybrid of both. Therefore, central to determining liability, it is pertinent to ascertain AI as a product or service.

In legal context, a product¹⁰ means goods or article is generally defined as whatsoever offered for sale and purchased which should be tangible item or a service¹¹. However occasionally even non-intangible item which is stored in devices like floppy, disk or pen drive or another means of containing software¹², which is written, produced, manufactured for business or individual to use by a customer or user. Thus, both physical goods include digital products, and can encompass a wide range of items from manufactured goods to software. The software is categorised in two category of Software (a) Packaged Software/Canned Software while (b) Customised software¹³. The Central Goods

¹⁰ Consumer Protection Act, No. 35 of 2019, § 2(33), India Code (2019). [Definition of under Sec 2(33) as “any article or goods or substance or raw material or any extended cycle of such product, which may be in gaseous, liquid, or solid state possessing intrinsic value which is capable of delivery either as wholly assembled or as a component part and is produced for introduction to trade or commerce, but does not include human tissues, blood, blood products and organs”]

¹¹ Consumer Protection Act, No. 35 of 2019, § 2(7), India Code (2019).

¹² *Tata Consultancy Servs. v. State of Andhra Pradesh*, (2004) 178 E.L.T. 22 (S.C.) (India). [It was held that “all types of software are treated as goods. Apex court held that the transfer of branded software constitutes a sale and is liable to sales tax, levied by State Governments under Entry 54, Schedule VII of the Constitution. Court opined that having regard to the definition of the term ‘goods’ contained in clause (12) of Article 366 of the Constitution of India, a software programme may consist of various commands which enable the computer to perform a designated task. The copyright in that programme may remain with the originator of the programme, but the moment copies are made and marketed, it becomes goods, which are susceptible to sales tax.”]

¹³ *Sasken Communication Techs. Ltd. v. Jt. CCT*, (2011) (Karnataka H.C.) (India). [Confirmed that “customized software is specifically created for a particular customer to meet his specific needs in terms of coding, layout, reporting, etc. Customized software has to be developed from the grass root level, wherein a totally new software product is developed. Generally, it is treated as service.”]

and Services Tax Act, 2017 under Section 7 Schedule II consider goods and services both¹⁴ and Schedule II entry 5 (2) (D¹⁵) treat as services. Thus, on discussion we can conclude that software which is deliverable digitally or physically, it is categorised as goods, if sold in a tangible medium while service if downloaded or accessed electronically or through internet.

III. COMPARATIVE GLOBAL APPROACHES

In order to comprehensively examine the legal character of Artificial Intelligence as product or service, it is pertinent to analyse the regulatory approaches adopted by selected foreign jurisdictions. The evolving international legislative trends assists in understanding whether contemporary legal systems incline towards product or service classification of Artificial Intelligence.

III.1. *European Union*

The European Union has recently proposed harmonised rules regulating artificial intelligence.¹⁶ At the outset the proposed rules acknowledges the negative consequences or risks associated with the said technology along albeit the economic, strategic, social and environmental benefits.¹⁷ Thereby need for a

¹⁴ Central Goods and Services Tax Act, 2017, § 7, India Code. [Provides that “Scope of supply.— (1) For the purposes of this Act, the expression —supply includes

(a) all forms of supply of goods or services or both such as sale, transfer, barter, exchange, licence, rental, lease or disposal made or agreed to be made for a consideration by a person in the course or furtherance of business”]

¹⁵ CGST Act, 2017 § 7 (d) [“development, design, programming, customisation, adaptation, upgradation, enhancement, implementation of information technology software”]

¹⁶ Regulatory Framework for Artificial Intelligence, European Commission, Digital Strategy, <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai> (last visited May 7, 2026).

¹⁷ European Commission, Proposal for a Regulation of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act) and Amending Certain Union Legislative Acts, COM (2021) 206 final (Apr. 21, 2021), <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0206>.

balanced approach has been argued for a human and ethical approach towards technology.¹⁸ The fundamental legal reliance for the said rules have been placed upon EU Charter of Fundamental Rights¹⁹ along with Treaty on Functioning of the European Union (TFEU)²⁰ along with Article 114 which provides for the provision to “*adopt the measures for the approximation of the provisions laid down by law, regulation or administrative action.....the establishment and functioning of the internal market.*”²¹ Paragraph 3 of the said article further provides that “*The Commission, in its proposals envisaged in paragraph 1 concerning health, safety, environmental protection and consumer protection, will take as a base a high level of protection, taking account in particular of any new development based on scientific facts.*”²² Furthermore heavy reliance have been placed upon the imperative to protect the rights enshrined in the EU Charter, whereupon AI may have adverse effects upon.

The European Union Artificial Intelligence Act²³ is the key framework governing artificial intelligence providers and applies to “*providers placing on the market or putting into service AI systems or placing on the market general-purpose AI models in the Union, irrespective of whether those providers are established or located within the Union or in a third country*”²⁴ An AI system has been defined to be a machine-based system with variable autonomy, which based on the inputs received, gives outputs, which may affect virtual or physical environment.²⁵

¹⁸ Id.

¹⁹ Charter of Fundamental Rights of the European Union, 2012 O.J. (C 326) 391 (EU).

²⁰ Consolidated Version of the Treaty on the Functioning of the European Union, art. [X], 2012 O.J. (C 326) 47 (EU).

²¹ Id. art. 114(1).

²² Id. art. 114(3).

²³ Regulation (EU) 2024/1689 of the European Parliament and of the Council Laying Down Harmonised Rules on Artificial Intelligence (Artificial Intelligence Act), 2024

²⁴ Id. art. 2(1)(a).

²⁵ Id. art. 3(1).

The Act at the outset categorises AI systems into high-risk AI systems and otherwise.²⁶ Rules for classification of systems as high-risk has been contained under Article 6 which provides that “*Irrespective of whether an AI system is placed on the market or put into service..... AI system shall be considered to be high-risk where both of the following conditions are fulfilled:*

(a) the AI system is intended to be used as a safety component of a product, or the AI system is itself a product.....

*(b) the product whose safety component.....or the AI system itself as a product, is required to undergo a third-party conformity assessment, with a view to the placing on the market or the putting into service of that product.....”*²⁷ Further for such systems classified as high-risks various mandatory requirements of conformity assessments, quality management, documentation, providers duties etc have been specified.

Article 16 of the said act lays down the obligations of the providers of high-risk AI-systems in order to ensure that these systems must match specific standards. These providers have been obligated to maintain a quality management system in accordance with the provisions of Article 17.²⁸ Article 17 provides that “*high-risk AI systems shall put a quality management system in place that ensures compliance with this Regulation.*”²⁹ Various aspects with regard to which these standards are to be documented (written policies/procedures/instructions)³⁰ inter alia include procedures for the management of modifications to the high-risk AI system,³¹ techniques for the design control and verification,³² procedures for

²⁶ Id. art. 2(2).

²⁷ Id. art. 6(1).

²⁸ Id. art. 16(c).

²⁹ Id. art. 17(1)

³⁰ Id.

³¹ Id. art. 17(1)(a).

³² Id. art. 17(1)(b).

quality control and quality assurance,³³ security of supply related measures,³⁴ an accountability framework,³⁵ etc. Conformity assessment procedures have also been specified.³⁶ Such providers must also prominently display their name, registered trademark or name along with their address either upon their high-risk systems or its packaging.³⁷ Further conformity assessment have been mandated for all such high risk systems in accordance with the provisions of Article 43.³⁸ Two assessment procedures have been laid down under Article 43, whereof, one must be chosen by the provider in order to ensure that certain standards have been employed while creating these systems have been abided by. In absence of these standards, such system must mandatorily follow certain assessment protocols.³⁹ Further advanced provisions have been provided in case such systems would be employed for law enforcement, asylum, immigration or union authorities.⁴⁰ Annex-I is pertinent in the present context as it links the AI systems to existing sector specific Union harmonisation legislations which inter alia include medical devices, equipment's employed in civil aviation, lifts, safety components used in lifts, machinery toys, cable ways, two- or three-wheel vehicles and quadricycles, etc.⁴¹

Interestingly, the Act also concurringly seems to advance a service-provider based regulatory framework. The provider has been defined to include a natural/legal person/public authority/agency/other body that “*develops an AI system or a general-purpose AI model or that has an AI system or a general-purpose AI model developed and places it on the market or puts the AI system*

³³ Id. art. 17(1)(c).

³⁴ Id. art. 17(1)(l).

³⁵ Id. art. 17(1)(m).

³⁶ Id. arts. 43-49.

³⁷ Id. art. 16(b).

³⁸ Id. art. 16(f).

³⁹ Id., Art. 43(1).

⁴⁰ Id., Art. 43(1)(b)(d).

⁴¹ Id. Annex I.

into service under its own name or trademark, whether for payment or free of charge.....”⁴² Further, the term “deployer” seems to have been employed for a consumer which has been defined to include natural/legal person/public authority/agency etc., using an AI system under its authority.⁴³ Article 26 which provides for the obligations of the deployer, whose scheme is clearly seems to be inclined towards a service based model, which focuses on use/deployment (not sale.) Further the context of Article 50 is also pertinent, therefore should be contextually considered, which governs the conduct of certain interaction-based AI models which implies chat-bots (generative AI) whereof the standards pertaining to user facing operational conducts have to be maintained.

Comprehensive perusal of the Act suggests that there may not be a definitive conclusion as to categorise AI as product or service. The Act does not strictly categorise AI-systems, neither as product, nor service, but rather advances a hybrid model. It seems to be rooted simultaneously in both product safety, as well as digital service governance.

Prima facie the Act appears to be inclined to treat AI-systems as products. The legislative basis of the regulation itself i.e. Article 114, Treaty on Functioning of the European Union (TFEU) is an internal market regulating provision, thereby, roots of these regulations’ signals at a product-based inclination. This is further corroborated by employment of certain terms inter alia ‘placing on the market,’ ‘conformity assessment,’ etc. Furthermore, the scheme of Article 6 is pertinent to note in this regard which provides that which recognises an AI system as a safety component of a product, or the AI system is itself a product. Perhaps this compellingly substantiates the product-orientation of these regulations. Article 6 has virtually placed AI-systems in the product category which is further

⁴² Id., art. 3(3).

⁴³ Id., art. 3(4). [See also exception u/a 3(4) i.e. “except where the AI system is used in the course of a personal non-professional activity”]

confirmed with the approach of Article(s) 16-17, 43, annexure-1, etc. The conformity assessments and standards clearly reflect the legislative intent of regulation of such systems as a product.

However, such a conclusion would be fundamentally incomplete. AI has not been regarded as a product in an absolute sense. Simultaneously it has also been recognised as a digital service. This further become evident in the employment of the term ‘provider’ who puts into ‘service’ and the ‘deployer.’ Putting into service implies operational servicing, instead of merely the sale of it. Such an observation becomes more evident in light of Article 26. Article 50 may be considered as conclusive in this regard, which regulates chatbots, deepfake generating, etc. The obligations contained under the said article, are not merely product regulation but instead regulation of service delivery.

Whereas the Act does explicitly recognise AI as a product, but at the same time it also extends implicit recognition to AI as a service. In essence, the EU Act appears to have arrived at a regulatory compromise, thereby adopting a hybrid model in its considerations. Accordingly, the apt legal position would be that, by virtue of these regulations, a dual legal identity has been accorded to AI-systems, productised for market systems and service-ified for human interaction or generative AI.

III.2. *China*

China promulgated the Interim Measures for the Management of Generative Artificial Intelligence Services⁴⁴ in 2023, whereas with a premise of cyber/data

⁴⁴ Interim Measures for the Management of Generative Artificial Intelligence Services (promulgated by the Cyberspace Admin. of China, the Nat'l Dev. & Reform Comm'n, the Ministry of Educ., et al., July 10, 2023), translated in China Law Translate (July 13, 2023), http://www.cac.gov.cn/2023-07/13/c_1690898327029107.htm.

protection,⁴⁵ to regulate generative AI “services,” meant for general public⁴⁶ however holds relevance in the context of the present research. The provisions largely remain focused on upholding and protection of national interests,⁴⁷ however, it also provides clarity to the larger picture with regard to status of AI, in terms of its categorisation.

Article 2 of the rules provide that the provisions would apply to use of generative AI to provide services to the general public. Article 7 which contains the duties of the providers, gives further clarity in this regard. The terminology employed there, i.e., “*providers of generative AI services....shall carry out*”⁴⁸ clearly

⁴⁵ Id. art. 1. [“Article 1: These Provisions are drafted on the basis of the Cybersecurity Law of the PRC, the PRC Data Security Law, the Personal Information Protection Law of the PRC, the PRC Law on the Scientific and Technological Progress, and other relevant laws and administrative regulations, so as to promote the healthy development and regulated use of generative AI, preserve national security and the societal public interest, and protect the lawful rights and interests of citizens, legal persons, and other organizations.”]

⁴⁶ Id., art. 2.

⁴⁷ For instance: Upholding core socialist values, protecting national sovereignty, security, unity, stability, preventing discrimination, violence, obscenity, respect for commercial rights, etc. See Id., art. 4. [“The provision and use of generative AI services shall comply with the requirements of laws and administrative regulations, respect social mores, ethics, and morality, and obey the following provisions:

(1) Uphold the Core Socialist Values; content that is prohibited by laws and administrative regulations such as that inciting subversion of national sovereignty or the overturn of the socialist system, endangering national security and interests or harming the nation’s image, inciting separatism or undermining national unity and social stability, advocating terrorism or extremism, promoting ethnic hatred and ethnic discrimination, violence and obscenity, as well as fake and harmful information, must not be generated;

(2) During processes such as algorithm design, the selection of training data, model generation and optimization, and the provision of services, effective measures are to be employed to prevent the creation of discrimination such as by race, ethnicity, faith, nationality, region, sex, age, profession, or health;

(3) Respect intellectual property rights and commercial ethics, and protect commercial secrets, advantages in algorithms, data, platforms, and so forth must not be used for monopolies or to carry out unfair competition;

(4) Respect the lawful rights and interests of others, the physical and psychological well-being of others must not be endangered, and the rights and interests of others, such as in their image, reputation, honour, privacy, and personal information, must not be infringed;

(5) Based on the characteristics of the service type, employ effective measures to increase transparency in generative AI services and to increase the accuracy and reliability of generated content.”]

⁴⁸ Id., art. 7.

indicates the service categorisation, however situated only in the context of generative AI.⁴⁹ Further Chapter III (Article 9-15), provides for continuing obligations of the service providers in terms of service specifications.

Moreover, it is pertinent to examine the relevant rules of Provisions on the Administration of Deep Synthesis Internet Information Services⁵⁰ to further corroborate the service categorisation of AI. Similar to 2023 Interim Measures, the instant regulations are also drafted on the basis of the relevant cyber-security laws.⁵¹ Detailed perusal of the instant rules would be redundant as it is evident from the surface level reading itself that even these regulations have characterised artificial intelligence into the service category (without prejudice to the fact that these rules only apply to deep synthesis AI services.) Reliance must be placed upon Article 17 of the instant rules, as it appears to be para-Materia with the scheme and intent of EU AI Act, Article 50⁵² in terms of regulating interaction of the AI systems in terms of its output.

The Chinese regulatory framework is reflective of the fact that, unlike European Union, China has established artificial intelligence, predominantly as a service, with no measure of inclination towards the product category. Such is reflected not merely in the titles of the provisions but also in the consistent regulatory nomenclature employed which inter alia includes “generative AI services,” “deep synthesis services,” and “algorithmic recommendation services.”⁵³ The Chinese

⁴⁹ Id., art. 22(2). [(“2) “Generative AI service providers” refers to organizations and individuals that use generative AI technology to provide generative AI services (including providing generative AI services through programmable interfaces and other means).”]

⁵⁰ Provisions on the Administration of Deep Synthesis Internet Information Services (promulgated by the Cyberspace Admin. of China, the Ministry of Indus. & Info. Tech., & the Ministry of Pub. Sec., Nov. 25, 2022), translated in China Law Translate (Dec. 11, 2022), http://www.cac.gov.cn/2022-12/11/c_1672221949354811.htm.

⁵¹ Id., art. 1.

⁵² Regulation (EU) 2024/1689, art. 50.

⁵³ Provisions on the Management of Algorithmic Recommendation in Internet Information Services (promulgated by the Cyberspace Admin. of China, the Ministry of Indus. & Info. Tech., the Ministry of Pub. Sec., & the State Admin. for Market Regulation, Dec. 31, 2021),

regulations are not concerned with Artificial Intelligence as marketable products. The cause of concern for them only arises when it is employed to provide “services to the public.” The Chinese regulations are fundamentally unambiguous to this effect, unlike the EU scheme which, at instances, invoked product law nomenclature. Accordingly, China service-fies artificial intelligence (regulated digital service within the public context.)

III.3. *South Korea*

South Koreans’ Framework Act on the Development of Artificial Intelligence and Establishment of Trust⁵⁴ appears to suggest a similar model (in terms of the present exploration) as was reflected in the European Union framework, however in explicit terms. South Korea adopts an express hybrid model, classifying AI industry into AI products and AI services. The act defined “AI Industry” to include industries that “....*develop, manufacture, produce, or distribute products utilizing AI or AI technology (hereinafter “AI products”) or that provide related services (hereinafter “AI services”).*”⁵⁵ Further, a distinction has been provided between AI-developer and AI-using Business Operators. An AI-developer includes individual/entity which develops and provides for AI.⁵⁶ Whereas, an AI-using Business Operator includes “*such individual/entity which provides AI products/services using AI provided by a developer.*”⁵⁷

Interestingly, akin to the model of the European Union, Korea also provides for regulation of high-impact AI and also generative AI models. Such business

translated in China Law Translate (Jan. 4, 2022), http://www.cac.gov.cn/2022-01/04/c_1642894606364259.htm.

⁵⁴ Framework Act on the Development of Artificial Intelligence and Establishment of Trust, Law No. 20676 (S. Kor.), enacted Jan. 21, 2025, enforced Jan. 22, 2026, Korean Law Information Center (Ministry of Gov’t Legislation), [https://www.law.go.kr/\(...\)](https://www.law.go.kr/(...)); archived at <https://perma.cc/CL6T-VHZ6> (translated by Etcetera Language Group, Inc., July 9, 2025).

⁵⁵ Id., art. 2(6).

⁵⁶ Id., art. 7(a)

⁵⁷ Id., art. 7(b)

operators, employing high impact AI or generative AI in its product or services are obligated to ensure certain standards of transparency. Such operators must notify the users in advance that such product or service employs high-impact or generative AI as the case may be.⁵⁸ The users must also be informed in cases the images or videos are generated through AI and it is difficult to distinguish between authentic and artificially generated ones.⁵⁹ For High-Impact AI Business Operators' further obligations have been provided for implementing certain measures which are to be prescribed by presidential decree.⁶⁰ Such operators must conduct an impact assessment for evaluation of its possible impact on human rights in advance.⁶¹

A definite conclusion which may be inferred from the Korean framework is that it expressly recognises the dual commercial character of Artificial Intelligence by noting it both as product and services. It avoids a binary categorisation designed for conventional goods and services.

III.4. *Comparative Observations*

Comparative analysis reflects that there is no universally accepted legal characterisation of Artificial Intelligence. While certain jurisdictions incline towards product-based regulation, others approach it otherwise, whereas some recognise its dual nature. This reflects that traditional binary classifications are increasingly inadequate for regulating the evolving and multifunctional character of Artificial Intelligence.

IV. STANDARDS AND GOVERNANCE OF ARTIFICIAL INTELLIGENCE

⁵⁸ Id., art. 31(1) & 31(2)

⁵⁹ Id., art. 31(3)

⁶⁰ Id., art. 34

⁶¹ Id., art. 35(1)

If we look the standard of the AI, we find that there is no conclusive legal framework for governing Artificial Intelligence by the United Nations but policy or recommendation, such as UNESCO Recommendation on the Ethics of Artificial Intelligence⁶², UN resolution on artificial intelligence⁶³. UNESCO recognised challenges which posed by AI that may have implication on the local and regional ethical standards and values.⁶⁴ UN categorized AI in to three category (a) individual, (b) political and societal and (c) environmental. For example- manipulation, deception, nudging, sentencing, exploitation, discrimination, equal treatment, prosecution, surveillance, loss of human autonomy and AI-assisted targeting. Further AI may create nudging, loneliness and isolation, neurotechnology, lethal autonomous weapons, autonomous cars, medical diagnostics, access to health care, etc. This is reflective of the fact that AI is not merely limited to technological context but also has serious social, environmental, ethical and legal ramification. Meaning thereby that the regulation of Artificial Intelligence may not be merely limited to the issue of liability, post harm. Rather, it is pertinent that there must be ex-ante standards for ensuring safety and reliability before it is put into use. Therefore, ‘standardisation’ is fundamental to ensure certain minimum standards development, deployment and monitoring of such systems.

At the international arena efforts are been made to provide for specific standards to regulate artificial intelligence systems. The International Organization for Standardization and International Electrotechnical Commission introduced

⁶² UNESCO, Recommendation on the Ethics of Artificial Intelligence, SHS/BIO/REC-AIETHICS/2021, UNESCO Doc. No. 41 C/73 (Nov. 23, 2021), <https://unesdoc.unesco.org/ark:/48223/pf0000380455>.

⁶³ United Nations General Assembly, Draft Resolution A/78/L.49, Seizing the Opportunities of Safe, Secure and Trustworthy Artificial Intelligence Systems for Sustainable Development (Mar. 11, 2024), <https://docs.un.org/en/A/78/L.49>.

⁶⁴ UNESCO, Recommendation on the Ethics of Artificial Intelligence, SHS/BIO/PI/2021/1 (2022), UNESCO Doc. No. 41 C/73 (Nov. 23, 2021), <https://unesdoc.unesco.org/ark:/48223/pf0000381137>.

ISO/IEC 42001:2023⁶⁵ providing for requirements for “*establishing, implementing, maintaining, and continually improving an Artificial Intelligence Management System (AIMS) within organizations. It is designed for entities providing or utilizing AI-based products or services, ensuring responsible development and use of AI systems.*”⁶⁶ This has been the first system to manage the risks and opportunities of artificial intelligence, to balance innovation with ethical governance. Similarly, ISO/IEC 23894:2023⁶⁷ provides a structured framework for AI risk management. Likewise, the Institute of Electrical and Electronics Engineers (IEEE), has attempted to integrate ethical considerations while developing technological designs through introducing *IEEE 7000™-2021*⁶⁸ (IEEE Standard Model Process for Addressing Ethical Concerns During System Design.)⁶⁹ It has been emphasized that human and social values must be taken into consideration for a system to be ethical. This model inter alia provides for “*a system engineering standard approach integrating human and social values into traditional systems engineering and design; processes for engineers to translate stakeholder values and ethical considerations into system requirements and design practices; a systematic, transparent, and traceable approach to address ethically-oriented regulatory obligations in the design of autonomous intelligent systems.*”⁷⁰

⁶⁵ ISO/IEC 42001:2023, Information Technology- Artificial Intelligence- Management System (Int’l Org. for Standardization & Int’l Electrotechnical Comm’n 2023) (ISO/IEC 2023), <https://www.iso.org/standard/42001>.

⁶⁶ Id.

⁶⁷ ISO/IEC 23894:2023, Information Technology- Artificial Intelligence- Guidance on Risk Management (Int’l Org. for Standardization & Int’l Electrotechnical Comm’n 2023), <https://www.iso.org/standard/77304.html>.

⁶⁸ IEEE Std 7000-2021, IEEE Standard Model Process for Addressing Ethical Concerns During System Design (IEEE Standards Association 2021), <https://standards.ieee.org/standard/7000.html>.

⁶⁹ IEEE Standards Association, IEEE, <https://standards.ieee.org/> (last visited May 9, 2026).

⁷⁰ IEEE 7000-2021

Within regional frameworks, the European Union through the European Union Artificial Intelligence Act, has adopted, perhaps, the most comprehensive provisions mandating conformity assessments, quality management, compliance, etc. In the Indian context, no dedicated framework has been presently adopted specifically pertaining to artificial intelligence. However, various laws and regulations exist, for ensuring quality⁷¹ of the goods which should meet certain standard according to the regulatory authority. For example, Bureau of Indian Standards Act of 2016, Bureau responsible for setting Standards⁷², guidelines, for various goods, services, and processes. Further, Bureau can adopt standards from other institutions, both in India and abroad for integration into the Indian Standards framework. Bureau also recognizes or accredits other organizations involved in standardization of product and services.⁷³ Therefore, although India presently lacks a dedicated artificial intelligence specific framework, the existing standardisation mechanisms may provide foundational support for evolving future regulatory governance of Artificial Intelligence.

V. WAY FORWARD & CONCLUDING OBSERVATIONS

The research demonstrates that the legal characterisation of AI cannot be satisfactorily resolved through the traditional binary of product and service. Its legal significance, therefore, cannot be determined in abstraction. The

⁷¹ There are various laws which includes, The Food Safety and Standards Act, 2006, Indian Contract Act, the Sale of Goods Act, the Dangerous Drugs Act, the Agricultural Produce (Grading and Marketing) Act, the Indian Standards Institution (Certification Marks) Act, the Prevention of Food Adulteration Act, the Standards of Weights and Measures Act, Consumer Protection Act, to ensure quality of product to consumer without any defect

⁷² “Indian Standard” means the standard including any tentative or provisional standard established and published by the Bureau, in relation to any goods, article, process, system or service, indicative of the quality and specification of such goods, article, process, system or service and includes-

“(i) any standard adopted by the Bureau under sub-section (2) of section 10; and
(ii) any standard established and published, or recognised, by the Bureau of Indian Standards established under the Bureau of Indian Standard Act, 1986 (63 of 1986), which was in force immediately before the commencement of this Act;”

⁷³ For detail see Bureau of Indian Standards Act, 2016 (India)

comparative regulatory approaches examined herein reflect that contemporary legal systems have not adopted a uniform approach towards this question. Accordingly, the more legally sustainable position is to recognise its dual legal identity.

The question of liability must accordingly move beyond rigid classification and towards a context-sensitive framework. Such an approach would ensure that accountability is not diluted merely because the technology does not conform to traditional legal categories. In the Indian context, the absence of a dedicated legal framework in this regard reflects a significant regulatory vacuum. While existing statutory mechanisms may partially address isolated aspects of liability and standardisation, they remain inadequate to address the challenges unique to AI. Therefore, it becomes imperative for India to develop a dedicated legislative or regulatory framework specifically governing Artificial Intelligence.

The way forward lies in reconstructing legal doctrine itself. Rather than asking whether Artificial Intelligence is exclusively a product or exclusively a service, legal systems must evolve towards a principled hybrid framework supported by ex-ante standards, adaptive regulation and coordinated institutional governance. Only such an approach would ensure that technological innovation advances alongside legal certainty, consumer protection and public trust.