# FROM INK TO EMOJIS: E-CONTRACTS REDEFINED IN THE DIGITAL AGE

# Abhijeet Kumar Srivastawa\*

## ABSTRACT

*E-contracts have become integral to modern commerce, offering efficiency, cost-effectiveness,* and convenience. They allow parties to create, review, and sign agreements swiftly, significantly reducing time and effort. They are environmentally friendly, remotely accessible, and inexpensive. Nonetheless, they present challenges including their legal recognition varies, and courts may not enforce them if deemed unfair; ensuring the security of electronic signatures and data privacy is essential, as is bridging the digital divide. The transition from traditional paper contracts to e-contracts represents a profound shift in the landscape of contractual agreements. This article explores this transformative journey. This article delves into the evolution, types, and modes of execution of e-contracts, highlighting their benefits, challenges, and the legal framework governing them. It emphasises the significance of econtracts in contemporary commerce while underscoring the need for compliance with local laws, data privacy, and security.

#### **Keywords:** *E-contracts, Electronic Signatures, Data Privacy, Security.*

# INTRODUCTION rnal of Legal Research and Juridical Sciences

You would have created an email account, and in the last step, the email service provider asked you to tick a box and click "I Agree/I Accept". Below "I Agree/I Accept" the email service provider had provided a hyperlink which, when clicked, popped up a new page displaying the terms and conditions. These terms and conditions were an agreement between the email service provider and you, and because they were executed electronically, they are referred to as electronic contracts or e-contracts. E-contracts, like the one in this scenario, typically include essential elements such as offer and acceptance, consideration, and the intention to create legal relations. By clicking "I Agree" and reviewing the terms and conditions, you actively participate in forming a valid e-contract, binding both parties to the terms outlined in the agreement.

#### \*TECHNOLOGY LAWYER.

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Recently a Canadian court held that the "thumbs-up" emoji is tantamount to a digital signature. This case highlights that e-contracts represent a significant change in the way agreements or transactions are executed in the digital age. The rapid expansion of e-commerce, driven by the internet and advances in technology has made e-contracts pervasive. E-contracts have become an integral part of our daily lives, from creating social media accounts to purchasing goods online to executing agreements digitally with a simple click. They are cost-effective, eco-friendly, user-friendly, and remotely accessible. People can now draft, sign electronically, and store e-contracts with ease, whether they are in the office, at home, or on the go.

As e-contracts continue to evolve, they face challenges related to security, data privacy, digital signature authenticity, digital divide, cyber-attacks, legal validity, and enforceability. To effectively address these issues, there is a need for the development of strong data protection laws, cyber security measures, and synergy between various laws, rules, and regulations.

# **E-CONTRACTING: A BRIEF HISTORY**

The origins of e-contracts can be traced back to the late 20th century with the advent of computer software in physical formats (such as optical discs). The user buying the software was deemed to have entered into an agreement called the shrinkwrap agreement with the seller the moment the user had torn the wrapping of the software. Now, the shrinkwrap agreement has shrunk, and its successors such as the clickwrap and browsewrap agreements are being used, where users digitally accept terms and conditions by clicking a button called "I Agree/I Accept".

International treaties played an important role in establishing global guidelines for e-contracts. The United Nations Commission on International Trade Law (UNCITRAL) introduced the Model Law on Electronic Commerce in 1996, emphasising that electronic and paper-based information, as well as electronic transactions and processes, should receive equal legal recognition without discrimination. In 2001, UNCITRAL introduced the UNCITRAL Model Law on Electronic Signatures, which established rules for the use of electronic signatures. However, it was the United Nations Convention on the Use of Electronic Communications in International Contracts (New York in 2005) that, for the first time, provided legal certainty to electronic contracts in international trade. The UNCITRAL Model Law on Electronic Transferable Records (2017) extended these principles to transferable documents and instruments, such as bills of lading, bills of exchange, cheques, promissory notes, and

warehouse receipts, thus enabling the use of their electronic form in international trade. These legal frameworks set the stage for the widespread acceptance of electronic agreements globally.

Following the United Nations guidelines, countries worldwide have created acts, rules, and regulations governing e-contracts and electronic or digital signatures. The Electronic Signatures in Global and National Commerce Act (ESIGN) was passed in the United States in the year 2000. ESIGN recognized electronic signatures and electronic records as valid and enforceable, ensuring that e-contracts held the same legal weight as their paper counterparts, thus removing barriers to conducting business electronically.

In 2005, India passed the Information Technology Act that gives legal recognition to econtracts, e-signatures, and digital signatures. Since 2015, India has been using one of the most innovative and secure methods of e-sign called the Aadhaar e-sign.

# **COMMON APPLICATIONS OF E-CONTRACTS**

(1) Online Shopping: Agreeing to a website's terms and conditions when making an online purchase constitutes an example of an e-contract.

(2) Business Agreements: E-contracts are widely used in business for various agreements, such as service contracts, vendor agreements, and partnership agreements.

(3) Real Estate Transactions: Property sales, leases, and rental agreements can be facilitated through e-contracts.<sup>1</sup> In all of Legal Research and Juridical Sciences

(4) Employment Contracts: Employers and employees often use e-contracts for hiring agreements, non-disclosure agreements, contractor agreements, etc.

(5) Government and Legal Documents: Government agencies and legal entities utilise econtracts for various purposes, including permits, licences, and legal settlements.

(6) Healthcare Agreements: In the healthcare industry, e-contracts are employed for patient consent forms, medical service agreements, and other healthcare contracts.

(7) **Financial Agreements:** Banks and financial institutions use e-contracts for loan agreements, mortgage contracts, and other financial services.

# **E-CONTRACTS: TYPES AND MODE OF EXECUTION**

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(1) Clickwrap Agreements ("I Agree" or "I Accept"): They are forms of e-contracts commonly used in the digital world. These agreements are executed when a user clicks on a button, such as "I Agree" "I Accept" or "OK" or checks a box to signify her acceptance of the terms and conditions set forth by a service provider, so they are also known as End-user licence agreements. Clickwrap agreements are commonly employed on websites and online platforms and are often encountered during various online activities. For example, while creating online accounts on various websites to use their services. Clickwrap agreements are explicit and transparent. The users can review the terms and conditions before accepting them, but users don't have the leverage to negotiate, leaving users either to accept or reject. Courts may uphold these agreements if they meet certain criteria, such as being explicit and providing users with a genuine opportunity to review the terms.

The enforceability of clickwrap contracts in the United States was upheld by the Appellate Division of the Superior Court of New Jersey in Hotmail Corporation v/s Van Money Pie Inc. This case is a significant example of the legal recognition of clickwrap agreements.

(2) Browsewrap Agreements (Terms and Conditions of Website): They are slightly different from the click-wrap agreement. While in Clickwrap, users are asked for their consent before using the services, the consent is deemed to have been granted by users in the browsewrap agreement merely because they were browsing the site and continue to use it. To illustrate, users are not required to take affirmative action like clicking an "I Agree" button or checking a box to indicate their consent, because their continued use of the website implies consent. This type of acceptance of terms and conditions is called passive acceptance. The users are required to accept various terms and conditions such as privacy policies or cookie policies, and the terms and conditions of these policies are placed somewhere on different pages of the website that are accessible through hyperlinks. So, the visibility of terms and conditions is not as explicit and transparent as clickwrap agreements, and finding the terms and conditions in a browsewrap agreement can be challenging.

Thanks to data protection laws like the General Data Protection Regulation (GDPR) 2016, businesses are making the browsewrap agreements explicitly by giving popup notices as soon as the users visit the website. Now, the users have the option to accept or reject.

(3) Shrinkwrap Agreements (Agreements packaged with products or End User Licence Agreements): Shrinkwrap agreements are a type of e-contract used primarily in the software

industry. They get their name from the physical shrinkwrap or plastic wrap that encases software products. These agreements are typically contained within or on the software packaging, such as in a user manual, on the back of the box, or on an insert. When the user breaks the physical seal or opens the software package, the shrinkwrap agreements are considered to be accepted. The terms and conditions within shrinkwrap agreements can cover licensing terms, restrictions on use, and warranty information. Here, too, users can't negotiate, they are expected to adhere to these terms once they open the package and install or use the software.

(4) Data Contracts or Electronic Data Interchange (EDI) contracts: These e-contracts are used in the context of data exchange between businesses such as purchase orders, invoices, shipping notices, or any other business-related data, but they don't involve the exchange of goods or services and rather focus on the structured exchange of electronic data and information. EDI contracts are legally binding agreements that govern how data is transmitted, processed, and protected in electronic communications. The terms and conditions in EDI contracts include data format, encryption methods, data security, data transmission protocols, and responsibilities of the parties involved.

(5) Electronic agent contracts, or automated contracts: Electronic agents (also known as bots or computer software) represent the parties involved in a contract. These electronic agents are designed to autonomously perform tasks such as making decisions on behalf of their parties or negotiating, signing, executing, and ensuring compliance. Now, Machine Learning, Natural Language Processing, and Large Language Models are being leveraged as electronic agents. They are being integrated into Contract Lifecycle Management Systems, in short called CLM. However, there is an oversight of humans to set the rules and parameters that guide the electronic agent's behaviour. They are commonly used in automated financial trading, where trading algorithms buy and sell financial instruments on behalf of traders. They are also used in online shopping, virtual assistants like chatbots integrated into a website. The use of electronic agents in contracts raises legal and ethical considerations. For instance, there may be questions about the responsibility for the actions of these agents, particularly in cases of errors or misconduct.

(6) Smart contracts: Smart contracts are the latest ones to be included in the category of econtracts. They are a type of Electronic agent contract. They use blockchain technology to automate and self-execute the terms of the agreement. The terms of the agreement are written

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into code on the blockchain when those predefined terms are met, the agreement self-executes itself. For example, they use conditional logic, such as "if," "when," and "then," to define the conditions and actions within the contract. This logic ensures that the contract behaves as intended. They eliminate the need for intermediaries, reducing the time and costs associated with traditional contract execution. So, they are known for their efficiency, accuracy, immutability, and cost-effectiveness. Blockchain technology makes smart contracts trustful, transparent, and secure since the blockchain is a decentralised public ledger and uses a cryptographic mechanism, thereby removing possibilities of hacking, manipulation, and fraud. Smart contracts stand out in the e-contract category due to their unique characteristics, such as being self-executing, immutable, and reliant on predetermined conditions and blockchain technology.

# EMOJIS AS LEGAL CONSENT: THE SOUTHWEST TERMINAL LTD. V. ACHTER LAND & CATTLE LTD.

In a remarkable legal case, the use of emojis in online interactions took on a new dimension when a Canadian court acknowledged them as a valid form of consent. The dispute involved the South West Terminal Ltd. (SWT), the buyer, and Achter Land & Cattle Ltd., the seller. Both parties had a phone conversation in which the buyer expressed interest in procuring a specific variety of seeds known as Flax.

Following this conversation, the buyer sent a screenshot of a contract to the seller, requesting of Legal Research and Juridical Sciences confirmation. The seller's response to this contract was not conveyed through a written confirmation but rather with a simple "thumbs-up" emoji. This informal gesture became the focal point of the case.

The Court acknowledged that in the past both buyers and sellers had often entered into electronic agreements, in which the buyer would place orders and the seller would confirm them with short responses such as "looks good", "ok" or "yup". The Court rejected the seller's claim that the "thumbs up" emoji he sent was merely an acknowledgment of receiving the Flax contract, and not his consent to the terms and conditions of the Flax contract, and ruled in favour of the buyer.

This landmark decision underscores the evolving landscape of contract law in the digital era, where even the most casual digital exchanges can carry significant legal weight.

# **E-CONTRACTS IN INDIA: ARE THEY VALID?**

There is no specific law to govern e-contracts in India. They are governed by the Indian Contract Act of 1872, the Information Technology Act of 2000, and the Indian Evidence Act of 1872.

(a) Indian Contract Act 1872: For any agreement to be a legally enforceable contract, it must satisfy the following essential conditions of Section 10 of the Act.

- Competency of the parties,
- Free consent between the parties,
- Lawful consideration, and lawful object, and
- The agreement is not expressly declared to be void.

So, there is no provision in this Act that prohibits the enforceability of electronic agreements provided that the essential elements of the valid contract must be present in such agreements.

(b) The Information Technology Act, 2000 (IT Act): Section 10A of the IT Act gives recognition to the contracts formed through electronic means by stating that the contract shall not be deemed to be unenforceable just because the contract was formed by electronic means and the electronic means was used for the communication, acceptance or revocation of proposals. Section 5 of the IT Act gives legal recognition to the eSigns (both electronic and digital). However, The following instruments can not be executed electronically by using eSigns, as per Section 1(4) of the IT Act:

- 1. Negotiable Instruments
- 2. Power of Attorney
- 3. Trust Deeds
- 4. Will
- 5. Any agreement for the sale or conveyance of immovable property.

(c) Indian Evidence Act 1872: Section 65B of this Act states that electronic records, when printed or stored on optical or magnetic media by a computer can be considered admitted as "evidence" in the court without the need for the original document. Additionally, the term "evidence" has been defined under Section 3 of this Act, which engulfs all documents including electronic records. So, these provisions make e-contracts admissible in a court of law.

# STAMPING OF E-CONTRACTS: IS IT MANDATORY IN INDIA?

The Indian Stamp Act 1899 talks about levying stamp duty on the 'instruments'. Section 2 (14) of the said act defines that an 'instrument' includes every document by which any right or liability is, or purports to be, created, transferred, limited, extended, extinguished, or recorded.

Furthermore, Section 2(1) of the Maharashtra Stamp Act, 1958 has extended the definition of the term "instruments" by stating that instrument includes every document by which any right or liability is, or purports to be, created, transferred, limited, extended, extinguished or recorded, but does not include a bill of exchange, cheque, promissory note, bill of lading, letter of credit, policy of insurance, transfer of share, debenture, proxy and receipt. It also provides an explanation stating that the term " document " also includes any electronic record as defined in clause (t) of sub-section (1) of section 2 of the Information Technology Act, 2000.

Thus, stamping of e-contracts is mandatory in India. If they are not duly stamped, they will be inadmissible in a court as Section 35 of the Indian Stamp Act 1899 states that - No instrument chargeable with duty shall be admitted in evidence for any purpose by any person having by law or consent of parties authority to receive evidence, or shall be acted upon, registered or authenticated by any such person or by any public officer, unless such instrument is duly stamped.

# HOW DOES THE INDIAN JUDICIARY SEE THE E-CONTRACTS?

Journal of Legal Research and Juridical Science

(1) Standard form of Contracts/Adhesion Contracts: In the remarkable case of LIC India & ANR. v. Consumer Education and Research Center & ORS.ETC the Supreme Court held that "In dotted line contracts there would be no occasion for a weaker party to bargain as to assume to have equal bargaining power. He has either to accept or leave the service or goods in terms of the dotted line contract. His option would be either to accept the unreasonable or unfair terms or forgo the service forever." This statement of the Supreme Court underscores the need to ensure that standard forms of contracts are fair and transparent and offer some degree of choice and protection to the weaker party. It highlights the potential for abuse when there is a significant power imbalance in contractual relationships and the risks associated with the use of one-sided, non-negotiable terms in contracts.

#### (2) Can a consumer take the defence of e-contracts being unreasonable?

It all boils down to the bargaining power of the parties. Courts may hesitate to intervene in situations where the bargaining power of the parties is relatively equal. However, when there is a significant power imbalance, as is often the case in consumer-business relationships, court intervention may occur if the consumer can prove that the services or goods he sought were absolutely necessary and also that he didn't have any other means of availing goods or services.

In the case of Trimex International Fze ... vs Vedanta Aluminium Limited, the Supreme Court held that "Once the contract is concluded orally or in writing, the mere fact that a formal contract has to be prepared and initialed by the parties would not affect either the acceptance of the contract so entered into or implementation thereof, even if the formal contract has never been initialed." Thus, the Supreme Court accepted that proposal and acceptance over emails form a binding contract whether or not they are signed.

#### **BENEFITS OF E-CONTRACTS**

(1) Efficiency, Cost-effectiveness, and Convenience: Creating and signing e-contracts requires only an electronic device like a computer or mobile and internet access, thus saving time and effort compared to traditional paper contracts. Automated contracts powered by blockchain and artificial intelligence can eliminate human intervention. Artificial intelligence can be very useful in contract management, it can create, negotiate, review, execute, and enforce contracts, thus not only increasing efficiency but also the revenue of the organisations. For example, JP Morgan Chase & Co., a bank in the United States of America, has developed an AI-powered system called COIN (Contract Intelligence) that can review 12,000 commercial loan agreements in seconds, for which their lawyers took 360,000 hours a year.

(2) Security: Electronic signatures are legally binding and harder to forge than handwritten signatures. E-contracts can be encrypted and securely stored online, reducing the risk of tampering or loss.

(3) **Eco-Friendly:** E-contracts eliminate the need for paper, contributing to environmental conservation by saving trees and reducing pollution.

(4) Accessibility: E-contracts can be easily shared and accessed by parties involved, allowing for review, amendment, and enforcement. The organisations can say goodbye to heaps and

boxes of paper contracts. The contract experts don't have to bother flipping and browsing through all pages to find a specific clause, they can just hit the search box on the computer.

(5) Audit Trail: E-contracts create a comprehensive date and time-stamped audit trail, allowing parties to trace the entire contract process, from creation to execution, which can be useful in case of disputes or regulatory compliance.

# **ISSUES WITH E-CONTRACTS**

(1) Legal Recognition: Some courts may not enforce e-contracts if they are found to be unfair or one-sided, potentially leading to legal challenges, but some can accept even emojis as a form of consent. Multiple rules and regulations make enforceability daunting.

(2) Security & Data Privacy Risk: Improperly encrypted or stored e-contracts may be vulnerable to hacking, potentially resulting in the unauthorised disclosure of contents of the contract such as confidential information.

(3) **Digital Divide:** Not all parties involved in a contract may have access to the necessary technology and digital literacy. To illustrate, in India, Internet penetration is deep, but literacy is missing. Cheap Internet has provided users with access to online platforms, and while accessing their services, users consent to the online platform by clicking or tapping "I Agree" without reading the terms and conditions.

(4) **Technical Issues:** E-contract management systems can encounter technical problems, such as system outages, and software glitches which may disrupt the contract process and lead to delays or errors.

(5) Infrastructure cost: Implementing e-contract systems may require an initial investment in software, hardware, and training. Smaller organisations or individuals may find this cost prohibitive.

# **CONCLUSION AND WAY FORWARD**

Today, e-contracts have become the norm rather than the exception, and their ubiquity has increased as services have shifted from offline to online. They are no longer limited to simple agreements; they have evolved to encompass complex transactions, including the purchase of goods and services, financial services, software licensing, and more. They are widely used in

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various sectors, from real estate and finance to employment agreements and digital subscriptions. The convenience, efficiency, and environmental benefits of e-contracts have further solidified their place in modern commerce of this digital age.

However, the challenges posed by e-contracts can't be overlooked. It is important to ensure that e-contracts comply with local laws and regulations to ensure their acceptance. The automation infrastructure is costly, and on top of it, the use of artificial intelligence in contracts is fraught with danger if the artificial intelligence is not trained on accurate data. The users need to be given digital learning. The online platforms collect and store data, which can raise privacy concerns and security risks. The users may worry about how their data is used and protected by these platforms, thus the online services must ensure they inform their users that they comply with relevant laws and regulations governing data privacy, and they have deployed cyber security measures to protect data from hacking. While electronic signatures are secure, there is still a risk of sophisticated forgery, thus ensuring the security and authenticity of electronic signatures is crucial. Additionally, international agreements under the auspices of the United Nations can mitigate challenges and harmonise laws, rules and regulations around

the world.

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