

An Analysis of the Themes in Iranian E-Commerce Laws and Regulations

Sahar Gharaati¹; Mastooreh Ezzatzadeh²; Sara Mohammadpour³

1. *Ph.D. Student, Department of Media Management, West Tehran Branch, Islamic Azad University, Tehran, Iran*
2. *Assistant Professor, Department of Media Management, West Tehran Branch, Islamic Azad University, Tehran, Iran*
3. *Assistant professor, Department of Social Communication, West Tehran Branch, Islamic Azad University, Tehran, Iran.*

Received 4 October 2025

Accepted 9 November 2025

Abstract: This paper aims to provide an in-depth and systematic analysis of the laws and regulations pertaining to e-commerce in Iran. Given the accelerating pace of digital transformation and its widespread effects on the economy and society, a critical evaluation of current laws and the identification of structural shortcomings is essential to maintain fairness, security, and commercial competitiveness. The research method is based on Thematic Analysis, in which key documents such as the E-Commerce Law, executive regulations and bylaws, consumer protection regulations in cyberspace, cybersecurity guidelines, and cybercrime laws have been examined. The findings of this study show that a total of 4 Global Themes, 11 Organizing Themes, and 62 Basic Themes were identified. The results indicate that, although the current frameworks are partially compatible with the needs of the digital economy, there are weaknesses such as a lack of alignment with emerging technologies (such as blockchain, artificial intelligence, and the Internet of Things), insufficient transparency in the operations of digital platforms, a lack of comprehensive national standards for electronic documents, and a shortage of specialized and efficient oversight. To enhance the validity and objectivity of the research findings, the technique of referencing credible international sources and measuring data reliability using Holsti's reliability coefficient has been employed. Ultimately, this research offers practical and policy recommendations such as the regular and periodic revision of laws and regulations, the development and implementation of a comprehensive national standard for digital documents (including electronic signatures, records, and electronic exchanges), the creation of a national database to increase transparency in the performance of e-commerce platforms, and the strengthening of specialized and independent oversight in this area.

Keywords: E-commerce, Iranian E-Commerce Laws and Regulations, Thematic Analysis, digital economy.

Introduction

E-commerce has emerged as one of the most significant drivers of global trade transformation and domestic economic development across various countries. This modern commercial system has not only revolutionized transaction processes but also marked a turning point in regulating business relations, protecting consumer rights, creating novel economic opportunities, and facilitating access to markets (Emami et al., 2021). The enactment of the Electronic Commerce Law in Iran in 2003 constituted the first serious initiative towards aligning the country's legal framework with the exigencies of the digital economy. The primary objective of this law was to establish an appropriate legal framework to ensure stakeholder interactions—including sellers, buyers, intermediaries, and regulatory agencies—secure transactions, validate electronic documents, and facilitate the development of online business activities (Hassanpour et al., 2022).

Problem Statement

With the rapid advancement of digital technologies, e-commerce has become one of the central pillars of economic development and commercial relations. In this context, laws and regulations must safeguard security, transparency, competitiveness, and consumer protection.

¹ Email: fardad.gharaati@gmail.com

² Email: mastooreh.ez@gmail.com (Corresponding Author)

³ Email: s.mohamadpour@gmail.com

However, many of the current regulations in Iran—particularly when compared to the swift pace of technological progress—exhibit significant shortcomings. Notable issues include the lack of alignment between existing laws and technologies such as blockchain, artificial intelligence (AI), and the Internet of Things (IoT); ambiguity regarding the liabilities of digital platforms; inconsistencies in enforcement; and the absence of national standards for electronic documents. These deficiencies give rise to concerns about the validity of digital contracts, the lack of clear grievance mechanisms, and challenges in protecting the rights of key stakeholders (Hosseini, 2019).

A comprehensive and critical review of the current regulatory structure—aimed at essential reforms to foster justice and ensure the growth of the digital economy—is thus both evident and urgent, serving as the primary motivation behind the present study.

Moreover, the rapid developments in new technologies, the expansion of artificial intelligence applications, the growing complexity of cybercrimes, the diversification of digital platforms, and the emergence of innovative business models have posed grave challenges to the implementation and timely updating of these laws. In other words, the existing legal and regulatory frameworks may fail to fully or effectively meet the growing and complex needs of the digital economy.

In this study, using a thematic analysis approach, the structure of regulations and laws pertaining to e-commerce in Iran is evaluated, and its main strengths, weaknesses, opportunities, and fundamental challenges are identified.

The principal research question is

What challenges and opportunities exist within the current legal structure of Iran's e-commerce regulations, and to what extent can these frameworks respond to technological advancements and contemporary legal requirements?

The ultimate aim of this research is to provide scholarly and practical recommendations to enhance the efficiency and effectiveness of Iran's e-commerce legal and regulatory system.

Definition of Key Concepts and Theoretical Literature

Research in the field of electronic commerce necessitates the precise clarification and definition of concepts that form the foundation for legal and economic analysis in this domain. In this section, I provide scholarly definitions of the four main keywords and situate each within the relevant theoretical literature, with reference to credible academic sources.

Electronic Commerce (e-Commerce)

Electronic commerce (e-commerce) refers to the set of processes that, by leveraging information and communication technology (ICT), facilitates the exchange of goods, services, or information over digital platforms (Laudon & Traver, 2024).

This domain encompasses subfields such as online retail stores, payment systems, online marketplaces, and business-to-business transactions. Major advantages of e-commerce include the elimination of geographical barriers, reduction of transaction costs, and acceleration of new entrants' participation in markets (OECD, 2016). E-commerce is evolving rapidly with the emergence of technologies such as artificial intelligence and blockchain, constantly requiring updates to regulatory norms and legal frameworks (UNCTAD, 2021).

E-Commerce Laws and Regulations in Iran

The legal and regulatory framework for e-commerce in Iran is principally based on the "Electronic Commerce Act of 2003" and its supplementary regulations (Iranian E-Commerce Act, 2003). The act targets three main objectives: the legal recognition of electronic documents and contracts, the definition of rights and obligations of digital transaction parties, and the establishment of basic consumer protections. While the initial legal infrastructure offers benefits such as clarity and foundational support, significant challenges remain, including insufficient enforcement mechanisms, regulatory gaps in personal data protection, and inconsistencies with international standards (Hoseinzadeh & Ameri, 2022; Zanjirchi et al., 2020).

Scholarly literature emphasizes the necessity of ongoing reform and dynamic engagement between policymakers and technological developments to foster a competitive and secure digital ecosystem (OECD, 2023).

Thematic Analysis

Thematic analysis is a qualitative research methodology used for identifying, organizing, and interpreting patterns or meaningful themes within textual data (Braun & Clarke, 2006).

In legal and management studies related to electronic commerce, thematic analysis serves to reveal major trends, dominant concepts, and strengths and weaknesses in regulations. This approach also enables the comparison of domestic findings with successful international examples (Vaismoradi et al., 2013).

In policy studies, thematic analysis helps clarify regulatory gaps and areas in need of revision.

Digital Economy

The digital economy refers to an economic system shaped by digital technologies, big data, and internet-based networks, wherein value creation is primarily driven by data and technological innovation (Bukht & Heeks, 2018).

Key components include e-commerce infrastructures, mobile payment systems, smart networks, and big data platforms, all integral to the global digital economy. The expansion of the digital economy necessitates fundamental changes in market structures, the formation of new ecosystems, and the development of adaptive regulations (OECD, 2020; UNCTAD, 2021).

In Iran, the growth of e-commerce has significantly transformed the traditional economy, but institutionalizing competitive advantage requires regulatory reforms and the adoption of international best practices (Hoseinzadeh & Ameri, 2022).

Synthesis of Theoretical Literature

A review of the literature reveals that the four main keywords are meaningful not only independently but also in their structural interrelation.

E-commerce acts as the primary driver of the digital economy, while regulatory frameworks must adapt to the realities of data-driven innovation. Thematic analysis offers an effective tool for critically evaluating and reformulating these frameworks. Institutionalization of these concepts requires continuous engagement among policymakers, market actors, and academics to develop an innovative digital ecosystem in Iran.

Theoretical Framework

The theoretical foundations of this research are built upon two main domains: (1) theories related to electronic commerce, and (2) theories concerning regulation and legislation in the field of technology.

Theories Related to Electronic Commerce

Technology Acceptance Model (TAM)

Proposed by Davis (1989), this model examines the factors influencing users' acceptance and utilization of technology. According to TAM, two principal determinants—perceived usefulness and perceived ease of use—play a critical role in shaping individuals' attitudes toward a technology and their willingness to adopt it. In the context of e-commerce, TAM assists in understanding the drivers of consumer trust and satisfaction in online purchases.

Network Theory

This theory highlights the significance of relationships between individuals and organizations in the digital economy. It posits that the value of goods and services depends not only on their intrinsic attributes but also on their position within a network of relationships. Concerning e-commerce, network theory provides insights into the role of online platforms in creating and facilitating connections between buyers and sellers.

Transaction Cost Economics (TCE)

Introduced by Williamson (1985), TCE investigates the costs associated with exchanging goods and services. It argues that organizations strive to minimize transaction costs through various governance structures, such as contracts, hierarchies, and networks. In the realm of e-commerce, this theory clarifies the role of laws and regulations in reducing risks and transaction costs in online environments.

Theories of Regulation and Legislation in the Technology Domain

Functional Regulation Theory

Articulated by Lessig (1999), this theory asserts that regulation can be implemented through various means—including law, markets, social norms, and code. In e-commerce, this theory clarifies the multifaceted role of regulatory instruments alongside self-regulation and technological tools.

Adaptive Regulation Theory

This theory underlines the importance of flexibility and adaptability to technological changes in regulatory processes. It advocates designing laws and regulations capable of responding swiftly and effectively to technological advances. In e-commerce, adaptive regulation elucidates the challenges inherent in governing emerging technologies.

Comparative Regulatory Theory

This approach emphasizes the comparative analysis of legal frameworks governing e-commerce across countries, underscoring the necessity for regulation to be flexible and responsive to developments in the digital ecosystem (Baldwin, Cave, & Lodge, 2012).

Consumer Protection Perspective in the Digital Economy

According to this perspective, regulatory priorities should focus on consumer protection by providing legal instruments to prevent abuses and privacy violations (OECD, 2016).

Technology Governance Framework

This framework stresses that laws must be technology-driven and dynamically adjusted to the pace of innovation to prevent legal voids in the face of emerging technologies (Lessig, 1999).

These foundations elucidate why aligning regulation with technological innovation and protecting user and consumer rights are central to efficient and equitable commerce.

Literature Review

- Chen & Zhang (2021): Focusing on the necessity of comprehensive standards for electronic documents, especially with the expansion of digital signatures and cross-border transactions, this research highlights the need for updated standards corresponding to novel technological applications. This study, utilizing thematic analysis, provides a thorough and systematic review of Iran's e-commerce laws and regulations, aiming to extract the key themes underpinning this field. Compared to earlier studies that mostly engaged in comparative assessment or evaluation of the Electronic Commerce Law's effects, this work adopts an innovative analytical approach. Furthermore, taking into account ongoing technological advances and their attendant challenges, it seeks to propose practical policy recommendations commensurate with contemporary societal needs. The foregoing literature demonstrates that the success of leading countries relies on continual legislative review, clear standard setting, and robust consumer protection—an approach Iran should also prioritize.
- Asadi & Mehrabi (2021): Concentrating on the alignment of Iran's e-commerce law with international standards, this work revealed significant obstacles arising from a lack of harmony with European directives and the absence of national security protocols—factors impeding the development of digital commerce in Iran.
- Soleimani et al. (2020): Through a thematic analysis of consumer protection regulations in the virtual space, this research emphasizes that weak enforcement mechanisms have eroded public trust in Iranian e-commerce platforms.

- Greenwood et al. (2019): This comparative study examined regulatory structures for e-commerce in the European Union and the United States. The authors found that regular and ongoing legal review, along with a procedural approach to technological innovation, are the foundations of success in these jurisdictions.
- Mousavi & Shariati (2017): This study focused on the shortcomings of Iran's Electronic Commerce Law, highlighting ambiguities in the definition of electronic documents and inefficiencies in judicial processes concerning cybercrimes. The authors recommend the development of more specific regulations tailored to new digital environments.
- OECD (2016): This research analyzed policy and regulatory frameworks supporting consumer rights and market competition in global e-commerce.

It offers a model regulatory approach for adapting to ongoing digital transformation.

Research methodology

This research employs Thematic Analysis to examine and analyze Iranian e-commerce laws and regulations. The statistical population of documents includes fundamental items such as the E-Commerce Law approved in 2003, related executive regulations and bylaws, consumer protection regulations in cyberspace, documents related to cybersecurity and prevention of computer crimes, and other laws related to the field of e-commerce (Hassanpour et al., 2022).

These documents were selected due to their pivotal role in shaping and defining the general framework of legal rules and regulations governing e-commerce in Iran.

The process of thematic analysis in this research has been pursued through the following stages:

- Comprehensive Review of Documents: In this stage, all selected documents were carefully reviewed and examined to gain a complete understanding of the concepts, principles, and regulations contained therein.
- Identification of Key Propositions and Differentiation of Units of Analysis: In this stage, key propositions, phrases, and sentences containing important information relevant to the research topic were identified and extracted. Additionally, the Units of Analysis were precisely defined and differentiated.
- Extraction of Conceptual Codes and Categorization of Themes: Based on the extracted key propositions, Conceptual Codes were created. These codes are labels attached to each key proposition and indicate the main concept of that proposition. Subsequently, similar and related conceptual codes were categorized into Themes.
- Combining Similar Concepts, Reducing Redundancies, and Scientifically Defining Each Category: In this stage, similar themes were combined, and redundant and irrelevant items were removed. Then, each of the themes was accurately and scientifically defined to reduce ambiguity and interpretability.
- Compilation and Documentation of the Analysis Process and Recording of Evidence to Assess the Validity of Themes: In this stage, all stages of the analysis were accurately documented to allow for review and evaluation of the analysis process. Also, evidence and documentation related to each of the themes were recorded and maintained to assess the validity and reliability of the themes.

To ensure the validity and objectivity of the research findings, the technique of referencing valid international sources and assessing data reliability using Holsti's reliability coefficient was employed. Holsti's formula is as follows:

$$\text{Reliability} = 2M / (N1 + N2)$$

In this formula:

M: The number of agreements between two coders regarding the assignment of codes to units of analysis.

N1: The total number of units of analysis coded by the first coder.

N2: The total number of units of analysis coded by the second coder.

Reliability scores above 0.8 typically indicate an acceptable level of validity in qualitative research.

Findings

The findings of the present study are dedicated to presenting the results of thematic analysis of documents related to Iranian e-commerce laws and regulations. This research employs thematic analysis to extract and explain the key themes governing the legal framework pertaining to e-commerce in Iran. The process of thematic analysis in this study was conducted through systematic and meticulous steps. After identifying the units of analysis, conceptual codes were categorized into four main axes based on similarities and existing relationships. These four axes are: Legal Frameworks (including general principles and legal rules governing the subject), Data Protection (including measures and mechanisms related to privacy and information security), Cybercrime Prevention (including preventive measures and legal penalties for cybercrimes), and Digital Contracts (including rules and regulations governing the conclusion and execution of electronic contracts).

Finally, each of the extracted themes was defined with a scientific and precise definition to clearly explain its dimensions and characteristics

Table (1): Themes of Legal Frameworks for E-commerce

Themes as Basic Themes	Organizing Themes	Global Themes
General principles and legal framework of electronic commerce, Regulated legal relations, Description of relations between persons participating in electronic commerce, Determination of the rules related to contracts and obligations, The role of civil law in regulating these relations, Principles of legal regulation of electronic commerce, Guaranteeing judicial protection of the rights of participants, How to implement judicial protection, Examination of cases of violation of rights, Legal restrictions,	Laws and Regulations for E-Commerce	Legal Framework for E-Commerce
The need to develop coordination with Islamic law, Examination of various conditions for ensuring the reliability of information, Assessment of legal needs with regard to technological developments	Legal Needs Assessment	

Table (2): Themes of Information Protection in Electronic Exchanges

Themes as Basic Themes	Organizing Themes	Global Themes
Personal Data Protection Laws Related to the Collection, Processing and Storage of Information, Companies' Commitments to Respect Users' Privacy, Transparent Information, Requirements Related to the Full Introduction of Goods and Services, Pricing Methods and Terms of Sale, Right of Withdrawal and Conditions and Duration of the Right of Withdrawal from Electronic Contracts, Exceptions to the Right of Withdrawal,	Consumer Rights Protection	Information Protection in Electronic Exchanges
Law for the Protection of the Rights of Authors, Composers and Artists, Rights Related to Literary and Artistic Property, Protection of Trade Secrets, Illegal Acquisition of Trade Secrets, Nature and Punishment of Crime, Importance of Legal Protection,	Copyright Protection	

Table (3): Themes of Supervision, Enforcement, and Prevention of Cybercrimes

Themes as Basic Themes	Organizing Themes	Global Themes
Institutions responsible for supervising e-commerce activities, Complaint and violation investigation processes, Crimes and penalties, Types of violations and offenses in the e-commerce space, Penalties related to violations of laws and violations of consumer rights,	Crimes and Punishments of Violations	Supervision, Enforcement, and Prevention of Cybercrimes
Legal requirements for online payments and payment systems, Support for secure payments and payment security methods,	Security of Online Payment Methods	
Information Security Requirements for data encryption and financial information protection, Necessary measures against cyber-attacks and data breaches,	Cybersecurity and Crimes and Damages	
Misusing user information for fraud, Blocking access to data and demanding ransom, Impersonating users for criminal activities, Unauthorized access to personal and financial information, Altering or creating fraudulent transactions for profit,	Cybercrimes	

Table (4): Themes of Contract Conclusion in E-commerce

Themes as Basic Themes	Organizing Themes	Global Themes
General conditions for concluding contracts, Exceptions and laws of the Russian Federation on the recognition of contractual obligations by the parties, Terms of agreement on obligations, How to conclude a contract in electronic commerce, The process of offer and acceptance, Time and place of concluding a contract, Legal requirements and regulations governing the use of electronic documents in trade Description of the conditions and legal provisions necessary for the validity of electronic documents Indication of the impact of the agreements of the parties on the legal validity of documents Written form of a transaction concluded by exchanging electronic documents Validity and admissibility of electronic documents	Conclusion of Contracts by Electronic Document Exchange	Conclusion of Contracts in E-Commerce
Increase transaction security through strong authentication to prevent counterfeiting and fraud, Reduce costs related to printing, Archiving and sending physical documents, Speed up business processes by eliminating the need for manual signatures and paper circulation, Improve productivity and efficiency by automating various stages of document signing and approval, Easily access documents and evidence through electronic storage Quick and easy search capability,	Electronic Signature	
Reference to other electronic documents Mandatory terms in contracts Easy understanding of contract terms for customers, Providing information before concluding a contract	Contract Requirements in E-Commerce	

Holsti's formula was used to determine reliability. To assess reliability, 20% of the textual content of the documents was randomly selected and coded by two independent analysts, and the agreement rate between them was measured using Holsti's formula. The value obtained in this study was 85%, which indicates high coding reliability and the generalizability of the results. Validity was also supported through the development of transparent criteria for classifying themes, continuous reference to international commercial law resources, review of the accuracy of inferences by independent experts, and reference to legal articles and objective evidence.

Conclusion

The results indicate that Iran's Electronic Commerce Law, as a fundamental step towards regulating digital economic relations, plays a significant role in the development of this field. However, the emergence of new technologies, the expansion of artificial intelligence applications, the development of data-driven platforms, and smart contracts have presented existing laws with new challenges (Taghizadeh, 2020). Among the strengths of this legal framework is its emphasis on the validity of digital signatures and the facilitation of remote transactions. Nevertheless, regulations regarding the activity of digital platforms, the use of artificial intelligence in commerce, the protection of copyright in the online environment, and the method of digital authentication are still incomplete and ambiguous. Currently, there are gaps in determining the responsibility of platform operators, regulations concerning data ownership, ensuring fair competition in the digital space, and compliance with international requirements (Emami et al., 2021). Based on findings in Iranian legal documents, the protection of users' personal data is enshrined as a fundamental principle. However, sufficient operational transparency and specialized oversight mechanisms are lacking (Hassanpour et al., 2022). Furthermore, the responsibility of service providers and platforms in protecting consumer rights, ensuring refunds, providing transparent terms of service, and resolving online disputes suffers from regulatory fragmentation and weak enforcement. The rise in phishing crimes, the dissemination of fake data, and the absence of a comprehensive database of violations have exacerbated the relative weakness in this area. Copyright and intellectual property rights in the digital space are also not guaranteed due to the lack of systems to combat digital content theft (Safari, 2019).

Moreover, overarching and extensive oversight primarily focuses on the application of criminal sanctions. In contrast, the absence of a single, specialized body for assessing business licenses, resolving disputes, and addressing user complaints is clearly felt (Emami et al., 2021). Insufficient coordination between the judicial system, cyber police, and regulatory bodies leads to duplication of effort or uncertainty. Cyber security regulations in the area of online payments are mostly based on general and non-detailed principles. Clear standards and specialized institutions for preventing and combating cyber-attacks are lacking, and the routing of user complaints and the pursuit of cyber-crimes, assigning matters to judicial authorities without online and specialized mechanisms, has slowed down the process of transparency and handling (Hassanpour et al., 2022). Based on the findings, although the validity of electronic signatures and the capacity to conclude digital contracts are foreseen in law, little success has been achieved in practice in implementing a comprehensive and valid digital signature system at the national level (Taghizadeh, 2020).

The lack of a national standard for valid electronic documents creates doubt about the legal validity of contracts and provides an opportunity for offenders to abuse the system. Restrictions on the possibility of citing and legally pursuing digital contracts undermine trust-building and the development of e-commerce.

In conclusion, a summary of the thematic analysis and its evaluation reveals:

- While Iran's legal structure has created a suitable foundation for guiding e-commerce, it lags significantly behind technological developments, the emergence of platform ecosystems, and the capabilities of artificial intelligence.
- Lack of coordination among executive and specialized agencies, serious deficiencies in the supervisory system and regulatory transparency, have increased the vulnerability of consumer rights and the business environment (Safari, 2019).

- Implementation of international standards, development of technical infrastructure, and legal updates in line with rapid technological changes are vital requirements for the future of the digital industry and business competitiveness.
- Legislative weakness in providing adequate consumer protection, managing cybercrimes, and the absence of trusted digital documents have created fundamental challenges for strengthening this sector.

Scientific and Strategic Recommendations

1. Regular Regulatory Updates: It is necessary to update key regulations with a comprehensive view and based on continuous monitoring of new technologies (artificial intelligence, big data, blockchain) to enhance the capacity to deal with new commercial risks and opportunities.
2. Development of Specialized Supervisory Bodies: Establishing a single, specialized body for licensing, online dispute resolution, handling cybercrimes, developing security standards, and practical consumer protection is essential.
3. Promotion of Education and Legal Literacy: Holding targeted training courses on e-commerce laws, increasing legal awareness among market participants, and educating users about cybercrimes and data security are recommended.
4. Convergence with International Standards: Cooperation and alignment of national regulations with global standards, including GDPR, UNCITRAL guidelines, and EU regulations, will enhance convergence, facilitate cross-border trade, and strengthen stakeholder trust.
5. Ensuring the Validity of Digital Documents and Contracts: Accelerating the development of national standards for electronic signatures and digital documents with judicial enforceability and admissibility will help reduce disputes and build trust in electronic transactions (Taghizadeh, 2020).
6. Creation of Transparent Databases: Establishing a database of contracts, violations, secure payment infrastructures, and statistics on e-commerce-related crimes will increase supervisory efficiency and risk analysis capabilities.

These measures will contribute to enhancing security, increasing public trust, and sustainable growth of Iran's e-commerce.

Policy Recommendations

- Continuously review and update the Electronic Commerce Law by drawing on contemporary global regulations, especially regarding data protection and cybersecurity.
- Develop supplementary regulations for online platforms, data intermediaries, and cryptocurrencies, employing a comparative regulatory approach.
- Establish independent regulatory bodies and increase public and specialized education in the field of e-commerce law.

Research limitations

1. Limited access to some important documents and internal executive directives, especially up-to-date documentation related to new technological developments.
2. Limitations in the full generalizability of findings due to a focus on national laws and a lack of extensive comparative analysis with the legal structures of developed countries.
3. The continuous dynamism of digital technologies, which causes the validity of some inferences to decrease over time.
4. Challenges related to the interpretation and summarization of extracted themes, which depend on the analyst's judgment and can lead to bias.

Authors' Contributions

Authors contributed equally to this article.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

We would like to express our gratitude to all individuals helped us to do the project.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support. Ethical Considerations In this research, ethical standards including obtaining informed consent, ensuring privacy and confidentiality were observed.

References

1. Asadi, S., Mehrabi, M. (2000). Harmonization of Iranian and European Union E-Commerce Regulations. *Economic Studies*, 20(1), 43-59.
2. Baldwin, R., Cave, M., & Lodge, M. (2012). *Understanding Regulation: Theory, Strategy, and Practice*. Oxford University Press.
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
4. Bukht, R., & Heeks, R. (2018). Defining, conceptualising and measuring the digital economy. *Information Technology for Development*, 24(1), 13-43.
5. Chen, Y., & Zhang, L. (2021). Digital Signature Standards and Cross-border E-commerce. *International Journal of Law and Information Technology*, 29(3), 175-194.
6. Emami, M., Abdi, S., & Rezaei, H. (2021). Legal Analysis of Iran's E-commerce System. *Journal of Legal Studies*, 15(2), 120-145.
7. European Parliament and Council. (2000). Directive 2000/31/EC on electronic commerce (E-Commerce Directive). *Official Journal of the European Communities*.
8. European Parliament and Council. (2016). Regulation (EU) 2016/679 (General Data Protection Regulation). *Official Journal of the European Union*.
9. Greenwood, D., Wattal, S., & Sharda, R. (2019). Regulation of E-commerce: Comparative Perspective. *Journal of Business Law*, 98(1), 67-89.
10. Hassanpour, N., et al. (2022). Information Security in E-commerce: Regulatory Review and Challenges. *Digital Economy Journal*, 3(1), 65-83.
11. Hoseinzadeh, S. M., & Ameri, M. (2022). Legal and regulatory challenges facing e-commerce in Iran: Comparative and analytical study. *Journal of Law & Technology*, 12(2), 45-69.
12. Hosseini, F. (2019). *A Comparative Analysis of Iranian E-Commerce Laws*. Tehran: *Journal of Technology Law*.
13. Iranian E-Commerce Act, 2003
14. Laudon, K. C., & Traver, C. G. (2024). *E-commerce: business. technology. society*. Pearson.
15. Lessig, L. (1999). *Code and Other Laws of Cyberspace*. Basic Books.
16. Mousavi, M., Shariati, N. (2017). Weaknesses and Legal Challenges of E-Commerce in Iran. *Journal of Legal Studies*, 15(2), 113-132.
17. OECD. (2016). *Consumer Protection in E-commerce*. OECD Publishing.
18. OECD. (2020). *OECD Digital Economy Outlook 2020*. OECD Publishing.
19. OECD. (2023). *Regulatory Approaches to the Platform Economy*. OECD Publishing.
20. Safari, A. (2019). Consumer Protection in E-commerce. *Journal of Modern Technology Law*, 7(3), 225-243.
21. Soleimani, S., et al. (2019). Consumer Protection in Iranian Cyberspace. *Economic Policy Quarterly*, 12(4), 65-84.
22. Taghizadeh, S. (2020). Legal Challenges and Opportunities for Electronic Contracts in Iran. *Trade and Law Review*, 4(2), 90-108.

23. UNCTAD. (2021). Digital Economy Report 2021: Cross-border data flows and development. United Nations.
24. Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing & Health Sciences*, 15(3), 398-405.
25. Zanjirchi, S. M., Hajikhani, A., & Eskandarpour, B. (2020). Barriers to Electronic Commerce Law Enforcement in Iran. *Iranian Economic Review*, 24(4), 1021-1042.