



Legal Pathology of E-Commerce in Iranian Law

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Abstract

The convergence of computers, the internet and audio-visual communication is a prime example of how the quick development of information and communication technology has brought about revolutionary developments in the electronic and digital domains. This has significant positive and negative ramifications, especially for developing nations. The emergence of new difficulties in the field of intellectual property rights has created a situation where the e-commerce law can be exploited and used to the benefit of right holders. This study employs a descriptive-analytical methodology to investigate the legal pathology of e-commerce under Iranian law. By analyzing factors including e-commerce barriers, regulatory implications and commercial inefficiencies, the study reveals their important impact. The results highlight how, in terms of Iranian law, e-commerce is among the fastest and most effective business practices worldwide, promoting speedy and safe transactions. Information and communication technology has advanced significantly over the last few decades, changing people's lives and opening up new commercial and consumer options. E-commerce has become a vital part of people's lives, enabling transactions in a variety of industries. The explosion of e-commerce around the world has changed customer behavior in addition to retail and logistics. The goal of the article is to assess the current state of affairs and pinpoint deficiencies by exploring the legal analysis and pathophysiology of Iran's e-commerce legislation. In order to answer its central questions, this study takes a descriptive-analytical approach and uses data analysis. Data is collected from a variety of sources, such as books, papers and library resources, as well as interviews with professionals in the field of commercial law. Thematic analysis and coding are applied to the data, extracting and classifying concepts according to their similarities and differences. Examining the legal aspects of e-commerce in Iran reveals its complex character under Iranian legal frameworks. The report emphasizes how important e-commerce is to promoting effective domestic and international business operations. Nevertheless, the study points out flaws in the current legal system, such as inconsistencies in the title and content of the legislation, ambiguity in the timing of signing electronic contracts, and contradictions in insignificant articles. A number of laws and rules, such as the Electronic Commerce Law, policies and extensive development projects, control e-commerce in Iran. The study emphasizes how important these legal bases are for creating the e-commerce infrastructure, educating the public, creating an e-commerce culture, and advancing fair competition by getting rid of barriers that discriminate against businesses. In Iranian law, the evidentiary value of electronic trade is assessed from the perspective of the functioning nature of the legal system. According to the research, electronic evidence that is provided in the form of data messages fulfills all legal requirements and is comparable to traditional writing. The study highlights the significance of maintaining the original function of referenced documents and tackles issues of the validity of electronic documents. The complex legal environment surrounding e-commerce in the Islamic Republic of Iran is clarified by this research. The report highlights the necessity for ongoing legal adaptation to the changing e-commerce ecosystem while acknowledging the revolutionary influence of technology on business. The study recommends that current regulations be reviewed and modified to better meet the needs of modern society and create a favorable climate for the expansion of e-commerce in the nation.

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Key Words

E-commerce law, electronic communication, legal pathology, Iranian law

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INTRODUCTION

Developments in information and communication technology in the past decades have significantly changed life and provided many opportunities for consumers and customers. Now, e-commerce has become an indispensable part of people's daily lives. This network has provided food, clothing, travel, entertainment, higher education, personal services, and other human needs.^(Li^[44])

E-commerce is expanding rapidly all over the world. In today's digital world, the growth of e-commerce around the world has brought enormous changes to our shopping habits, not just in the retail and logistics industries but in general. (Leung^[42])

Today's economy has seen huge changes thanks to the growth and development of information technology. The effort to do business has led to massive changes in the global arena, which are called electronic commerce. In such a process, exchanges and transactions between individuals and large and small companies take place digitally and there is no need for the physical presence of individuals or spending on unnecessary expenses. Global developments in the field of the Internet and global spreadsheets have caused the distance between goods sellers, service providers and consumers to be removed and business operations can be carried out in the shortest possible time.

Contrary to global practice in the fields of information technology and electronic commerce, the inefficiency of the country's banking system has led to the dissatisfaction of people and industrial and commercial enterprises. The slow speed of banking operations, the very low variety of services provided, the boring rules and procedures and the need to go to branches to perform various banking operations are all issues that the country's banking system is currently suffering from.

The purpose of writing this article is to review, analyze and examine the legal pathology of e-commerce laws in order to evaluate the current situation and identify its defects. This article identifies the various defects and problems of the existing law and also reveals that this law is poorly drafted in terms of substance and form. The complete mismatch of the title of the law with its content, the contradiction between the important articles of the law, the redundancy of some provisions and the vagueness of the time for concluding electronic contracts are some of the major problems of this law.

For example, Articles 6, 7 and 8 of the Electronic Commerce Act specify that where writing, signing, or presenting an original document is required by law, the message data must, wherever applicable, be equivalent to such legal requirements.

In these articles, the word "law" is used in a general sense, which can include all laws and is not limited to business laws. However, Article 6 of the Electronic Commerce Law has excluded some cases from the scope of the principle of equality of message and written data, one of which is immovable property ownership documents. Since these documents are considered civil documents, it is clear that the scope of the e-commerce law and its provisions, as well as the principle of equality of message and written data, covers all reasons and is not limited to commercial matters.

Otherwise, it is not necessary to exclude ownership documents of immovable property (which are part of civil documents) from the general principle of data equality of message and writing because, under such an assumption, these documents would automatically be outside the scope of the law. In order to achieve the goals of this article, the formal problems of the law, including the problems related to the way of writing and translating the texts and the omission of some words, have been discussed, and finally, in order to improve the provisions of this law, suggestions have been made to solve the problems. And the adjustment and modification of some regulations have been emphasized.

Research Questions:

- What are the legal features of e-commerce in Iran?
- What are the dimensions of legal inefficiency in Iran's e-commerce?

MATERIALS AND METHODS

In conducting this research, data analysis was needed to answer the questions. Therefore, we chose the qualitative-exploratory research method. First, to collect the required data, library resources, books, articles and internet sites have been used. The tools for collecting information in this research are books and information sources. Then, experts in the field of commercial law were interviewed and the analytical information needed in the interview was analyzed by coding and thematic analysis.

In data analysis, concepts were extracted from all the data based on the principles and methods of working in the basic theory in the form of open coding. In the next step, axial coding was done, based on which classification work was done. In this way, concepts that are close to each other, based on similarities, were placed in the same class of concepts and at the same time, based on the differences between the codes, different concepts were created and categories were defined by establishing a relationship between them.

As can be seen, in the axial coding stage, the process of creating concepts and categories takes place. Finally, the researcher was able to ensure the validity of the obtained data by re-examining the obtained results with the help of the participants themselves in order to ensure the accuracy of his findings. Open, central and selective coding steps are described below.

First Step: Open Coding: In this article, we use the foundation's qualitative data research method. In this method, open coding is one of the first stages of data analysis, in which we identify important and meaningful concepts and themes from interview, observation, or document data and give them names or codes. The purpose of open coding is to distill and summarize the mass of information into concepts and categories that are related to the research questions. Open coding, or real coding, is conceptualization at the first level of abstraction and requires data analysis in order to extract a set of categories and their characteristics. This work is done with the largest possible number of categories and without a set of preconceived coding codes (Danaei Fard^[5]). Data is broken down to its smallest unit. By using the open coding system, it reviews the data line by line, identifies its processes and codes each sentence. The researcher tries to recognize the maximum possible codes to make sure that he has checked the information (Adib Haj Bagheri^[3]). At this stage, the researcher, in order to perform open coding, by reviewing library sources and interviewing experts in the field of e-commerce law and then extracting their main sentences, recorded the similar and meaningful components of the topics in the form of codes and for each of the main codes, Axis chose a code.

The Article's Topic Suggests that E-commerce-related Coding and its Rights Encompass the Following:

- Coding to create and send electronic message data, including email, SMS and fax, involves coding. This coding must comply with international standards and use encryption and digital signature methods to ensure message security and data validity.
- Coding to create and send electronic documents, such as invoices, contracts, receipts, etc. This coding must be compatible with the rules and regulations related to electronic documents in the field of electronic commerce law and use interchangeable and verifiable formats for electronic documents.
- Coding to create and send electronic payments, such as credit cards, e-wallets, bitcoin, etc. We

must coordinate this coding with banking and financial systems, utilizing methods for electronic transaction authentication and verification.

The Second Stage is Axial Coding for Category

Extraction: After open coding, a series of procedures known as axial coding establish links between categories, allowing information to connect in new ways. We do this work using a paradigm (a model with an example), which includes the conditions, content, and strategies of reciprocal action and its consequences (Strauss and Corbin^[21]).

In axial coding, the formed classes are developed, and each class will include sub-categories and the relationship between each of them will be determined. The central coding stage necessitates constant data comparison. The researcher compares the coded data with each other, makes appropriate clusters and places similar codes in the same class. At this stage, the researcher merges the primary codes and categories that he formed in open coding with similar ones, determines the relationship between subclasses and forms classes with new concepts (Papzen^[16]).

Open coding divides data into concepts and categories, while axial coding establishes a connection between a category and its subcategories. (DanaeiFard^[5])

Selective Coding Stage: The central point of the theory serves as the foundation for the central category, which connects the various works within the theory together. Thus, during the selective coding phase, we develop and deliberate on a theory (Kalki^[13]).

The process of selective coding connects the classes to the central classes, forming the theory (Papzen^[16]). Selective coding consists of combining the classes formed for the initial formation of the research framework. During this research phase, we combine the previously coded sentences once more to understand their relationships. (Francisa^[36]) and a category that is able to connect other classes or concepts to each other are identified. Then a diagram related to them is drawn, which should include the overlap of the topics in order to form the conceptual framework of the research (Papzen^[16]). Due to the rapid growth of the Internet since 1990 and the huge revolution in the communication industry, as well as the widespread use of this new technology by businesses, the need to pay attention and legislate on how to use and detect the crimes caused by it became evident to the governments. Some factors that affect businesses in this field (e-commerce) and their consequences have been investigated in this research. Among the crimes in the field of e-commerce is the violation of business trademarks, which is included in

the e-commerce law. In this field of intellectual property research, legal issues and the consequences of violating this law for businesses have been investigated.

Theoretical:

Definition of E-commerce: E-commerce carries out business activities using computer communication networks, especially the Internet. This type of business is described as a paperless process. By using e-commerce, the exchange of purchase and sale information, as well as information related to the transportation of goods, is done with the least effort and speed. This approach makes it possible for companies to communicate with each other without location restrictions and their communication is easier and faster.

In other words, e-commerce can be described as a method for the electronic exchange of information and conducting business transactions by creating an electronic bridge between business centers. This type of business deals with different amounts of information, which are not necessarily the same and also occur between ordinary people. In its early inception, e-commerce did not go beyond simple business information and anyone could advertise their products through web pages on the Internet. Published statistics from 522 companies show that about 34% of them used this method to advertise their products in 1995 and about 12% in 1991. By the end of 2012, financial transactions worth more than 222 billion dollars were made by hundreds of business sites on the Internet. (Hashmi^[9])

Today's electronic commerce was formed on the basis of EDI in the 1960s. In fact, EDI (Electronic Data Interchange) can be considered the father of today's electronic commerce.

In more precise terms, electronic commerce is buying, selling and exchanging goods, services and information through computer networks, including the Internet. This type of business is based on the processing and electronic transmission of data, including text, sound and image. E-commerce means buying and selling goods, services and information through computer networks such as the Internet (Turban^[23]).

The Concept of E-commerce: Today's economy has seen huge changes thanks to the growth and development of information technology. The effort to do business has led to massive changes in the global arena, which are called electronic commerce. In such a process, exchanges and transactions between individuals and large and small legal companies take place digitally and there is no need for the physical

presence of individuals and the expenditure of many unnecessary expenses.

Global developments in the field of the Internet and global spreadsheets have caused the distance between the seller of goods and services and the consumer to be removed and business operations can be carried out in the shortest possible time. Contrary to global practice in the fields of information technology and electronic commerce, the inefficiency of the country's banking system has led to the dissatisfaction of people and industrial and commercial enterprises. The low speed of banking operations, the very low variety of services provided, the boring rules and procedures and the need to go to branches to perform various banking operations are all the problems that the country's banking system is currently suffering from.

According to the definition of the European Commission, electronic commerce is based on the electronic processing and transmission of data, including text, sound and image. E-commerce is business and purposeful activities with technical data that are done with the help of electronic devices.

Another definition of electronic commerce is the trade of goods and services using telecommunications and telecommunication-based tools. Others have used the term e-commerce for this type of business. Also, some other terms have also referred to the use of electronic devices for the provision and distribution of goods, electronic shopping and electronic marketing. (Zargar^[25]).

Background of E-commerce Law: Unification of rights has always been one of the goals and ideals of jurists. Since the 20th century, a large number of institutions and organizations have started their activities in the field of creating uniform and coordinated regulations at the international level. Undoubtedly, the origin of all of them should be considered the United Nations Commission on International Trade Laws (UNCITRAL). This commission was established in 1966 based on UN General Assembly Resolution 2205 and one of its goals is to facilitate the regulation of international trade processes. In addition to approving important conventions such as the Vienna 1980 and New York International 1988 promissory notes, this commission finalized the electronic commerce model law in 1996. The movement of the model law is actually a proposed law and governments can try to approve it through their calendar channels while maintaining their independence, which will open their hands to applying changes. But because the shape and structure of the model law usually remain intact, it is a big step towards the unification of regulations. Its actions are justified,

its specific method of approval is consensus and it is highly acceptable with the government's vote (Junidi^[12] p. 19).

Model laws are Preferable to Conventions for the Following Reasons:

- In the decision-making process of approving these documents, their arrangement in the form of a treaty or commission is very difficult and time-consuming due to the need for the agreement of all countries.
- The political, social and cultural independence of countries is better preserved in model laws.
- The compliance of countries with the model law is greater due to the authority to change and approve, although countries should avoid radical changes. (Zarei^[24])

The United Nations Commission on International Trade Laws (UNCITRAL), which covers issues such as electronic signatures, the legal value of electronic correspondence, etc., has been adopted as a national law in more than 19 countries around the world. Iran's e-commerce law was also published in the official gazette on 31/01/2004, based on the model law of UNCITRAL, after a period of disagreement between the Islamic Council and the Guardian Council. Therefore, when interpreting the domestic law, the model law can also be used.

It should be noted that the use of electronic technologies in doing business has a relatively long history. In fact, the need for e-commerce originates from the demand of the private and public sectors to benefit from information technology in order to increase customer satisfaction and improve the internal coordination of organizations. (Bachta^[29])

The Legal Basics of E-commerce in Iran: E-commerce is also included in the laws of the Islamic Republic of Iran. In clauses a and b of Article 116 of the third development program approved in 2000, the Ministry of Commerce and all ministries and production organizations related to export were required to set up an information center based on the country's comprehensive business information network plan. In the following years, the following laws and regulations were approved in order to provide the main infrastructure of e-commerce:

- Electronic commerce law approved by the Islamic Council.
- E-commerce policy of the Islamic Republic of Iran.

Prohibitions on the consumer's right of withdrawal, the comprehensive program for the development of e-commerce, the regulations for

expanding the use of electronic money services, and the regulations for organizing the activities of Internet information bases, approved by the Council of Ministers.

In a meeting held on May 19, 2002, the Council of Ministers approved the e-commerce policy of the Islamic Republic of Iran in 16 articles, according to the proposal of the Secretariat of the Supreme Information Council and citing Article 138 of the Constitution of the Islamic Republic of Iran. (Hafazi^[8])

In Article 1 of this resolution, it is mentioned as a goal, which is announced by the government of the Islamic Republic of Iran based on specific principles and policies in order to widely use e-commerce in the world and its undeniable role in maintaining, strengthening and developing the country's competitive position.

Article 2 of this approval explains the principles for achieving the stated goals

One. providing the basic infrastructure and legal and executive fields required for the use of e-commerce.,

Two. Developing education and promoting the culture of using e-commerce.

Three. supporting the development of non-governmental sector activities, preventing monopolies and creating competition;

Four. removing any discriminatory restrictions on electronic commerce;

Five. Expanding the use of the Internet network to conduct electronic business in the country and taking necessary measures for the content health of the aforementioned network.

Article 3: Realization of electronic government, creation of electronic service centers and creation of an internet domain with an ir suffix approved by the Supreme Administrative Council.

It should also be noted that the legal infrastructure includes intellectual property laws, computer crime laws, digital signature laws, the national authentication system, secure electronic exchange centers, internet courts, etc.

Evidential value of E-commerce in the legal System:

E-commerce is one of the new and effective phenomena in the information age, which provides the possibility of conducting business transactions without time and place restrictions using information and communication technologies. E-commerce brings many benefits to businesses, consumers, governments and communities. Among these benefits, we can mention reducing costs, increasing speed and efficiency, improving quality and satisfaction, expanding markets, creating healthy competition, developing employment, realizing a knowledge-based economy and promoting digital culture.

But e-commerce, as a new and complex activity, also contains many challenges. Among these challenges, we can mention technical, security, social, cultural, economic, political and legal issues. These challenges require serious attention from the stakeholders in e-commerce so that they can benefit from the opportunities of this technology and reduce its risks. One of the most important challenges of e-commerce is the legal one. This challenge means the absence or lack of appropriate laws and regulations to regulate and support e-commerce. This challenge causes the trust, security, rights and interests of e-commerce stakeholders to be jeopardized and many disputes and ambiguities arise in this field.

For example, regarding the evidentiary value of electronic documents, which is one of the main tools of electronic commerce, there are no clear and uniform rules and criteria and this issue can lead to the denial, forgery, misuse and invalidity of these documents. Investigating the evidentiary value of electronic documents in Iran's legal system is of particular importance because electronic documents, as one of the most important communication and proof tools in electronic commerce, play a significant role in establishing and stabilizing the trust and security of the beneficiaries of this activity. On the other hand, Iran's legal system, as a legal system based on counted evidence, does not have enough compatibility with the nature and characteristics of electronic documents that are in the form of message data and needs to be changed and adapted to this new phenomenon. Therefore, this research tries to analyze and evaluate the probative value of electronic documents in Iran's legal system by considering the concepts, types, functions, and problems of electronic documents, reviewing domestic and international laws and procedures related to them and finding solutions to improve and improve this value.

Considering that the proof evaluation system in Iranian law is a legal system and the proofs are enumerated in the law, it is necessary to check in which of the mentioned formats the electronic proof can be placed. First, we emphasize that law is inherently functional., that is, it does not take into account the scope, format and form of rights and the purpose of introducing legal conditions and requirements is to ensure its functions. (Khudri^[14])

Therefore, if the law requires the existence of writing or signature, the goal is to ensure their functions. As stated earlier, electronic reasons are in the form of message data and data is a conceptual message that includes any symbol of an information event or concept, whether verbal or written., in other words, message data means information. All can be processed by computer systems and programs. (Jaafari^[11] 39-41)

On the other hand, we know that message data is capable of providing all the functions of writing., the only function that electronic evidence may lack is the ability to access and refer again, so if this capability is also provided, according to the functionality of the legal system, message data in the traditional evidence system is equivalent to writing. (Fijan and Hosseini^[7], p. 160).

Some experts believe that even though an electronic signature is called a signature, it is in the same category as a seal. Because this signature is actually a series of mathematical formulas and technical methods produced by a third party and assigned to individuals and since individuals use them only as tools and in the form they are, in legal analysis, this signature is classified as a seal. (Fijan and Hosseini^[7], p. 160).

Electronic signatures^[2] are the functional equivalent of handwritten signatures. They also identify other users to verify the parties' intent to commit to the content of the signed contract, i.e., the person's intent to acknowledge authorship. That is, to identify the person, to ensure the involvement of that person in the act of signing, to relate the person to the content of the document, depending on the nature of the document, they also identify other users to confirm the intention of the parties to adhere to the content of the signed contract, that is, the intention of the person to confirm authorship.

Despite the aforementioned argument, which shows the admissibility of electronic evidence, the Civil Procedure Advisory Commission of the Legal Department in 1344 made a mistake regarding the ability to cite the audio recording, did not consider it admissible and commented as follows:

The grounds for proving a claim as described in the third volume of the civil law are confession, document, testimony, emirates and oath and in the tenth chapter of the third chapter of the procedure of public and revolutionary courts in civil affairs, the manner of dealing with the said grounds is also provided and the audio tape, which can be imitated but is not a reliable device and has no title in Iran's laws, cannot be cited as evidence in proving the lawsuit under the current situation. (Zaheri^[26]).

Another issue is the authenticity of the document. According to Article 96 of the Law of Procedure of Public Courts and the Revolution in Civil Affairs, the parties are obliged to present the principles of their documents to the court. Otherwise, if it is normal and is denied and doubted by the other party, it will be removed from their reasons. This requirement also applies to electronic documents. But due to the fact that the realization of the concept of original in its traditional sense does not exist in the case of electronic documents, all electronic copies are considered copies

in the traditional sense and even a facsimile copy that has a tangible and material appearance is also considered a copy and does not have the validity of the original document. (Shams^[19] p. 84) How should the sentence in the mentioned article be implemented?

In this regard, ensuring the original function of the citing document makes it unnecessary to provide the original copy. Therefore, considering that the function of providing the original copy is to ensure the integrity of the document, if the citation can prove the integrity of the document with a method such as a digital signature, the said electronic document is considered to be the original and the citation does not need to submit the original copy to the court. and cannot be rejected on the pretext of not presenting the essence of his claim. (Fijan and Hosseini^[7], p. 161).

Therefore, if one of the parties in a dispute presents a document that refers to the biometric signature of the other party and this signature is special and unique, he is obliged to prove the attribution of this document to the person who issued it. But if the referenced document is only through the assignment of this message to the person who issued it and the e-mail address of this person is mentioned, considering that the password is only in the possession of its owner, sending the message through this e-mail address can should be considered as evidence of the attribution of the document to this person, but considering that the computer can easily discover a password, this cannot be a decisive proof of the authenticity of the document and in this case, the judge can refer the said document to accept the title of a judicial emir, if the signature of the document is of other types of simple signatures such as a personal identification number or the image of a hand signature, the same rule prevails (Abdollahi^[16] 116).

The Criminal Loophole in the E-commerce Law: The e-commerce law has not criminalized all risky behaviors in the e-commerce process and in areas such as advertising of low-quality goods, misuse of electronic facilities to hide the facts related to the origin of goods and services, unrestricted advertising and moral burden, advertising There is a legal loophole for a legal loophole for violence, sectarianism, extravagance, etc. Regarding the absolute or limited nature of the crime, even though some of these crimes, such as endangering people's health, may have objective effects and results, the legislator has determined punishments only for the absolute crime, and between the assumption of the absolute or limited nature of the crime and entry He did not differentiate between the damage or the lack of damage to people's health and considered the same punishment for both assumptions. In terms of whether crimes against advertising rules are intentional or unintentional, some

unintentional behavior in the advertising process carries the same risks as intentional behavior and the supplier's negligence should not be ignored. In spite of this, from the spiritual point of view, the legislator did not refer to the realization of the crime unintentionally and according to the famous legal interpretation of the principle of intentionality of crimes, in the absence of a declaration that unintentional behavior is a crime, the only assumption is that the crime is intentional. In terms of executive guarantee, the punishment for crimes against the rules of advertising-except for sending unwanted ads-is the fifth-degree ta'zir, in which amicable mechanisms such as judicial immunity and postponement of the verdict are not possible. The expansion of e-commerce requires that both the buyer and the supplier are able to set up an online store and e-commerce with confidence and a low risk of being prosecuted. In conditions where the approach of criminalization and criminal exposure increases the cost of business for the supplier and does not provide effective support for the consumer, it is suggested that other solutions be adopted in this field based on the three principles of technical prevention. trade union supervision and empowering and supporting the consumer.

Weaknesses of the System of Dealing with Illegal Competition in the E-commerce law and ways to fix Them:

Shortcomings in the Rules: With a brief review of the Electronic Commerce Law, it is clear that the legislator did not pay enough attention to the standards related to competition rights from the point of view of issues related to trade, goods sellers, suppliers of studies and electronic service providers and only to a part of these rights that are consumer rights. The doer is concerned and has paid attention. Of course, the approval of this law as the first step in the establishment of regulations related to electronic commerce and the realization of national regulations in this regard is beneficial from the point of view of motivating and encouraging international trade and countries with technology to conduct electronic transactions and cover the legal gap in this field. Gives. However, now the necessity of revising and amending the said law in a way to neutralize the destructive effects of electronic commerce from the point of view of competition rights is fully felt. (AbassiDakani^[1]) Along with this law, the law amending the articles of the Fourth Development Plan Law, which mainly deals with aspects of competition in the free market, such as the formation of cartels and the abuse of a superior position, has been approved. Although this law does not directly monitor the rules of insidious competition in its traditional sense, it can be a way forward in some cases. Despite being new, the Law of Patents, Industrial

Designs, and Trademarks also has some ambiguities, and the need or not to register a trademark to protect them is one of the most important of these ambiguities. In this context, the judicial procedure has not had the opportunity to interpret and provide a specific answer. In the Internet environment, considering that these names and signs are produced at a faster rate, the need to solve this problem is felt more. In relation to the protection of domains as well as the prevention of misuse of domain registration, no specific law has been approved and only the mentioned policy, which the applicant is required to accept as an implicit condition when registering a new domain, is enforceable. This issue, to what extent the provisions of the Paris Convention regarding unfair competition are a way forward in this field, is a question that can only be answered by lawsuits and judicial procedure. Although there are valid arguments for the acceptance and application of this convention, it seems necessary to pass a comprehensive law in this field and state the examples of insidious competition in detail in a way that suits the requirements of the developed world.

Defects in the Law Enforcement Mechanism: Although the existing laws are associated with shortcomings, they have a lot of capacity to resolve many disputes and protect the rights of businesses and companies for healthy competition. As it was mentioned earlier, the provisions of the Paris Convention in the fight against unfair competition are among the most important of these laws, the generality of which can be considered. However, the lack of formation of the judicial procedure with the guarantee of executions in this system and relying on the guarantee of criminal executions based on the e-commerce law have not been able to develop the guarantee of civil executions as an effective element in the protection of intellectual property rights. In addition, another problem in the current system is the use of judicial and criminal solutions as the first and last resort to resolve these disputes. Meanwhile, alternative dispute resolution systems such as arbitration and conciliation and administrative mechanisms can be more efficient in this field due to their speed and expertise. The use of these mechanisms has been experienced in some countries, such as France and has brought successful results.

Currently, the process of providing evidence and filing documents in other judicial centers in Iran is done in a traditional way based on paper evidence. In other words, the cited evidence is presented in paper form in court and the case records are finally recorded and archived in paper form. This traditional procedure may be challenged on electronic grounds. Although electronic reasons can be presented in printed form in

court, it is also necessary to provide and maintain electronic records of these reasons in order to use them in cases where it is necessary to evaluate the validity of the reason or in subsequent objections. Although the rules of procedure of public courts and the revolution in civil affairs have not provided for the possibility of conducting judicial operations and filing documents electronically, it seems that there are no obstacles to using this method. Articles 6 and 7 of the Electronic Commerce Law have also considered writing and electronic signatures as equivalent to manual writing and signatures.

Article 8 of the Electronic Commerce Law has determined the conditions under which, if there is any message data, it is considered the original document. This part of the law indicates that electronic filing has no legal impediment and can be substituted for paper filing. Currently, the electronic judicial filing system has been launched in the Adalat judicial complex. This system prepares electronic images of paper documents and archives them. However, because the electronic judicial system is not available at the appeal stage, paper copies of the documents are also archived for reference if needed at the appeal stage. (Abdullahi^[2], p. 118).

The space of e-commerce and electronic exchanges is a space that is immaterial and intangible and relies on distance communication and speed. For this reason, conducting proceedings in the way that exists now (i.e., with face-to-face parties in court and holding hearings in a physical location) is not compatible with the e-commerce environment. Therefore, the possibility of an electronic court should be provided online without the physical presence of the parties.

As an immaterial and intangible space, the e-commerce space emphasizes remote communication and speed. Therefore, the need to conduct electronic courts through the Internet and without the physical presence of the parties is inevitable. In Article 2 of the approval letter of the comprehensive program for the development of e-commerce, the Ministry of Justice is obliged to compile the special procedure law for e-commerce in cooperation with the judiciary and the Ministry of Commerce by the end of September 2006. This law should provide the possibility of filing legal claims in the space of information exchange, respecting the immaterial and intangible nature of the e-commerce space as well as the importance of the principle of speed in the claims related to this area. Unfortunately, this law has not been drafted yet. (Abdullahi^[2] 119).

The general perception is that electronics are easy to fake and change, electronic systems are not accurate and reliable enough and there is a possibility of errors in their output data. The opinions of judges,

lawyers and judicial officials are not outside of this general perception. Electronic evidence has recently entered the judicial system of the country and until now, the necessary information and training about its features, validity and evidential value have not been provided. Even the name of the law of electronic commerce is unknown to many judges and lawyers, which may cause electronic reasons not to be accepted in proceedings. Therefore, it is necessary to train and attract judges and expert lawyers in the judicial system, as well as experts with technical expertise in fields such as recognizing the validity of the evidence, evaluating the document, ensuring its accuracy and electronic evidence recovery methods, in order to verify the affairs. Act as the pioneer of proceedings in the technical domain of electronic evidence.

Another case in e-commerce legislation that can be mentioned is related to the field of electronic registration.

In the model law of notaries^[3], the same definition is provided for both traditional and electronic registration, and other terms follow the same pattern. For example, in the definition of authentication in paragraph 2-1, the definition of authentication in paragraph 2-2, the definition of the certificate of signature and the identity of the signer in paragraph 27, the definition of oath in paragraph 2-11 and the definition of the certificate of signature of a document (Farber^[35] 31) in paragraph 2-19, no difference between traditional and electronic registration is specified and they are all defined in the same way.

The second rule is based on the neutrality of technology during the electronic document registration process. In the model law of notary public offices, any support or negation of the technologies used in these cases was not raised and the encouragement to use a specific technology in the field of signatures or electronic registers was avoided. However, criteria for the validity of electronic registration of documents have been provided and their presence is considered one of the reasons for the validity of document registration. For example, in paragraph 14-4, the criteria for electronic records and documents are specified. The compilers of the Model Law of Notary Public Offices have turned to abandoning abandoned and irrelevant scientific methods and to more inclined methods (Nouri^[18] 120).

According to paragraph 2-2, it means that a person's identity must be verified by appearing before the notary with the testimony of witnesses, a personal oath, or his conscientious commitment. Here, authentication means proving that the identity documents presented belong to the same person who is needed to register his identity document. The performance of this act by the notary is material and

objective in any case and it requires the physical presence of the person at the notary.

The legal challenges of e-commerce can be examined from the perspective of technical, security, social, cultural, economic, political, and legal issues:

Legal Challenge: E-commerce, for its growth in the domestic and international arenas, had faced numerous legal obstacles from the very beginning, all of which could not be solved using traditional legal foundations and required new legal mechanisms. Therefore, the electronic commerce law of the Islamic Republic was approved by the legislator in 2003. Despite this, after two decades have passed since the adoption of the e-commerce law, practical and frequent practices have not yet been formed in the courts.

- According to the law on direct taxes approved in 2003, no specific chapter is dedicated to the topic of electronic commerce.
- The law that can provide complete protection for the intellectual rights of software producers has not yet been approved.
- Specific courts in the field of information technology have not yet been established in Iran's judicial system.
- Imbalance and complete adaptation of the legal system and set of laws of the leading countries in the field of information technology with Iran's legal system and environment. (Rosoulia^[17]).

On the other hand, e-commerce creates a new legal situation for buyers due to non-personal relationships. This new type of market creates challenges for national laws in the protection of consumer rights, which requires a new legal structure to effectively protect consumers. (Kirillova and Blinkov^[40]).

Consumer Protection law in Electronic Commerce:

Consumer protection plays an important role in maintaining trust and relationships between businesses and consumers. The purpose of consumer protection laws is to ensure adequate protection for consumers against misleading, fraudulent and unfair commercial conduct, to empower them with education and in case of disputes, to provide them with effective dispute resolution measures. Online transactions provide many benefits to online sellers, or, in other words, online sellers are in a relatively advantageous position compared to online buyers. Online sellers are those who have direct access to products, so they definitely have better knowledge and information about the goods and services they offer, while online buyers are those who have limited access to products in terms of information, quality, etc.

The issue of trust between online buyers and sellers is a critical factor in the development of e-commerce. Therefore, it is necessary to have consumer protection laws because laws and regulations protect e-commerce and protect consumers against unfair business practices by creating alliances among consumers to fight collectively against commercial organizations that are in the practices. Unfair commercial excesses help. In addition, an effective consumer protection law can be effective in promoting consumer confidence as well as increasing the capacity of consumers to participate more in cross-border e-commerce, transact safely and knowingly, and take advantage of opportunities. Use it now to reduce risks. OECD (2018)

Some dimensions of legal inefficiency in Iran's e-commerce are: lack of complete and unified laws to regulate and monitor this type of business, lack of coordination between national and international laws, lack of validity and enforce ability of some contracts and electronic signatures, lack of Courts and dispute resolution authorities specific to e-commerce, lack of appropriate guarantees and insurances to protect the parties to the transaction, lack of qualitative and ethical rules and standards for activists in this field, non-compliance with consumer rights and intellectual property rights, occurrence of crimes and various violations such as fraud, forgery, theft, vandalism, intrusion, hacking, etc. Lack of skilled and experienced personnel in familiarizing themselves with claims and information technology. (Rasoulzadeh and Javadi^[17])

Ambiguity in the Statement of the Legislator: The novelty and unknown types of message data, together with the type of law writing and the conflict between the articles of the Electronic Commerce Law, have added to the difficulty of knowing the nature of these evidences. Article 12 of the said law clearly defines and expresses the data message in the form and format of electronic documents and evidence. "Documents and evidence to prove a claim may be in the form of message data and no court or government office can reject the probative value of message data based on the rules of existing evidence simply because of its form and format" from this article. that electronic evidence is not considered a new type of evidence and is the only format and form available for evidence. (Aslani^[4])

Iran's e-commerce law, unlike UNCITRAL's model law and related laws in many other countries, has not clearly explained the error in sending message data. (FaiziChekab and Kalanter^[6]).

Challenges Related to Intellectual Rights: Another challenge is fighting intellectual property rights (IPR) infringements on the goods and services they sell

online. This challenge arises when an online business actor acts as an e-service provider that facilitates sellers offering their goods online. However, in the digital age, exploitation of copyrighted works is increasingly intensive, complex and multifaceted. (Ariani^[28]).

Intellectual property is a major concern for any organization that engages in business, including web-based business exchanges. The web is an unlimited site with minimal guidelines and in this way, the security of intellectual property rights (IPR) is a growing concern among most electronic organizations. Lal and Kiran^[41]

Although intellectual and commercial property rights are recognized in Iran, the durability of these regulations is not essential to protecting freedoms through Internet commercial exchanges.

Liability for Breach of Contract: Generally, a contract is an agreement with specific terms between two or more persons or entities in which a promise is made to do something in exchange for a valuable benefit known as consideration. Because contract law is at the heart of most business transactions, it is one of the three or four most important areas of law and can involve changes in circumstances and complexities.

Another challenge, in the form of liability for breach of contract, is what is agreed in the online contract, which always guarantees the instructions to be followed. In this case, providers Electronic transactions play an important role in paying attention to consumer rights.

The challenge in e-commerce is that there is no meeting of the parties regarding the purchase and sale of goods and services, so it becomes a challenge in the execution of transactions. Increasing legal problems will arise when agreeing on agreed-upon objects. (Santoso^[47])

Challenges Facing Consumer Rights: There are various challenges facing consumer rights. These challenges are a serious threat to consumers and this is because consumers do not have the necessary training for all consumer products. Consumers will continue to rely on the expertise of manufacturers or their representatives (retailers) to make decisions about products and services. Also, the new trend in business (e-commerce) faces many challenges. As a result, these challenges deprive electronic consumers of their rights to fully benefit from this process. Some of these challenges are discussed below.

Technical Challenge: In addition to legal challenges, some technical challenges also have legal consequences. Technical concerns or challenges related to technical standards and compatibility of

systems are especially related to security and confidentiality. (Shiravi and Maliki^[20])

Electronic signatures can be mentioned among the electronic technologies used in Iran's legal system. For example, electronic signatures are divided into two types: simple and secure. Simple signatures, like binary signatures, are less secure than secure ones. Despite the provision of a secure type of electronic signatures in the e-commerce law approved in 2003 in Iran, after several years, due to the lack of proper infrastructure to spread the use of digital types of secure signatures, many weaknesses have been observed in the exchange system, the effects of which are that a countless number of legal cases have appeared in the judiciary. In Iran's legal system, despite the acceptance of biometric signatures, with the passage of many years, there has been no effort to develop tools for the use of this type of signature, such as iris or retina scanning tools, which have a higher level of security than fingerprints, which is one of the fundamental flaws. Iran's legal system is considered (Sadeghi and Naser^[18])

The use of encryption technologies to secure electronic documents prevents unauthorized access and manipulation. This includes not only electronic signatures and programs for multi-layered and complex passwords and the use of generation tools, but can also include the use of invisible digital roles and biometric tools. In general, the various encryption technologies used in communications ensure their integrity, security and confidentiality. It necessarily includes electronic hearings (whether in the form of an audio or video conference) and electronic discussion and review sessions between judges. The strength and quality of the signal and communication depend on infrastructure, technical connectivity and compatibility issues. Such factors will definitely have an effect on the use of audio or video conferences when electronic hearings include detailed questioning of experts and witnesses, and also in cases where the number of parties in the hearing is more than two. (Trakman^[49]).

Security Challenge: Weak system security, reliability, standards, and some communication protocols., if it is on an e-commerce website, customers will lose their money. Hacking of sites that do not have sufficient cyber security is the most common problem in e-commerce.

Privacy is a serious issue in e-commerce, no matter what source one reviews. Similarly, Culnan (2000) argued that privacy concerns are an important reason why people do not go online and provide false information. E-commerce businesses continue to struggle with the challenge of securing product copyrights and ensuring privacy and security concerns. Large e-commerce organizations such as eBay, Amazon and Walmart are currently developing strategies to

ensure they are able to protect customer privacy (Fang^[34]).

While there are many challenges, such as security concerns and the need to differentiate themselves in a crowded market, there are also many opportunities for growth and innovation that e-commerce businesses can overcome by using new technologies and marketing strategies. and grow in the coming years (Wang^[50]).

Many authors (e.g. Grandon^[37]) have argued that security concerns prevent organizations from adopting e-business technologies. A variety of security measures exist in case companies to cover areas such as data storage and adverse management. These companies usually use basic encryption technologies and username and password verification methods.

The surveillance and data collection technologies employed by companies have commercial purposes, but they also have other side effects that threaten personal privacy, including data domain generation, data warehousing and data mining and biometrics. They will throw. Many of these technical mechanisms can lead to consumer profiles that are no longer based solely on their individual profile but transactions with a single organization, as their data is shared by multiple merchants. (Clarke^[30])

Cyber Crimes: Cybercrime is a threat to e-commerce, poses many challenges to it and has actually made internet transactions insecure and vulnerable to manipulation by people who are not parties to these transactions.

Fraudsters are taking advantage of the online nature of this innovative e-commerce to complete their illegitimate business. Therefore, the need for a more deterrent and stronger legal and regulatory regime in the field of cybercrimes in the country is felt to reduce the large volume of these crimes.

Perception of Risk in the Face of Electronic Services: Understanding how consumers perceive digitized e-services has become increasingly important. Electronic service substitution may seem unfamiliar, artificial, and inauthentic compared to traditional service processing methods. Consumers may believe that new Internet-based payment methods expose them to new potential risks of online fraud, identity theft and many other benefits. (Raghunath and Panga^[46]) Due to the nature of e-commerce, especially the processing of payments and the need to store private information, security threats such as fraud and theft are common. (Al. Asghar Jabbour^[27])

Research studies have shown that the perception of insecurity in e-commerce transactions and ICT phobia are the main barriers to the diffusion of

e-commerce among businesses and consumers. (Magembe and Shemi^[45]).

Cybersecurity poses many threats to e-commerce, including threats to e-commerce, systems, information, and individual and business risks. A threat to the system means that the target is a commercial website. A business can become a victim of viruses and malware that damage the website. (Kenneth^[34])

Economic and Political Challenges: If e-commerce continues to grow at a rapid pace in the coming decades, it could have significant impacts on the structure and performance of economies at the firm, sector, and aggregate levels. The effects of these changes are diverse and are likely to affect prices, the mix of trade, labor markets and tax revenues. Adapting policy frameworks and institutions to these changes and ensuring full use of the potential benefits of e-commerce will create challenges for structural policies.

Moreover, the large scale of structural changes is likely to be interrelated with macroeconomic policies and economic performance, which can change how policymakers interpret cyclical developments and may even affect their ability to conduct and effectively implement macroeconomic policies. (Copple^[31])

Cultural-social Challenge: Along with website design and having famous brands, trust is one of the most important obstacles in e-commerce (Suresh^[48]). Electronic trust symbols have a positive effect on creating electronic trust in consumers and increasing the credibility of medium and small companies. (Li^[43] Hu^[38]). Most cultures in developing countries do not support e-commerce and the conditions are not suitable due to a lack of trust in technology and online culture. (Efendioglu^[33]). The social and cultural characteristics of most developing countries and the associated concepts with online transactions pose a much greater challenge and act as a major barrier to the adoption and spread of e-commerce. Even though online transactions that predate e-commerce, such as catalogs and telesales, have existed in developed countries and have been used by the public for a long time (Efendioglu^[33]), such innovative systems and approaches exist in developing countries. The development is new and does not suit their culture and way of doing business.

CONCLUSION

As mentioned, a conventional definition of e-commerce is that this process deals with the exchange of goods and services using telecommunications and through telecommunication-based tools. Some of the terms

used in the field of distance commerce include this meaning and in this sense, they have referred to the term electronic commerce or e-commerce. Some other terms, such as preparing and distributing products using electronic devices, electronic shopping and electronic marketing, have used electronic devices to express this process.

In the present research, an attempt has been made to deal with the legal aspects of e-commerce in Iranian law. The interaction between business and technology is a long-standing relationship that has continued until now. In fact, technological advancements created a boom in the field of trade, and especially the construction of ships brought about this great development. This development for the first time opened the geographical borders for business, and it was possible to start businesses in other territories and add different and creative methods to them until today, when e-commerce is known as one of the most popular methods of business. The words e-commerce and electronic contracts are two of the most commonly used words in commerce today, and following the use of these words, other terms such as consumer and supplier of goods and services are used. As we know, it is much easier to access information and unauthorized use of electronic data in virtual space and at the same time, the government's policy is also towards the virtualization of transactions and business relations. Therefore, due to the fact that nowadays many relationships are carried out in the context of electronic exchanges, the need for stronger and more effective supports is felt more than ever.

Considering the year of approval of Iran's e-commerce law, it was expected that this law would open the way to solve the existing problems and provide new protections by using new methods and in accordance with the current requirements. This is while the platform for using property is one of the material world and the other is the virtual world, which requires the approval of similar laws as well as filling the gaps in the previous laws and removing legal deficiencies and defects to support intellectual creation, taking into account the aspects of It is modern that, unfortunately, despite the approval of Iran's e-commerce law, there are still shortcomings and deficiencies, and therefore the need to review these laws and approve laws that are more in line with the conditions and requirements of our current society is felt very much.

One of the weaknesses that can be felt in the field of e-commerce in our country is the lack of proper infrastructure in the country. Of course, it goes without saying that in the last few years there has been good growth in the development of telecommunication infrastructure and internet platforms in society, but the

needs still do not cover the development of e-commerce.

In the meantime, in the jurisdiction and laws of e-commerce, due to the growth of e-commerce technology, no new laws have been formulated and the rights of consumers and owners of intellectual and tangible capital in e-commerce, such as patent rights and copyrights and countless other rights, are reviewed by the law. Investors have not been placed, and no attention has been paid to it, which alone is one of the factors with a high ranking in limiting e-commerce in the country.

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