Problems of Signing Electronic Contract

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Abstract--The world is witnessing a significant and rapid development in communications technology. In this digital age, the Internet has spread widely and a new term (e-commerce) has emerged, where it became possible for businessmen to avoid the hardship of traveling and moving between countries to meet their partners and their clients. Businessmen have been able to save time and money in order to promote products and services, and therefore to conclude contracts. This type of contracts needs special regulations to be controlled and governed.

Objective of the study

The emergence of this type of contracting, which require signing as a mean to express agreement, requires some clarifications regarding these contracts, and definition of national and international regulations and laws that regulate such contracts. This type of contracts needs to be understood in terms of its legal validity, also, the need to understand all aspects relating to electronic signature.

Significance of the study

The importance of the current study came as a result of the effects of technological progress in the means of communication and information. The subject of the current study acquires its importance of being a modern global issue, and also new in our national legislation, and that a large part of its significance has emerged from the actual presence of this issue in our life where trade between the world’s states became electronically achieved, which led to the emergence of the urgent need to find a new and important legal regulation required by the new conditions of life, and which also needs to be duly regulated and controlled, how to complete the documentary process electronically, how to conclude a contract electronically, and the Authenticity of electronic signature.

Problem of the study

The emergence of the issue of electronic contract and the authenticity of electronic signature created a big problem in this topic, especially in the countries that have created new legislations to regulate this issue, and therefore, these legislations are unable to cover all practical aspects of the subject, what produced the problem of the lack of legislative texts whether judicial or religious ones.

Also, the problem of security and privacy on the Internet occupies a great deal of legal interest and concern to a lot of people, causing a kind of distrust of this network including the extent and range of the ability of this technology to maintain the confidentiality of the information or message sent and the ability of any other person to access, modify or distortion of the sent message. It also includes the ability to determine the identity of the sender and receiver of such messages and correspondences, as well as ensure the credibility of these persons.

From here stems the main problem in this research which is how to cover the important aspects of this in the light of the almost exclusive legislation which is the temporary electronic transactions Law No. 85 of 2001.

Hypothesis of the study

The search is based mainly on the hypothesis of keeping abreast of developments in the field of electronic contracts globally, as the world has become a small village where contacts between
individuals, although their distance locations, are concluded by modern means of communication. Do we have legislative ingredients and legal texts imposed by this new environment? Did our judiciary have done what is required of it in this area to keep up with the continuous development in this area?

**Research proposal**

In this study, we will address the contract structure and electronic signature through the following two sections: The first section deals with electronic contract in terms of its definition, types, legitimacy, and the competent courts to resolve its disputes. The second section deals with the electronic signature of the close association with the implicit and electronic contract. In the end, the researcher will address will the findings and recommendations of the current study.

**Section (I)**

**Electronic Contract**

We will divide this section into the following two topics:

**First topic:** Contract theory in the Jordanian civil law

**Second topic:** the electronic contract.

**First topic**

**Contract theory in the Jordanian civil law**

In this topic, we will address the definition of contract, its contents (pillars) and conditions.

**First: contract definition**

The Jordanian civil law defines “the contract” in Article (87) as follows: “the contract is the association between the offer issued by one party and acceptance approved by the other party of a contract where each party has an obligation to the other.” Article 90 of the Civil Law states that: “the contract is concluded upon the association between the offer and the acceptance between the contracting parties within specific conditions of the contract.”

Scholars define the contract as: the association between the “offer” by a party with the acceptance by another party in a way that makes an effect on the contracted issue.”

Accordingly, the negotiations that precede the contract are not considered as a contract do not constitute “offer” nor “acceptance” being preapprehension before concluding the original contracts, because such negotiations are subject to cancellation at any time before the conclusion of the original contract, and shall remain like this until the original agreement is set and agreed by the contracting parties.

**Second: content (pillar) of contract**

1. The basic rule in the contract is “the mutual agreement” which means the consistency of the two wills as stipulated in Article 90 of the Jordanian civil law. The will means here “the will which tends to make certain legal effect which is the creation of commitment”.

2. How is “will” expressed:

   A. Whether by “the explicit expression: for example a person offers his goods for sale, and the other person explicitly accepts buying such goods.

   B. Or by “implicit expression”: for example a merchant who puts his goods in front of his store putting a label that holds the value of his goods.

1-Will has two main elements “offer” and “acceptance”: acceptance, for example, a person takes the offered good and pays its price. Acceptance includes the main elements of the contract without reservations. Acceptance is the consent of the party who received an offer, and it shall be identical to “offer” whether positively or negatively. Offer and acceptance make the contract concluded an neither party shall have the right to retreat or take back.

2-Forms of contracting

   A. The contract may be concluded by persons present at one time and place.
B. Contract can be concluded between absent parties. The question here is: how can such contract be concluded while contract parties are in distant and different places. For this issue, there are for theories:

- Announcement of acceptance theory: The second party announces his consent “acceptance” of the “offer” of the first party in terms of time and place.
- Acceptance sending theory: the contract is concluded upon sending the acceptance to the first party by the second party in terms of time and place.
- Acceptance receiving theory: the contract is concluded upon receiving the acceptance of the second party by the first party in terms of time and place.
- Acceptance awareness theory: the contract is concluded upon the first party’s awareness “knowledge” of the second party’s acceptance in terms of time and place.

Attitude of the Jordanian legislator:

- Pursuant to Article (101) of the Jordanian Civil Law, the Jordanian legislator has adopted Announcement of acceptance theory “The second party announces his consent “acceptance” of the “offer” of the first party in terms of time and place”. The following shall have effect according to Announcement of acceptance theory:
  a) The state where the acceptance was announced is the state of Jurisdiction.
  b) As for spatial Jurisdiction, the court where the acceptance was announced is the competent court.
  c) The time of contract conclusion is the time of the announcement of acceptance, and the law in force at that time shall prevail.
  d) The offerer shall have the right to withdraw before the second party’s acceptance, but not after that.

1. “Will” may contain some defects such as “coercion, error, injustice with false pretenses”

A. Coercion: to compel a person unjustly to do something without his consent. Coercion may be material or moral. The conclusion of the contract is subject to the consent of the compelled person; if the compelled person accepts, the contract can be concluded, or otherwise, the contract shall be deemed void.

B. Error: a person thinks something regarding something in the contract, while this think is not true. There are two types of error: (productive error, non-productive error). Here we have concern with the productive error which has two sub-forms:

1. An error that makes the contract as void (an error in the contract, its content or conditions)
2. An error that affects the acceptance of a party, and this terminates the contract; this includes (an error regarding the person a party in the contract, place of contract conclusion, or the description of a place).

A. Injustice with false pretenses

Injustice with false pretenses (fraud) shall terminate the contract, provided that the harmed party shall prove that the other party knows that a fraud is taking place. The contract to be terminated under this condition requires that the harmed party shall suffer obscene unfairness (Obscene unfairness is an injustice that cannot be evaluated by evaluators). The contract shall not be terminated due to Obscene unfairness unless accompanied by fraud in case if such fraud takes place due to legitimacy, Endowment properties or State properties.

In case of simple injustice, whether accompanied by fraud or not, the contract is not terminated unless it took place in the following cases: if it takes place regarding the properties of a person under guardianship due to a debit, or the monies of a dying person.

Third: eligibility: eligibility is defined as a person’s competency to act legally, and this has two types:
A. Person’s eligibility to acquire its rights.
B. Performance eligibility: person’s eligibility to acquire rights and perform obligations, and this is for adults.

**Eligibility shall**

A. exist in any person and who argues the non-existence of such eligibility shall prove this.
B. As for a child who completes seven years old, the behaviors of such child include:

1. Harmfull behaviors shall be void, including: endowment, Discharge of the debt.
2. Useful behaviors, are all acceptable, including: the acceptance of endowments.
3. Behaviors that range between being useful and harmful, including “will (lease: for a period not exceeding 3 years), collection of rights, and rights stipulated by the Jordanian Civil Law. These behaviors are all based on the approval of guardian. As for the behaviors and actions that are out of “will acts” , shall not be taken by the guardian, subject to the approval of the court.

C. The behaviors and acts of a discerning child are all allowed but within the limits determined by the court. Eligibility of a person who is 18 years old and over may be subject to some defects including: Madness, Dementia, Extravagance, and Inattention.

**Madness:** a mad person is a person of no mental capacity, and such person is treated as a child and here no need for court guardianship.

**Imbecile:** Talkative of offensive acts, and such person is treated as a child.

**Extravagant:** careless spender; who wastes his monies. This person is subject to court guardianship, and the court also shall have the right to assign his guardian.

**Unaware:** a person who forgets his actions and behaviors, and is subject to the provisions that govern the Imbecile.

**Second: the characteristic of the contract:**
Article 157 of the Jordanian Civil Law stipulates that “each contract shall have a specific characteristic to be added to the contracted subject; the characteristic is the obligation one party commits itself to execute”.

The conditions that shall be met in the characteristic of the contract:

1. It shall be present, but future sale is allowed provided that the following conditions and terms shall be met:
   a) Items sold for the future shall not contain injustice or false pretenses
   b) the sale shall not include selling a live person’s property.

2. It shall be possible only (impossible things include, selling the fish in the sea, or selling a free bird).

3. To be tangible or clearly describable.

4. Shall not be contrary to law such as (drugs), Contrary to public order and morals, or forbidden by nature.

**Third: cause:** Article (166) of the Jordanian Civil Law stipulates that:

1. The contract to be valid it shall contain a legal benefit to the parties of such contract.

2. It is proposed that a contract contains such legal benefit, unless otherwise is proved.

**Fourth: the contracting formality:**

Article (2/105) of the Jordanian Civil Law stipulates that “if the law requires a specific for a contract, such for shall me met in order to conclude such a contract”.

Examples on this formality as a precondition for concluding a contract “the partnership contract and actions imposed on vehicles, ships, planes, and cars pursuant to their special laws”.

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Section (2)

Electronic contract

This section includes the definition of the electronic contract, its types, legitimacy, its legal nature, the form of its conditions and pillars of the electronic contract.

First: definition of electronic contract

The electronic contracting is part of e-commerce, which is a commercial deal like that deal which is happening on the ground, but that the conclusion of the contract and the payment is an indirect automatic electronic procedure; it is that kind of trade taking place between the user of the computer and another user who are both connected to the Internet.

The Jordanian Transactions Act No. 85 of 2001 has defined the electronic contract in Article (1) as "the agreement which takes place wholly or partly by electronic means," and as the same legal in the same article has addressed the nature of electronic transactions as "technique using electric, magnetic, optical mean or any other similar means in the exchange of information and store it."

Secondly, the types of electronic contracts: the electronic contracts are concluded by two ways, either by the World Wide Web (Web contracts) or by e-mail.

1. Website contracts
These are contracts concluded through the World Wide Web through websites available on this network where the user (consumer), who wants to sign a contract, looks for goods through the search engines and after finding the desired contract, he resort uses a symbol relating to goods, which leads him/her to the bidding company. By clicking on the desired items, the user finds the contract that he must sign containing the terms and conditions of the contract.

2. E-mail Contracts
These are contracts that are concluded through email by sending these contracts and receiving them electronically between computers using the Web; and these contracts are the most widely used among producers and suppliers.

Third: the legality of e-commerce contracts:

Electronic Transactions Act has expressly provided for the legality of electronic contracting in Article (7) of paragraph “A”: "electronic record, electronic signature and electronic message are all of the same legal effects of the documents written and signed under the provisions of the legislation in force in terms of forcing the parties or their validity as evidence”.

Fourth: the form of the terms and conditions of the electronic contract:

A. Mutual agreement

the general rule as stipulated in Article 93 of the Jordanian civil law that the expression will be given by writing in the covenants even by Speechless, if such consent is given by distinct way. The expression of the “will” in the e-mail contracts is expressed by clicking the button “I agree” on the terms of the contract, and this is confirmed by the Jordanian electronic transactions law in Article No. (7/ b) "The legal effect of any aspect mentioned in paragraph (a) of this article cannot be overlooked being conducted by electronic means, provided that it shall be consistent with the provisions of the law.

B. Characteristic of the electronic contract

As we previously mentioned, each contract shall have a specific characteristic to be added to the contracted subject; the characteristic is the obligation one party commits itself to execute”. This characteristic shall be tangible, this means that the product shall be describable via a photo of that product published on the website of the company, what in turns make the buyer ensures the quality of the product and to ensure that no fraud may be committed by the seller. A sample of the product can be taken or seen to ensure the quality of the product in order to protect the customer of any potential fraud.

C. Eligibility in electronic contracts
eligibility in electronic contracts is essential for the validity and authenticity of electronic contracts like the ordinary contracts, where the contract shall not be deemed as valid unless the parties of the contract are eligible to conclude such contract. Some ineligible can access to the web and conclude contracts, and the question here how can we prevent contracts to be concluded. In fact, it is not easy to realize that but there are several attempts and solutions including the following:

• The existence of publicity authorities: It is neutral third parties, whether public or private that govern the relations between the two parties online, whereupon such authorities define the identities of the parties and the legal capacity through the issuance of certificates to prove certain facts related to the contract being online.
• The existence of forms of contracts that are placed on the internet which show it is limited to certain categories only.

A. The reason in the electronic contracts

It is known that the reason of obligations must be present and correct and is not contrary to public order and morals. These conditions, if possible to be available in the electronic contracts, are like contracts normal contracts as stipulated in Article 88 of the Jordanian Civil Law which states that "contracting can be on anything unless it is forbidden by law or contrary to public order or morality." Accordingly, we in the process of applying the general outlook on electronic contracts.

B. Formality in electronic contracts

Law sometimes requires that the contract shall take a certain form and the agreement of both parties is not enough. Formality in contracts may be either in writing as it is in the company’s contract as stipulated in Article (48 / b) of the Civil Code or that the contract is to be recorded in the official records as it is in the contract of sale of real estate.

The same law, in Article (56) has excluded some cases, namely:

A. Contracts and documents, and the documents issued according to special legislations and in a certain way and are of specific actions, including:
1. Create and modify the commandment.
2. Create and modify endowment conditions.
3. Dispose of immovable properties transactions, including powers of attorney, bond of ownership and the creation of their rights assigned except for leases relating to such properties.
4. Powers of attorney and transactions relating to civil status.
5. Notices relating to cancel or rescind water, electricity and health insurance contracts.
6. Roll of actions and pleadings, notices and court decisions.

B. Securities, unless those of special regulations as issued by the competent authorities pursuant to Securities Law in force. Most of the laws have applied these exceptions mentioned in Article (6) of the Jordanian Electronic Transactions Act.

Fifth: the legal nature of the electronic contract

We have previously mentioned the types of the electronic contracts, web contracts, and e-mail contracts. In order to identify the legal nature of these types, we have to distinguish between these two types, as follows:

• Website contracts
These are contracts concluded through the World Wide Web through websites available on this network where the user (consumer), who wants to sign a contract, looks for goods through the search engines and after finding the desired contract, he resort uses a symbol relating to goods, which leads him/her to the bidding company. By clicking on the desired items, the user finds the contract that he must sign containing the terms and conditions of the contract. The contractor (buyer) have no choice and cannot negotiate or discuss any issue regarding the price, quality or conditions of the contract. The buyer only can resort to another manufacturer or supplier if the conditions, quality or price of this contract did not satisfy him.

• E-mail Contracts
These are contracts that are concluded through email by sending these contracts and receiving them
electronically between computers using the Web; and these contracts are the most widely used among producers and suppliers. These contracts are characterized by that most of them are of mutual agreement because the contract parties can negotiate and discuss any issue relating to the offered product. They continue negotiate until they reach a final settlement including the “offer” and the “acceptance”.

Sixth: Jurisdiction and the law applicable to electronic contracts:

Electronic contracting raises many problems in terms of procedure, especially to identify the competent court, applicable law and good means to prove the contracting process.

First, the problem of determining the competent court in resolving any dispute arising from electronic contracts or remotely disputes. These contracts can be divided into two categories:
1. Contracts concluded remotely within a single country.
2. Contracts concluded remotely in different countries.

Second: The problem of determining the applicable law

As it is well known in the field of contracts, the law of will or the law of contract is initially applied, but it is not always that easy to specify the governing law of the contract. Judge bears the responsibility of determining that law.

If the contract does not specify the governing law, this becomes the responsibility of the judge. The judge shall conclude that from the nature of the contract, the most relevant law to the contract, and the facts presented by the litigants.

Section (II)

Electronic Signature

Some the main reasons that scare contractors online and sometimes prevent them from taking these quick way are the lack of trust and satisfaction to the authenticity and integrity of the information contained electronically, in addition to the fear of fraud as internet is considered as a (high way) and is open to all. For these reasons, it was necessary to take the means to achieve security and integrity of the information to by the so-called electronic signature followed by other types of signatures which achieve the safety and tranquility and documenting the parties of electronic instrument or the electronic contract. Thus, we will divide this section into:
First topic: definition of electronic signature
Second topic: types of electronic signature
Third topic: conditions that make the electronic signature of legal effect
Fourth topic: the effects of the electronic contract

First topic

Definition of electronic signature

Article 2 of the Jordanian transactions law has defined the electronic signature as “data in the form of characters, figures, symbols or signals, inserted in an electronic, digital, optical or any other similar way in information message or connected to it and which allows to determine the identity of the person who signs it to be distinguished from other person”.

It is noted that this definition is based on the non-physical nature of the message of information on the one hand, and to the signature function on the other hand, as long as the message is not linked to specific information by electronic means, electronic signature must not be confined to this letter in particular. The objective of this definition is to make the concept of e-signature to accommodate present means or any other means of signature that will appear in the future so that they can be included in electronic form, add, or linked to the message information and be able to do the function of signature. Also, it is noted that
this definition does not require that the signature to be only a natural person, and therefore, the signatory may be natural person or legal entity.

The U.S. Code defines an electronic signature for the purpose of US law as "an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record."

Second topic

Types of electronic signature

Technology allows online signature, what in terms has emerged many forms and types of electronic signatures that offer warranties similar to the warrants of ordinary signatures written on paper. We do here mention these types of signatures in details:

1. Scanning the signature and attaching it with the sent document: this is executed by a scanner and attaching the signature with the sent document, but this type of signature is not save because the receiver may keep the original signature and use it again for his own purposes.

2. Passwords and codes: It is a magnetic card used by banks to facilitate the ATM to their customers operations and through this card holder can enter the card in the ATMs device where this card includes the information and data of card holder. The user then enters his own password and this process represents “the will” of user for withdrawal and deposit operations. This way is safe, because the card and password are separated and could not be stolen together.

3. Biometric signature: this includes some specific features for every person such as fingerprint, iris or tone of voice and these properties ensure human uniqueness from others in a reliable way. Like other electronic signatures, this way depends on the level of technology progress which shall be of high technology to ensure safety.

4. Pen-Po: this is a pen that can be used to sign on the computer’s monitor via a special software.

5. Digital signature: this started to be used by banks such as smart cards and Mondex-Card, which include a password by which the card holder can carry out all banking procedures via ATM.

This type of signature (electronic signature) represents a real security and safety which is the most popular type of electronic signature and a lot of companies in the world have adopted this signature in the transactions, particularly the most important banks and financial companies.

Although it is a complex process, but the processes of message creation and signature are performed by message safety and security software. The sender encodes the message and send it to the receiver, who in turns, decodes the message and read the message after verifying the identity of the sender.

Jordanian legislator has referred to (Certification Authorities) in the Jordanian electronic Transactions Act No. 85 of 2001 to the authorities in articles (33.34). The Jordanian legislator has mentioned the conditions of the issuance of identity certification, namely:

1) To be issued by a licensed or certified authority.

2) To be issued by a competent, recognized and licensed authority in other states.

3) To be issued by a government department, institution or commission legally authorized.

4) To be issued by a body approved by the contracting parties.

Third topic

Conditions that make the electronic signature of legal effect

Before the issuance of the Jordanian Electronic Transactions Act, there were amendments to some laws in order to keep pace with the development and recognition of electronic means. One of these laws is The Jordanian Banking Act No. 28 of 2000 where article (91) of his law allows “the provision of
evidence” in banking issues by all means of proof, including electronic evidence. Banking law has excluded commercial and financial books and replaced it with computers and other technological devices as alternatives. Also, the Jordanian Evidence Act no 37 of 2001 has approved the authenticity of e-mails messages. The question here is that: when the electronic signature can be as an alternative to ordinary signature? What are conditions that make the electronic signature of legal effect?. To answer this question, we mention here the Conditions that make the electronic signature of legal effect as stipulated by Article (10) of the Jordanian Electronic Transactions Law:

1) The signature shall relate to the original person, in other word; it shall distinguish that person and closely associated with him/her to be of legal effect.
2) Signature shall be sufficient to determine the identity of signatory.
3) The signature shall be associated with the document in a way that cannot be changed or altered.
4) The existence of a competent body which is known as Certification Authority as stipulated in Article 22 of the same law.

These conditions shall be met in order to make the electronic signature of legal effect.

Fourth topic

The effects of the electronic contract

We do here address the effects of the electronic contract in brief pursuant to the Jordanian Civil Law:

a) The effect of contract between the contracting parties: contract shall be executed in good faith and each party shall meet its obligations, otherwise, the harmed party shall deserve compensation.

b) The effect of the contract regarding third parties: this includes

(1) The heirs of contracting party in terms of rights and obligations unless such rights or obligations cannot be transferred upon the agreement between the original parties, such as the lease contract, if the original contracting parties have agreed the heirs shall leave the leased property in case of the head of family death, or if the rights and obligations cannot be transferred by law as stipulated by Article (1215) if the Jordanian civil law.
(2) Special transactions when obligations are transferred to heirs such as (mortgage) and other associated rights and obligations.

(3) Creditors: the contract allows the creditors to file lawsuit based on the contract.

(4) The effect of the mediators such as publicity authorities whose responsibility is limited within the authenticity of the original documents they receive as neutral third parties and the errors such authorities may make. Such authorities are responsible to the documentation and verification of the authenticity of electronic signatures, the identity of the contracting parties, and sending such information and data to the other contracting party. If publicity authorities exceed these obligations, they are subject to compensate the damaged and harmed party.

Conclusion

The e-contract is a contract subject to the provisions of the civil law and legislation which referred to him Electronic Transactions Act in Article (7 / a) but it needs some special regulations in terms of the verification of the identities of the contractors and controls over document signatures to ensure the integrity of the contract. So publicity authorities were established for the implementation of this goal, which will be responsible for any errors or part of information leaking.

Finally, and in light of this study that addresses the electronic contract and electronic signature, and having reviewed the Transactions Law, the current study recommends the following:

- The most important barriers that hinder the development of e-commerce and the use of modern means of communication are those articles which
require written signature, which is not appropriate in the light of non-limited evolution and the age of information technology and communications. Therefore, it is necessary to address these subjects and come up with legislation that copes with the evolution of e-commerce, as happened in the Jordanian Evidence Act No. 37 of 2001.

- Jordanian Transactions Act does not mention the time and place of electronic contract, where it is advisable that the Jordanian legislator to address this issue clearly as well as the jurisdiction in situations of conflict on electronic contracts and it is advisable to determine the applicable law.
- We wish that a special legislation to be singled for electronic signatures organized in an integrated manner because it does not contain a lot of details as in the UNCITRAL law, which resulted in the presence of several legal problems, including:
  A. The behavior of the signature service provider in terms of duties and responsibility.
  B. The efficiency of the certification service provider.
  C. The extent of the recognition of foreign certificates and electronic signatures.
  D. Provisions of cases encryption sabotage.

- There is no doubt that the insertion of e-commerce law subject as a prerequisite in Jordanian universities will help the supervisors of the educational process in Jordan, but it is necessary to hold seminars and workshops where stakeholders from university professors, lawyers and judges are involved to instill electronic culture or what is known as (E - Law).