Interpreting digital licensing contracts between a metaphorical and functional direction: A comparative analytical study

Rania S. Azab*

Department of Law, College of Business Administration, Northern Border University, Arar, Saudi Arabia

**A R T I C L E  I N F O**

*Article history:
Received 30 January 2021
Received in revised form 9 May 2021
Accepted 22 May 2021*

**Keywords:**
Wrap contracts
Standard terms
Clickwrap agreements
Browse wrap agreement
Sign-in-wrap
Consumer law

**A B S T R A C T**

This study seeks to clarify the importance of explaining the type of digital license contracts to see if it can continue subjecting them to the metaphorical direction that adopts the direction of applying the traditional rules to this type of contract, or must it be subject to the functional direction that adopts the necessity of establishing independent legal rules in the theory of contracts in Egypt. The problem of the user not reading the contract terms is still there. Although consumers do not read the terms of digital licensing contracts, some jurisprudence in the US often insist that it must be the exchange of consent must take place that the offeree must see the terms and conditions before assenting in some sort of this contracts, this differs from the nature of digital licensing contracts and the way they are contracted. It is right that the consumers discover in some types of contracts do not express the consent by the traditional way in the contract but are subject to specific instructions set by the site, due to the inability to read and understand the terms of the contract, but rather that in some types of digital licensing contracts the consumers are not aware to be a party to a contract according to the traditional concept of contract theory. Legal recognition is important by the Egyptian and Arab legislations in the role of technical and digital in regulations next to the contract and the law (functional direction) which can contribute to help the user to read the terms of use, we must make use of digital technology to fulfill the function of the contract, which aims to create obligations on both parties, businesses and the user. The following questions were analyzed: Is it possible an individual can enter into a contract without realizing it on the internet? Is the individual obligated to contractual terms that he did not read and understand? How can the provisions of the traditional contract be applied to digital licensing contracts? Then I concluded the necessity of enacting new legal rules that regulate digital licensing contracts within Egyptian legislation.

© 2021 The Authors. Published by IASE. This is an open access article under the CC BY-NC-ND license ([http://creativecommons.org/licenses/by-nc-nd/4.0/](http://creativecommons.org/licenses/by-nc-nd/4.0/)).

1. Introduction

Access to the Internet has become easier and faster thanks to modern digital devices equipped with a touch screen feature. This has led to the development of contracting techniques in digital licensing contracts that take the form of standard contracts called adhesion contracts. It is noteworthy that they still represent a major challenge to the general theory of the contract in civil law in Egypt and the contract law in the US as well. The latter’s judiciary, at some point in time, has tried to extend the scope of traditional contract law rules on digital licensing contracts Some American Jurisprudence seriously attempts to clarify the futility of the application of the traditional contract law on digital licensing contracts. Which requires the need to exchange the will of the contractors based on real insight to the user of the contractual conditions (Metaphorical direction).

On the other hand, we find the functional direction that is concerned with the necessity of using technology to take its share in the regulation alongside the contract I found Technology does what the contract and the law cannot implement, especially when the traditional legal way of concluding contracts in the physical world could not meet the challenges and hidden conditions of the digital nature of licensing contracts. They often override the rights of the consumer who does not read the terms of the contract, which is a problem
found in the physical world and moved to the digital world. However, the Egyptian legislator is silent towards this problem and found it during the monitoring of judicial opinions and judgments. The reinterpretation of traditional rules for their application to digital licensing contracts is still dominant. This is why we are moving towards monitoring the legal-technical development of digital license contracts and the problem of the consumer’s lack of reading to the terms of these contracts. The proposed solutions are summarized in the need to adopt the functional direction in the interpretation of digital licensing contracts to leave the technical possibility to regulate next to the contract and the law. I can say that the functional direction is still in its beginning in our Arab countries to discuss what supports the idea of making technology one of the means of organization, besides the contract and the law to find a balance between consumer rights and the owners of literary works in the digital environment. I will divide this study into three main topics as follows:

- The relationship between digital licensing contracts and the concept of Adhesion.
- The metaphorical direction in the interpretation of digital licensing contracts.
- The functional direction in the interpretation of digital licensing contracts.

Previous studies:

1. The study of Daiza (2018): The study concluded that regardless of the consumer awareness of the conditions (which I think that the purpose of reading the terms is to ensure that the consumer is aware of and understands them), so he must be obligated to read them, and this is related to the obligation of the licensee to make these conditions clear for the consumer to read and agree to their terms, and US courts still rely on the existence of the notice, which is one of the criteria that determines whether or not a binding licensing contract exists.

2. The study of Ayres and Schwartz (2014): I see that the conclusion of this study is very important it concluded that it is necessary to adopt the principle of warning consumers of the importance of the conditions that are presented to their acceptance in digital licensing contracts by providing a warning technology instead of imposing a duty of reading on the consumer, which binds him to contractual terms.

3. The study of Spooner (2001): The study concluded that it has become possible for both the licensor and the licensee to enter into digital licensing contracts whose validity has been judicially recognized as contracts and are executed vis-à-vis both parties and does not deny the importance of the unified law for computerizing American electronic transactions and This is the first step that the Egyptian and Arab legislators should follow because the user knows very well that he cannot do without the Internet, he may accept any conditions that may be offered to him, only for the sake of enjoying the Internet use without attempting to know whether he is a party in a real contract or not. So what are his obligations? Or even what are the rights he may be deprived of once he agrees to the license contracts?

Commercial companies present terms and conditions to Internet users in the form of standard contracts that save time and effort in drafting contracts (Sterkin, 2004). Despite the importance of standard contracts in the digital economy; it can never be left up to abuse consumer rights. Therefore, the relationship between Digital License and adhesion Contract has to be clarified.

2. The relationship between the digital license contract and the adhesion contract

Digital license contracts (Hayes, 1993) are contracts concluded differently from traditional contracts (Kim, 2013). They are done only within the digital environment. These contracts are designed to restrict and control the way the consumer uses digital content while retaining ownership to its owners for the benefit of their owner. Business owners resorted to these contracts to protect their rights from any kind of infringement and unauthorized use within cyberspace, which copyright law did not sufficiently protect. So, there was a tendency towards the use of licensing contracts to restrict the use of such works by submitting their terms digitally. Businesses place them without negotiation with the user, which confines them within the range of adhesion contracts (Barnhizer, 2005; Gautrais, 2003) Digital licensing contracts enable the user to access websites and use their content. It is worth noticing that these contracts did not appear to us suddenly, for we found their predecessor in the physical world “offline”. They are represented in paper-based licensing contracts from “shrinkwrap” type, which were also classified within the range of adhesion contracts that provide their terms in fine print and based on the principle (take all the conditions or let it all) (Kunz et al., 2003; Kim, 2014b) in the sense that the only way to conclude the contract is to fully accept the terms.

Digital licensing contracts are the technical development of "shrink wrap contracts (Hart, 2014), which were considered the first and oldest forms of licensing contracts “end-user license agreements” (EULAs). This contract was intended to restrict consumer use of computer hardware or software (Davis, 2007), embedded in physical media such as CDs. These conditions exist under a transparent plastic cover where the acceptance of these conditions depended on the consumer's opening to the plastic cover. They were in too many pages and because the consumer does not and will never have enough time to read those conditions while standing
in the store. Therefore, the opening of the plastic cover is postponed until the copy of the program is downloaded to its computer to appear on the screen another digital contract of the “clickwrap agreement” type before he can use the program to complete what the paper contract started. If the consumer wants to use the program, he must accept the contract terms that appear on the screen. Otherwise, he will not be able to complete the download of the program on his computer.

3. The interpretation of shrinkwrap agreements according to the traditional adhesion contracts

Shrinkwrap Agreements are classified within the range of Adhesion contracts (Livingston, 2011), as did the US judiciary in one of the cases (Vault, 1988).

These contracts often have illegal and ambiguous written terms that provide no explanation to the consumer (Mohammed, 2014). Its way of acceptance takes into consideration the time during which the consumer opens the plastic cover, based on the principle of pay now and terms later (Manap, 2008). Since the consumer does not sign in, shrinkwrap agreements contracts contrary to adhesion contracts, lost the advantage of its warning function for the physical signature. In fact, the insured person, in the insurance contract, reads the terms before signing them and can inquire about any ambiguous term and then has the freedom of either to accept it all and sign or to refuse it and give up the contract. This was approved in contract law in Egypt (Inclusive Egyptian laws), France (Art. 1379 of the C.C.Q) (rationing countries), or America (case law).

As such, it was the real beginning of the issue of unreadable terms by consumers, especially the digital ones because of its ability to increase the pages to contain a huge number of contractual conditions at a very little cost. This created an actual difficulty for the user to read it, which led individuals to be disinterested in signing license contracts because it does not enable them to see the terms and conditions nor does it ask them in some types to sign any of them.

These disadvantages made the individuals feel the absence of a binding contract, as they are well aware that he has no solution but to obey and accepting (Davis, 2007) whatever the conditions are as long as they wish to enjoy Internet services.

4. Arab legislative recognition of digital license contracts

We did not find an explicit recognition of the legitimacy of dealing with digital licensing contracts in accordance with the previous concept in Egypt and neither in Saudi electronic transactions issued in 1428 Hijri nor in any of the Arab legislation for other electronic transactions. However, most of those legislations, such as the EESL (2004), explicitly recognized electronic writing. The Saudi Electronic Transactions Law of 1428 Hijri, as well, generally recognized electronic contracts, which are concluded on electronic documents and can be preserved, taking into consideration the UNCITRAL LAW (1996).

After we have known the essence of license contracts and their relationship to Adhesion contracts we will be exposed to the American judiciary interpretation of wrap contracts with its paper and digital types as follows.

4.1. The illegality of shrink wrap contracts in accordance with the provisions of the traditional contract

Initially, the US judiciary did not recognize license contracts, according to Article 2 of the UCC, which relates to how the contract is concluded. According to section 2-207 of the same law, the offeree must express his clear assent to any new or additional conditions or it will be excluded from the contract and not part of the agreement. On the contrary, it will be considered as a new affirmative that needs new assent. In one of the cases Step-Saver Data Systems’, the contract was entered into at the time of the purchase of the program by phone, and according to the paper license contract of shrinkwrap agreements, the offeree has already seen the terms and conditions contrary to Section 2-207, which requires the explicit assent of the additional terms set out under the agreement and this was the decision of the Third Appeals in this case which, consequently, decided that the license contract would not be valid (Nimmer, 1999).

The US judiciary has also analyzed shrink-wrap contracts in another case6, under Section 2-209 of UCC, the court has interpreted its ruling to refuse to enforce a shrink-wrap contract because it needs an explicit expression of acceptance of its proposed terms. It must be clearly expressed, and cannot be inferred solely from the conduct of the contractor once the contract has been continued. Because Arizona has not clearly agreed to the terms and conditions of the shrink wrap, the latter is considered not valid. However, with the economic pressure of businessmen to publish shrink-wrap terms to the public, it has become urgent to consider those contracts valid, as a need to support the continued development of the digital economy. As a result, the US judiciary found itself obliged to recognize the legitimacy of those contracts, hence the begging of a second phase.

4.2. The legality of the shrink wrap contract according to traditional contract condition

At this stage, the US judiciary is still looking for that legitimacy under the umbrella of traditional rules (Grusa, 1997). When it excluded sections 2-207 of UCC law, which required the expression of acceptance of any additional conditions, it is

---

6 https://cyber.harvard.edu/ilaw/Contract/step.htm
7 https://law.justia.com/cases/federal/district-courts/PSupp/831/759/1802265/
intended to apply sections 2-204 (1) and section 2-606. From the same law (Gatt, 2002), section 19 of the US Contract Law also provides that the expression of acceptance may be wholly or partly in writing or speech, or by any other action, or even not to act, in order to make shrink-wrap contracts valid and effective. Therefore, according to section 2-204, the buyer can accept the terms of the contract, by performing any actions, in the manner specified by the offeror, as he drafted the terms and has the strongest will to impose it on the weaker part. In this case, on appeal, the Seventh Circuit found that the plaintiff had set shrink-wrap terms. The buyer could accept these terms by using the software after he had the opportunity to read them, as did the defendant under section 2-606 of the same law which enables contractors to agree on the way of concluding the contract. This section also assures the buyer the right to express his final acceptance if he was given enough opportunity to know the product terms. The court has found that the plaintiff had extended the period of the opportunity to object if the buyer refused the conditions. Since the defendant had tried the program, and was aware of the license terms, and did not reject them, the court decided that the shrink-wrap license contract was valid, enforceable, and in compliance with the traditional contract in UCC law.

In the Hill case, the Court's opinion on the license contract turned from considering it, according to the Step-Saver case, to be additional conditions that might require an explicit expression of acceptance, into conditions within the core contract that were not additional. As long as the obligation was stipulated that in order to be concluded, the contract must allow the consumer to see the conditions, and verify the product as in the current case. So the license contract was part of the essential contract, which was done before between both parts. The arbitration clauses contained in the terms of the license are enforced against both parties in the event of a dispute between them. From this point on, the judiciary has begun to recognize for the offeror stronger authorities in setting the terms and concluding the contract in the way he wishes, regardless of the consumer rights.

It is noticeable that most of the cases brought before the US judiciary, which relate to the shrinkwrap agreement in that period, were because of the breach of the terms of the license which was part of the contract by the offeree whom he did not read the terms. The problem is that Article 2 of the UCC law could not be resolved nor did the traditional contract law. Cases where the judiciary determined that the shrinkwrap agreements were valid contracts and enforced proceeded in. The terms are considered part of the initial contract concluded, as long as the consumer has retained the product, used it, had the opportunity to see the terms of the license associated with the product, and did not return it. As in the cases of Mortenson and Caspi*. It can be also noticed that the courts were focused only, at that period, on how to build the basis on which to correct the status of shrinkwrap agreements regardless of the fact whether there is an offer and actual acceptance by the parties or not. Hence the decay began little by little to the full compliance with the traditional way of concluding contracts and turning a blind eye to the issue of enlightening the consumer about the conditions before purchasing the product. A real expression of acceptance or absence of it may be based on that basis which changed the way of concluding the contract by giving a period of time to review the terms, without making sure of the actual seeing conditions before accepting, with no return of the product. Indeed, the judicial basis has been established for the consideration of shrink wrap paper as valid contracts, according to the provisions of the contract in the UCC Act.

5. The interpretation of digital license contracts according to the metaphorical direction

5.1. The concept of the metaphorical direction in the interpretation of digital license contracts

Through the previous judicial decisions, it was found that this direction adopts an attempt to extend the rules of the traditional contract in accordance with Article 2 of the Uniform Commercial Code. Those rules address the contracts of sale to control digital license contracts and necessitate the exchange of a clear expression of the will of the contractors to conclude the contract. This means that the offeree must see those terms, understand and sign it to the effect that it is accepted. Therefore, proponents of this trend see the possibility of applying these traditional rules to digital license contracts without taking into account the real difference between the physical environment and the digital one, as well as the nature of the goods and services in each environment. We will begin to explain the American jurisprudence license contracts as follows.

5.2. Interpretation of American doctrine for wrap contracts according to the traditional contract law

There was a clear discrepancy between the direction of the judiciary and the direction of American jurisprudence in interpreting digital licensing trends. Although the judiciary has encouraged the need to let individuals free to determine the means of concluding a contract after the Pro CD case, it is still trying to subordinate license contracts to US contract law and UCC law. If we look at UCC law, we find that its rules have already been enacted to apply to material goods, which need a transfer of its ownership from the

* https://www.lexisnexis.com/community/casebrief/p/casebrief-caspi-v-the-microsoft-network
seller to the buyer. In contrast, we find that license contracts only assume transfer of possession and not a transfer of ownership, with a restriction on the consumer use regarding the subject of the license. As such, we are getting rid of little by little of the traditional rules of the contract for the sale of physical goods, to enter into the framework of dealing with intellectual property laws. According to the traditional theory of contracts, jurisprudence explained the illegality of Browse wrap contracts, as there is no explicit expression of acceptance, such as clicking on the acceptance icon, on the same page that the individual signed when he pressed the acceptance icon. The US doctrine has justified its objection, because of the real difference between the physical and digital environments as the goods in the physical environment, not like the digital ones, and that the presentation of conditions on physical paper, not as displayed on a digital page. In addition, the offer and acceptance among individuals in the physical world are not as the acceptance in the digital world and the signature of the pen on a physical paper is not as pressing on the acceptance icon, or writing accepts on a web page. As a result, we should not try to apply traditional contract rules to digital license contracts.

When this trend demonstrated the inability of Article 2 of the UCC law, in addressing the problem of the user not reading the terms of the license contracts, and the issue of expressing the will, it was necessary to amend that article more than once, until the promulgation of the UCITA Act (Szwak, 2002; Spooner, 2001). The latter was implemented in only two states, Virginia and Maryland because there are some objections to it in terms of consumer rights. We will clarify the direction of the US judiciary when trying to apply the concept of the rules of the traditional contract on digital license contracts. which is consistent in all Arab and American legislation, this can be boiled down to the wills of contractors after they see the terms of the contract, for the establishment of a specific commitment by reviewing the stages of the license contracts, in terms of judging their validity, legitimacy, and to which legal rules specifically they were subject as follows.

5.3. Interpretation of the US judiciary click-wrap agreements according to UCC law

There was no need for a new law or legal rules to be applied by the US judiciary to consider licensing agreements as valid and legitimate contracts. In one of the cases, the judge demonstrated that he was based on Section 19 of the US Contract Act (Hale, 2000) which embraces the freedom of the means of expressing the will determined by the offeror, therefore, the court decided that the contract was concluded, especially when the offeror decides that the mere use of the software constitutes in itself an acceptance of the terms of the contract. This is what the defendant did, indicating his acceptance of the terms of the Pro CD agreement. Following this decision on the validity and legitimacy of digital license contracts, companies presented their terms online to consumers, who would not be able to use the digital content, until after they clicked on the acceptance icon. In Groff v America Online, the court decided that users had pressed the acceptance icon not once, but twice. If they did not press the acceptance icon, they would not have been able to use it, which could not be invoked by not seeing or understanding the license terms. The contract is valid and effective even if he hadn’t seen the conditions already. The court also decided in other cases Specht v. Netscape Communications Corp Inc.† that there is a validity and enforceability of the license contract, between the defendants and the company Hotmail Corporation v. Van Money Pie Inc.‡, as long as they press the acceptance icon, indicating their consent to the terms of service. The judiciary expanded the scope of application of the traditional rules (Kelley, 2013) by comparing it to an individual clicking on the hyperlink written in a different color which leads him to the page where the terms of use are situated. It is, then, like turning the page of the contract paper Dewayne HUBBERT. Article 2 has not been able to explain the expressions of will and of a consumer not reading the contractual terms in the browse-wrap agreements. We will explain the effort made by the judiciary in an attempt to interpret browse-wrap contracts and apply Article 2 to them as follows.

5.4. Judicial interpretation of browse-wrap agreements in accordance with the provisions of the contract in the UCC law

The court refused to implement the license contract, when the judiciary tried to apply the rules of the traditional contract of the UCC law to the license agreements of the type browse-wrap, in the case of Ticketmaster Ticketmaster Corp. v.**. This was because the defendant did not take any actions to express his agreement to the terms and conditions of use of the Ticketmaster site, and reported that the mere use of the site does not constitute assent to its terms. However, if the user is aware of the terms and conditions, that consent may be available. In return, the company claimed the validity of the license contract, simply because it sent its terms to the users, and was among those conditions (that the mere use of the site is an expression of the user’s acceptance of the terms of the license contract). This is a kind of expression of the will according to Article 2. Thereupon, the company claimed that the use of the site constitutes a means of expressing the will which provides it with evidence of acceptance.

Since the issuance of this ruling in this type of license, the US judiciary knew that the license

---

† https://casetext.com/case/groff-v-america-online-inc
‡ https://cyber.harvard.edu/law/Contract/hotmail.html
§ https://casetext.com/case/ticketmaster-ticketmaster-corp-v-ticketscom-inc-2
** https://casetext.com/case/ticketmaster-corp-v-ticketscom-inc-2
contracts for websites have become indispensable. Thus finding a basis for the validity and legitimacy of these contracts has also become a necessity. In this regard, the court decisions have split, into supporter and opponent, on cases brought to it on the license agreements of the type browse-wrap. Finally, the courts have decided that it is a legitimate and valid agreement, as long as its terms are presented in a clear manner regardless of the user already read them or not. Since he has the opportunity to refuse to use one site and deal with another site as in the case of DeJohnv.TV. Conversely, courts have justified one of the decisions that ended for non-implementation of those contracts, by considering it as illegal contracts, for there was no real exchange of the will of the contractors. In accordance with the contract law as in the case of Pollstar v. Gigmania Ltd. The site has not displayed its terms to the user, and the user does not require any positive steps to express his will. Despite that, courts continue to subject license contracts under the UCC Act, as in the cases of LAN Systems. Once again, the US judiciary entered a new stage in the interpretation of digital license contracts, in which the requirement of explicitly or implicitly expressing acceptance, in the traditional way, was ignored. Moving into a stage in which the standard is to provide notice and requiring the user to search for the terms of the license contract, and to read them as long as they have been provided. At this stage, the contract is still under the umbrella of UCC law. As it is known, the standard adopted in traditional sales contracts Nettie EFFRON is the moment when the offeror is aware of the acceptance of the offeree. Acceptance has become limited to some types of license contracts in the non-objection to the terms that are often not read (Moringiello, 2003). Therefore, this criterion has lost its importance, in accordance with the rules of the contract, to rely on it in ascertaining whether the binding contract has been concluded or not.

In practice, instead of displaying the terms of use directly to the user, to see them before using the site, we find that they only provide a hyperlink somewhere, often in an inconspicuous color and in a small font on the homepage. If the user pressed that link, it will lead him to another page that provides the conditions. As such, there is no offer according to the traditional concept. However, the US judiciary continued to search for a basis to rule on the validity of browse-wrap agreements, without the site requiring from the user the need to express explicit acceptance, as long as it provides a notice to the location of the terms, and found its goal in a rule of the case that occurred in the physical world. Upon this, the Court (Andrade et al., 2004) decided that the contract can be done between the parties if only one of them managed to inform the other about the existence of the terms of use. As a result, if the first party had accepted, the contract would be concluded between them. The owner of the public garage, then, would only put a sign in which he disclaims responsibility for the loss or theft of things from the cars parked in it. This condition shall be valid for any owner of a car if he sees this sign and puts his car in the garage. As the standard here to enforce the contract, is the reading of the sign by the owners of cars. The sign is a notification for the presence of the terms of use of the garage and informed them that the use of the garage was the subject of the agreement terms between them and the owner Thornton v Shoe Lane Parking** said the judicially has transferred the same standard (the presence of notice) to establish the validity and legitimacy of browse-wrap contracts over the Internet. Thereupon, is enough for the individual to use the website to consider that as an act of acceptance of the terms of use, as long as there exists a notice indicating where the terms are situated, even if the website does not ask from the user to do any activity, other than the act of use, to express his acceptance. The decision of the Federal Court of California stated that the user always has the option to contract a site or change it if he does not like its terms††. Theoretically, the opinion is correct, but practically the user will not benefit from changing the site frequently, as all sites can include similar conditions (Kelley, 2013).

Initially, there was no difficulty in extending the scope of traditional contract rules, on shrink wrap, click-wrap agreements. On the contrary, in browse-wrap agreements, the courts had to assume that the user read the terms even if they did not do so, and therefore he was bound to it. It was found that the best Legal solution is to draw on the provisions of the adhesion agreement, to escape the necessity of the actual convergence of acceptance, in browse-wrap agreements. If any conditions may prejudice the rights of consumers, these conditions can be subject to judicial control, and the principles of justice. Once again the metaphorical trend was unable to deal with the problems of the actual exchange of will in digital licensing contracts.

Litigation regarding disputes relating to agreements click-wrap has continued, and decisions on the validity and legitimacy of those contracts were based on the jurisprudence of the pro CD case as in the case of Tony Brower v. Gateway 2000, Inc. Since the user has clicked on the acceptance icon, indicating his acceptance of the terms of use of the Microsoft Digital License Agreement, he is as binding as Caspi vs The Microsoft Network. The court has also decided the validity and legitimacy of the digital license contract click-wrap, when the user pressed the acceptance icon, declaring his acceptance of the terms of the agreement, even if he had not already read the terms or knew the condition of the

---

* https://law.justia.com/cases/federal/district-courts/FSSupp2/245/913/2514874/  
†† https://www.australiancontractlaw.com/cases/thornton.html

† https://casetext.com/case/effron-v-sun-line-cruises-inc-2  
†† https://bit.ly/2TNMqyk

---

** https://www.lexisnexis.com/community/casebrief/p/casebrief

††† https://www.pollstar.com/case/105418922
arbitration secured therein, as in the Groff v. America Online. Moreover, he will not have the right to terminate the contract, as long as he has signed the agreement by pressing the acceptance icon, as in the case of Hotmail Corporation v. Van Money Ple, Inc. In this case, pressing the acceptance icon was likened to the physical signing of the paper contract.

5.5. The metaphorical trend fails to interpret digital licensing contracts

Failure of the transmission of the problem of the user not reading the contract terms of the digital environment dates back to the time when the US judiciary was obliged to resort to the implicit expression. The latter is based on the assumption that all conditions are agreed upon as in the adhesion contracts. Accordingly, those contracts were judged as valid and legitimate because the individual has used the website even if he did not read it as long as the site has provided a notice indicating a link to the location of terms for the user which is located on the home page of the site. Therefore, the user believed that his acceptance or refusal of the contractual terms is the same as those contracts have no longer given the user the traditional warning function to read the conditions. Indeed, the individual felt the feasibility of use without having contractual obligations as he must execute as in the physical world. We will move, now, to the functional direction to see how it explains license contracts.

6. Interpretation of licensing contracts according to the functional direction

The US judiciary has obliged the user to read the terms of the license contract, regardless of whether or not the average person (Canino, 2016; Becher and Zarsky, 2015) understands its terms. This obligation depends on the existence of sufficient notice of the terms by notifying the user of a binding agreement. A sufficient note can either be real or inferred. The possibility of inferring the presence of the note depends on the way it is presented to the user, and what may be written in it, such as writing (I agree to the terms of use of the site), or (by clicking here you have accepted the terms of use of the site). We find that this obligation on the user gives the opportunity for business owners to include what they want in the terms, even if it is unfair to the rights of the consumer. The latter may find it difficult to read the terms for multiple reasons, such as the long-time that he may take to read it, or because of the way the terms are written, which is often unclear and written in a color that is not distinct from the rest of the page. Furthermore, the time when offering these terms to the consumer must be taken into account, whether before or during the completion of the transaction (Daiza, 2018; Ben-Shahar, 2009). More importantly, it provides the user with an icon that allows him to bypass the reading of the terms, and continue to use the site very easily. This makes us admit to the necessity of making sure if the user has read the terms actually and not just supposing that.

In this vein, there are conditions that suit the digital environment but have no counterpart in the physical environment. Therefore, they are strange for the user to understand and cannot be treated like traditional conditions in paper contracts, which are supposed to be assented to, without actual knowledge as the terms and conditions such as collecting personal data or photos uploaded and shared with other companies (attorney). This system is completely different in Internet law from civil service laws in traditional Arab legislation, as well as the requirement to consent to the inclusion of cookies programs on the user’s device and to access the user email by the service provider and placing advertisements therein. In addition to the condition of consent to change the terms of use at any time and maybe without the user’s consent. So how can it be assumed that the user has read those terms, informed of, and agreed to in accordance with the terms of the traditional contract? This has proved the failure of Article 2 of the UCC law as well as the inadequacy of UCITA law as well as the inadequacy of the traditional contract rules in Arab legislation in the application of rules on the licensing of digital contracts and its terms.

For all these reasons and others, it was proved to be insufficient to apply the traditional rules of the contract, in the interpretation of digital licensing contracts (metaphorical direction). Thus, supporters of renewal tended to adopt a functional direction in the interpretation of digital licensing agreements. This direction adopts the introduction of a new concept that must be taken into account when concluding licensing contracts, by giving the technology a regulatory function like law and contract.

6.1. The concept of the functional direction in the law of the Internet

This direction is still in its beginning as it admits the need to recognize the differences between physical and digital environments, and that the Internet environment should be considered as a means of communication between different computer networks. This means that this trend does not include any storage of digital data which is not in case of correspondence to the networks that connect them to the Internet. The technical and human nature of the latter permits the existence of an interactional relation between technology and the contract that regulates human transactions on the internet.

In order to define the concept of the functional direction, the important role of technology in the regulation of contracts within the digital environment must be recognized. Added to that, the regulation of the digital environment will not be only for the law and the contract, but also for their technological dimension. According to internet law, the traditional requirements of the contract must be
developed to meet the aspects of the digital environment. Thereupon, we must make use of digital technology to fulfill the function of the contract, which aims to create obligations on both parties, businesses, and the user.

For instance, we must not subject the way of concluding the license contract in accordance with the rules of the traditional sales contract, which requires offer and acceptance based on negotiation. Conversely, we must recognize the specificity of licensing contracts, which are submitted in digital form, presented on digital materials, and done on digital pages. This means that digitalization has developed the concept of formalism necessary to conclude contracts. In fact, digital contracts have become formal contracts that can be concluded only through digital pages without a physical intermediary. So if digital contracting is inevitable in a standardized form, then at least the digitalization must be used in a way to meet the general requirements for a valid contract binding to the parties (Livingston, 2011) in order to make the license contracts valid contracts.

6.2. Notice and license contract

Talking about the notice requires questioning whether the user has received a clear notice of the terms of the license agreements or not. This in itself requires the need to explore the concept of independence between transmitting the notice about the existence of terms and the acceptance of them. This means that pressing the icon that indicates where the terms exist on the site should not be considered as an acceptance of them. In fact, the US judiciary upheld the validity of the digital license contracts, following the judge's opinion on the validity and legitimacy of shrink wrap paper licensing agreements in the Pro CD case. In the past, in paper licensing agreements shrink wrap the judiciary obliged the consumer to read the license terms, after having verified that the seller of the software version has given him a notice, stating that he must read the terms and conditions and that by opening the plastic wrap he has agreed to the terms. As a result, achieving the two requirements namely, the presence of a notice to the location of the terms and the way of expressing acceptance, as well as the independence between the two requirements which provides a clear acceptance (Kim, 2013).

In contrast, in the digital licensing agreements of the type of browse-wrap, the judiciary has decided its validity and legitimacy, as the user has accepted the terms of use of the site without explicit expression by clicking on the icon of the notice and considered this act as an implicit acceptance. However, it is not enough to provide an icon on which the user agreements are written, without clarifying that by clicking on this icon, it will be considered as an acceptance of the terms of use of the site. Thereupon, the site has incorporated the requirement of the notice, with the requirement of expressing the will, as if it does not want the user to read the terms nor know that there is a real contract to be required later. Meanwhile, Thanks to digital technology it becomes easier for the owners of the sites if they want to provide an icon that draws the attention of the user to the necessity to read the terms of the license. This is because there are certain obligations that will be imposed on the user to achieve and which may relate to his privacy, his data, and the law that must be applied.

The burden of clarifying the conditions should be imposed on the offeror, as he should make use of the digital to highlight and enhance the functional role of the signature (Ayres and Schwartz, 2014) as to warn the user of the need to read the conditions before using the site. For example, the site may ask the user to click on a written icon, (the terms of the contract between you and the site reviewed), and then on another icon to agree to the terms of use of the site that he has read. Thus, the site obliged the user not to violate it by allowing him to click only once to read the terms, and once again to confirm and make sure about his explicit acceptance.

The judiciary must force the website owners to use the technology to clarify the importance of the form of the contract, to present the terms in a clear way, to make it accessible, readable, request the user's consent individually, and specifying any conditions that may prejudice his rights (Kim, 2013). The site must not merely merge all that in an ambiguous way in the contractual terms; in return, the user is obliged to read the terms after he has learned that he has entered into a binding contract and will be accused if he violates one of the conditions (Hart, 2014) according to the rules of the contract and not the criminal laws.

In addition, a notice about terms and conditions and their location can be sent to the user by e-mail (Livingston, 2011) and even if the user did not see it, the e-mail sent from him proves that the notice was sent to him. As a result, the validity and legitimacy of the digital license contract can be achieved.

7. Results and conclusion

To conclude, we can say that the functional direction is still in its beginning, to discuss what supports the idea of making technology one of the means of organization, besides the contract and the law, as we have great technical expertise. The latter can cooperate with the men of jurisprudence, the judiciary, and legislation in our Arab countries to adapt technology to help the contract and the law finding a balance between consumer rights and the owners of literary works in the digital environment.

Indeed, we have the example of the US Consumer Contract Law reform project presented to the American Law Institution that may help in setting legal rules to control digital License Contract transactions*. Upon this, we can review the most important legal and technical requirements to help to put rules that regulate the digital contracts in

* https://www.ali.org/projects/show/consumer-contracts/
Egypt and to solve the problem of the consumer not reading the digital license terms, and we will show them as follows:

**First: The Legal Requirements:**

- The necessity of enacting new legal rules regulating digital licensing contracts within Egyptian legislation independent from traditional ones.
- The legal requirements for the validity and enforceability of all types of digital licensing agreements are summarized against it parties, which is in line with the American Law Institute project of the principles of software contracts law and similar to it the draft of the Common European Framework of Reference, in the following four requirements:
  1. The need for the user to get sufficient notice of the location of the conditions*
  2. The need for the user to have a real opportunity to review the conditions and allow for retention and printing
  3. The need for the user to get sufficient notice that requires him to take a certain positive action to express his acceptance of the terms of the contract
  4. The user has already expressed his acceptance

**Second: The Technical requirements:** These legal requirements in the way they are implemented, are not sufficient to achieve the validity and legitimacy of such contracts, but it must put a warning note to the user for the need to read the terms and not just lay down the duty to read it on him, in order to strengthen the warning function to read and sign the conditions, including:

  1. Any site or company must provide notice for the need to read the terms in a clear, large, and striking way through a different color from the rest of the colors of the home page, and it must be the first thing found by the consumer, before applying more and allow him to use the site.
  2. To provide an icon to the consumer which indicates that he does not want to read the terms and complete the download or progress in the use of the site. This importance of choice is obvious in allowing the user total freedom of either to read or not read and therefore there is no ambiguity about the fact that he read the terms or not.
  3. To provide an acceptance icon and a refusal icon, allowing the user the possibility of acceptance or rejection and in the latter case, he is not allowed to use the site.

Finally, we see the paramount importance of the role of researchers in the studies of Internet law by raising awareness about the digital contracts and the risks of the user not reading the terms that negatively affect some of his rights as a consumer.

**Acknowledgment**

The author gratefully acknowledges the approval and the support of this research study by Grant No.-7757 BA2018-3-9-F from the Deanship of Scientific Research at Northern Border University, Arar, KSA.

**Compliance with ethical standards**

**Conflict of interest**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

**References**

Andrade FCP, Novais P, and Neves (2004). Issues on intelligent electronic agents and legal relations. In: Cevenini C (Ed.), The Proceedings of the LEA 2004-Workshop on the Law of Electronic Agents: 81-94. Gedit Edizioni, Roma, Italy.

Ayres I and Schwartz A (2014). The no-reading problem in consumer contract law. Stanford Law Review, 66: 545-609.

Barnhizer DD (2005). Inequality of bargaining power. University of Colorado Law Review, 76: 139-241.

Becher SI and Zarsky T2 (2015). Online consumer contracts: No one reads, but does anyone care? Comments on Florencia Marotta-Wurgler’s studies. Jerusalem Review of Legal Studies, 12(1): 105-120. https://doi.org/10.1093/jrls/jbv005

Ben-Shahar O (2009). The myth of the ‘opportunity to read’ in contract law. European Review of Contract Law, 5(1): 1–28. https://doi.org/10.1515/ERCL2009.1

Canino E (2016). The electronic sign-in-wrap contract: Issues of notice and assent, the average internet user standard, and unconscionability. UCDL Review, 50: 535-571.

Daiza H (2018). Wrap contracts: How they can work better for businesses and consumers. California Western Law Review, 54(1): 201-239.

Davis NJ (2007). Presumed assent: The judicial acceptance of clickwrap. Berkeley Technology Law Journal, 22(1): 577-589.

EESL (2004). Egyptian Electronic Signature Law No. 25 of 2004. Available online at: https://lawyeregypt.net/

Gatt A (2002). Electronic commerce-click-wrap agreements: The enforceability of click-wrap agreements. Computer Law and Security Review, 18(6): 404-410. https://doi.org/10.1016/S0267-3649(02)01105-6

Gautrais V (2003). The colour of e-consent. University of Ottawa Law and Technology Journal, 1: 189-212.

Grusa BL (1997). Contracting beyond copyright: ProCD, Inc. v. ZEIOENBERG. Harvard Journal of Law and Technology, 10(2): 353-367.

Hale W (2000). The origin of click-wrap: Software shrink-wrap. Available online at: https://www.wilmerhale.com/en/insights/publications/the-origin-of-click-wrap-software-shrink-wrap-agreements-

Hart DK (2014). Form and substance in Nancy Kim’s wrap contracts. Southwestern Law Review, 44: 251-265.

Hayes DL (1993). Shrinkwrap license agreements: New light on a vexing problem. Hastings Communications and Entertainment Law Journal, 15 (3): 653-670.

* https://dockets.justia.com/docket/circuit-courts/ca4/12-1245
Kelley C (2013). Old school “wrap”: Exploring traditional contract doctrine and developing law that can serve to prevent websites from exploiting online consumer data. Partial Fulfillment of the Requirements of the King Scholar Program, Michigan State University College of Law, Lansing, USA. Available online at: https://www.law.msu.edu/king/2012-2013/Kelley.pdf

Kim NS (2013). Wrap contracts: Foundations and ramifications. Oxford University Press. Oxford, UK.

Kim NS (2014a). The wrap contract morass. Southwestern Law Review, 44: 309-325. https://doi.org/10.1093/acprof:oso/9780199336975.003.0005

Kim NS (2014b). Exploitation by wrap contracts—Click ‘agree’. California Bar IP Journal, New Matter, 39(2): 10-17. https://doi.org/10.1093/acprof:oso/9780199336975.003.0003

Kim NS (2016). Wrap contracting and the online environment: Causes and cures. In: Rothchild JA (Ed.), Research handbook on electronic commerce law: 11-34. Edward Elgar Publishing, Cheltenham, UK. https://doi.org/10.4337/9781783479924.00010

Kunz CL, Ottaviani JE, Ziff ED, and Moringiello JM (2003). Browse-wrap agreements: Validity of implied assent in electronic form agreements. Business Lawyer, 59: 279-312.

Livingston JS (2011). Invasion contracts: The privacy implications of terms of use agreements in the online social media setting. Albany Law Journal of Science and Technology, 21(3): 591-637.

Manap NA (2008). Enforceability of database licensing agreement: A comparative study between Malaysia and the United States of America. Journal of Politics and Law, 1(3): 102-117. https://doi.org/10.5539/jplv1n3p102

Marotta-Wurgler F (2009). Are “Pay Now, Terms Later” contracts worse for buyers? Evidence from software license agreements. The Journal of Legal Studies, 38(2): 309-343. https://doi.org/10.1086/596040

Mohammed KK (2014). Positive in contract compliance. Al-Mouhaqiq Al-Hilly Journal for Legal and Political Science, 6(1): 367-401.

Moringiello JM (2003). ‘Paper world’ Analogies to web site terms and conditions: Travel tickets and other similar forms. ABA Section of Business Law eSource, 2(2): 1-7.

Nimmer RT (1999). Images and contract law—What law applies to transactions in information? Houston Law Review, 36(1): 1-59.

Spooner SJ (2001). The validation of shrink-wrap and click-wrap licenses by Virginia’s uniform computer information transactions act. Richmond Journal of Law and Technology, 7(3): 27.

Sterkin SD (2004). Challenging adhesion contracts in California: A consumer’s guide. Golden Gate UL Review, 34(2): 285-324.

Szwak DA (2002). Uniform computer information transactions Act [U.C.I.T.A.]: The consumer’s perspective. Louisiana Law Review, 63(1): 27-51.

UNCITRAL LAW (1996). The uncitral law of electronic commerce issued in 1996. Available online at: https://unctalun.org/sites/unctalun.org/files/media-documents/unctral/en/19-04970_ebook.pdf

Vault (1988). Vault Corp. v. Quaid Software, Ltd., 847 F.2d 255 (5th Cir. 1988). Available online at: https://cyber.harvard.edu/ialaw/Contract/vault.htm