

THE HISTORY OF LEGAL THEORIES IN E-CONTRACT

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Abstract

This paper is the study of how individuals and businesses develop and construct legal agreements through electronic means. E-contract works faster in order to promote certain outcomes, but can also contain a level of legal and moral hiatus stemming from the nature of the contract and the distance of the parties. This paper describes the history of legal theories apply to the formation phase of e-contract, and not contract per se. It begins with e-contracting and follows with legal theories that recognize legal enforceability. It then discusses essential legal requirements for e-contract formation resulted from these legal theories.

Keywords: e-contract, legal history, e-contract formation

INTRODUCTION

E-contracting

E-contracting, as referred by Xu & de Vrieze (2009), is not a new concept. The history of e-contracting can be reviewed from legal and technology aspects. Over the last twenty years or so, a growing body of research in artificial intelligence has focused on the representation of legislation and regulations (Sergor 1991). Further, Gardner (1987) has developed contract formation rules. Her work concerns legislation about the nature of exchanges that lead to contractual relations. Xu & de Vrieze (2009) further stressed that, the law regards contracts as collections of obligations; research in this area includes automated inference methods, which are intended to facilitate application of the theory to the analysis of practical problems. The purpose of a legal e-contracting system is to clarify and expand an incomplete and imprecise statement of requirements into a precise formal specification.

History

In the early 1990's, the development of EDI (Electronic Data Interchange) was a significant movement for electronic commerce. EDI requires an agreement between trading partners that not only dictates a standard data format for their computer-to-computer communications, but also governs all related legal issues of EDI usage. In 1987, the first set of EDI rules was named Uniform Rules of Conduct for Interchange of Trade Data by Teletransmission (UNCID, 1987). In 1990, the American Bar Association (ABA) published a Model Trading Partner Agreement and Commentary together with an explanatory report (Winn, J.K. & Wright, B. 2001). In 2000, IBM

submitted to OASIS (for standardization) the first example of an XML-based EDI TPA language which is called Trading Partner Agreement Markup Language (tpaML). While the EDI standard introduced efficient communication channels between companies, its implementation was not widely accepted due to its high installation costs, lack of flexibility and technological limitations (Raman, 1996). With the development of the Internet, electronic contracting began to be interpreted in broader terms. In this new view, e-contracts are not only used as a legally binding agreement between a buyer and seller, but they can also be used across different workflow systems to cross different organizational business processes (Koetsier, Grefen, & Vonk, 1999), (Kafeza, Chiu and Kafeza, 2001), (Cheung, Chiu & Till, 2002) to integrate different web services (Cheung, Chiu & Till, 2003) (Chiu *et al*, 2002). E-contracting has become synonymous for business integration over electronic networks. (Xu & de Vrieze, 2009).

Electronic contracts are created during online buying and selling on electronic markets. Electronic markets are platforms, which offer support for market transactions for online selling or buying of goods and services (Schmid, 1999). There are no special rules for forming a contract over the internet. However, whether the business is trading on-line or not, it is almost certainly affected by the E-Commerce Regulations which came into force in the UK on 21st August 2002. They cover more than just e-commerce.

The Regulations, properly called the [Electronic Commerce \(EC Directive\) Regulations 2002](#), implement the EU's E-Commerce Directive into UK law. The Directive was introduced to clarify and harmonise the rules of online business throughout Europe with the aim of boosting consumer confidence. According to the [Electronic Commerce \(EC Directive\) Regulations 2002](#), a person who is providing an information society service must provide the recipient of that service, and any relevant enforcement authority, in a form and manner that is easily, directly and permanently accessible, the following information:

- the name of the service provider;
- the geographic address at which the service provider is established;
- details of the service provider, including e-mail address;
- whether the service provider is registered in a trade or similar register available to the public, details of the register in which the service provider is entered and registration number;
- where the provision of the service is subject to an authorisation scheme, the particulars of the relevant supervisory authority
- where the service provider exercises a regulated profession: the details of any professional body or similar institution; his or her professional title and the Member State where it has been granted; and a reference to the professional rules applicable and the manner in which the service user can access them.
- where the service provider undertakes an activity that is subject to VAT, the identification number referred to in Article 22(1) of the sixth VAT Directive 77/388/EEC needs to be displayed.

Although there exist different descriptions for the e-contracting process (Milosevic and Bond, 1995), (Goodchild, Herring & Milosevic, 2000), the general e-contracting process includes two stages: contract establishment (contract formation) and contract enactment (contract performance or contract fulfillment) (Xu, 2004), (Angelov, 2005). This paper only focuses on the e-contract formation phase.

LEGAL THEORIES THAT RECOGNIZE LEGAL ENFORCEABILITY

The use of electronic means to complete business transactions rather than doing business face-to-face and exchanging paper-based documents is fast accepted. E-contract is any kind of contract formed in the course of e-commerce by the interaction of two or more individuals using electronic means, such as e-mail, the interaction of an individual with an electronic agent, such as a computer program, or the interaction of at least two electronic agents that are programmed to recognize the existence of a contract. E-contract plays essential roles since the arrival of Internet to attract businesses and consumers with the promises of borderless new opportunities. Analyzed by Boss (2012) that, in the business and legal world, people asked whether electronic contracts were real and could transactions formed by electronic messages in an electronic or Internet environment be enforceable. In matters of law, people asked whether these paperless contracts could be introduced into evidence in the event of dispute. Those questions have been satisfactorily resolved, to a great extent, both on a national and international basis.

A key factor in that resolution was the work of the United Nations Commission on International Trade Law (UNCITRAL) 1966 and the adoption of the United Nations Model Law on Electronic Commerce in 1996. Boss (2012) further mentioned that, as early as 1985, UNCITRAL had called upon all national governments to review the legal barriers to electronic commerce found in writing and signature requirements of legal systems. Concluding that paper-based requirements combined with the lack of harmonization in the rules applicable to electronic commerce constituted a barrier to international trade, UNCITRAL undertook the preparation of legal rules on the subject in 1992. Its Model Law on Electronic Commerce could be viewed as the first stage in accommodating the law to the demands of electronic commerce. Drafted to facilitate electronic commerce by removing existing legal barriers and to do so in a technology neutral, non-regulatory manner, the provisions of the model law, and its companion, the United Nations Model Law on Electronic Signatures, provide the basic framework for the validity and enforcement of electronic contracts.

The Uniform Electronic Transactions Act (UETA) 1999, which was adopted by the National Conference of Commissioners on Uniform State Laws (NCCUSL) in 1999, guarantees that electronic transactions are just as enforceable as their paper counterparts. UETA provides that: "a contract may not be denied legal effect or enforceability solely because an electronic record was used in its formation." Furthermore, the European Directive For Electronic Signatures (EU Directive, 2000) has set up a framework for using electronic contracts in business.

In addition, Section 8 of the Electronic Communications Act 2000 facilitates electronic communications. Section 8 of the Act states that regulations may be issued to amend existing legislation for the purposes of authorising or facilitating the use of electronic communications or storage. In implementing Directive 2000/31/EC, the UK Government did not transpose Article 9(1) of the Directive, requiring Member States to ensure the legal requirements for making contracts do not create obstacles to the use of electronic contracts. The Government took the view that existing statutory requirements were capable of being fulfilled by electronic communications where the context in which they appear do not indicate the contrary. Section 8 of the Electronic Communications Act 2000 will be used to amend conflicting legislation in the event that existing legal requirements create obstacles to the use of electronic contracts or result in such contracts being deprived of legal effect.

E-commerce is built fundamentally on the use of electronic communications systems, mainly the Internet, which have challenged our laws and do not recognize either geographic or jurisdictional boundaries. The United Nations Commission on International Trade Law (UNCITRAL), established by the United Nations General Assembly by resolution 2205(XXI) of 17 December 1966, plays an important role in developing legal framework in pursuance of its mandate to further the progressive harmonization and modernization of the law of international trade by preparing and promoting the use and adoption of legislative and non-legislative instruments in a number of key areas of commercial law. Those areas include dispute resolution, international contract practices, transport, insolvency, electronic commerce, international payments, secured transactions, procurement and sale of goods. (Poggi, 2000).

In 1998, the United States recommended that UNCITRAL develop an international convention on electronic contracts based on the pre-existing principles of the Model Law on Electronic Commerce (MLEC) adopted by UNCITRAL in 1996. These principles include technological neutrality, national source neutrality, and party autonomy in the choice of applicable contract law and rules. In July 2005, the Convention on the Use of Electronic Communications in International Contracts (CUECIC) was adopted by UNCITRAL at its thirty-eighth session. The General Assembly of the United Nations later adopted CUECIC on November 23, 2005. The CUECIC remained open for signature by all nations until January 16, 2008. Signing the convention only indicates an intention to consider its ratification rather than consent to be bound by it. As of January 16, 2008, eighteen nations including China, Russia, Singapore, and the Republic of Korea had signed CUECIC. Unlike the International Sale of Goods (CISG), which applies to “contracts of sale of goods,” CUECIC applies to “electronic communications in connection with the formation or performance of a contract between parties whose places of business are in different states.” Therefore, CUECIC potentially applies to contracts for services, licenses of software, auctions, barter and other types of transactions, as well as sales of goods.(Poggi, 2000).

CONTRACT FORMATION PHASE

Some e-contracts have the legal status of digital documents. Depending on whether networks are used during the e-contract establishment stage, e-contracts can be created online (i.e. through networks), or electronically without networks. The collaboration in the contract formation phase can be asynchronous (e.g. by email) or synchronous (e.g. online collaboration). Moreover, the e-contracting process can be finished on a shared platform (e.g. e-marketplace) or be interconnected between contractual partners (Xu, L. & Paul de Vrieze, 2009). The steps in the formation of e-contract are basically the same with conventional contract, with some additional requirements necessary for the networking environment.

Essential Legal Requirements and Precautions

E-contract or electronic contract is an agreement created and signed by electronics means, which may be carried out in various ways such as through the exchange of email messages or by clicking on an icon on a website to indicate acceptance of the terms of the agreement. The formation and validity of e-contracts were governed by the same general principles established in common law and the same principles applied whether the contract is formed online or traditional paper-based. For e-contract to be valid and enforceable, it is necessary to satisfy all the usual requirements for contract formation. The elements are:

- (i) an offer made by the offeror to the offeree,
- (ii) the offer is accepted in unequivocal and unconditional terms by the offeree and an acceptance of the offer is communicated to the offeror,
- (iii) consideration is provided to support the contract,
- (iv) there is an intention to be legally bound on the part of both offeror and offeree and
- (v) each parties has contractual capacity to enter into legallybinding relations.

Offer... or Invitation?

One of the early steps in the formation of a contract lies in arriving at an agreement between the contracting parties by means of an offer and acceptance. The first step in contract formation involves an offer by one person (offeror) either to a specific person or to a class of persons (offeree). In the Internet context, the most obvious means traders make an offer are by email messages posted to recipients on a mailing list or by a statement on a website. Sorkin (2012) advised to exercise caution if mass email postings are made to mailing lists since such emails run the risk of being classified as “spam”, which is prohibited in many jurisdictions. Many traders advertise their goods and services on buttons, for example, “submit”, “I accept”, or “I agree” to indicate their intention to proceed with an online transaction. The usual question is whether the advertising of product or services available for purchase on a website constitutes an offer or merely an invitation to treat.

A distinction is made between an offer and an invitation to treat. The distinction is significant because if the online trader’s conduct amounts to an offer to supply goods or services, the trader is indicating their willingness to be contractually bound to any person who accepts the offer. On the other hand, if the advertisement is an invitation to treat, it invites potential customers to make an offer or enter into negotiations or dealings with the person issuing the invitation. Where websites are used for e-contract, the responses of website customers will usually constitute offers, which may be accepted or rejected by the online trader. A contract is not formed until the customer's offer is accepted by the online trader who issued the invitation. Amendments to the Electronic Transactions Acts in 2010 have clarified the position about what is an invitation to treat and what is an offer in e-contract transactions. They introduce a default rule that where a proposal to form a contract is made through electronic communications which are not addressed to specific parties and are generally accessible to persons making use of digital information systems, it is considered as an invitation to treat unless it is clearly intended to be an offer which will be binding on the offeror upon acceptance.

Adams v Lindsell [1818] 1 B & Ald, 681, was the first case which established the postal acceptance rule when the court had to decide the moment of contract formation by post. The court found that the parties were not sure about the time the acceptance had been communicated. The parties could not be aware of the communication as postal communication is normally subject to delay . This created a number of problems and has led to a formulation of the rule. The rule as accepted in the common law legal systems is: "where the circumstances are such that it must have been within the contemplation of the parties that, according to the ordinary usages of mankind, the post might be used as a means of communicating the acceptance of an offer, the acceptance is complete as soon as it is posted".

The second case was *Henthorn v Fraser* [1892] 2 Ch 27 at 33 where it was decided that the uncertainty regarding the moment of contract formation does not happen in the environment of direct communication or even in distance contracting where an instantaneous method of communication is used. In this kind of contracting, all parties are aware of contract conclusion and they do not face problematic issues such as delay or failure of transmission which occur in non-instantaneous communications. In contrast, the case of *Adams v Lindsell* [1818] 1 B & Ald, 681, adopted the rule to avoid "the extraordinary and mischievous" consequences which could follow if it were held that an offer might be revoked at any time until the offer was in the position of "accepting it had been actually received". (*Household Fire and Carriage Accident Ins. Co. v. Grant* (1879) LR Ex D 216 at 221). Another reason has been suggested for the validity of this rule, is that the offeror must be considered as having made the offer throughout the whole time that his offer is in the post, and therefore, the agreement between the parties is complete as soon as the acceptance is posted. (*Henthorn v. Fraser* [1892] 2 Ch.27, 31).

Acceptance and Communication of Acceptance

To create a valid e-contract, an unconditional communication of acceptance is required to be made in terms of the offer. The general receipt rule is that acceptance is effective when received. No conclusive rule is settled for e-contracting. The applicable rule of communication depends upon reasonable certainty of the message being received. A contract is formed at the time and place the offeree's acceptance is communicated to the offeror. Exceptions apply where offers are made to the world at large or where acceptance by the offeree's conduct is required or can be implied. Determining when an offer is accepted is important because the place of acceptance determines the jurisdiction in which the contract comes into existence. Uncertainties arise in the internet environment as to when acceptance by the offeree is effectively communicated to the offeror. In particular, is the contract formed when the offeree sends the communication accepting the offeror's offer, or when the offeree's communication is received and read by the offeror?

Online contracting typically involves the electronic communication of offers and acceptances over the internet in the form either:

- An exchange of email messages between the parties using the Simple Mail Transfer Protocol (SMTP) to compose and send messages, and Post Office Protocol (POP) or Internet Message Access Protocol (IMAP) to retrieve messages from a mail server; or
- Direct data communications through a web browser using the Hypertext Transfer Protocol (HTTP), such as where a customer completes an online order form and clicks a button to finalize the transaction.

Two broad approaches have been developed over the years to determine the time at which an offer is accepted:

- The instantaneous communication rule; and
- The postal rule, applying to non-instantaneous communications.

A series of telex communications between parties located in different jurisdictions in *Brinkibon Ltd v StahagStuhlund Stahlwarenhandels-gesellschaft mbH* [1983] 2 AC 34, was held by the House of Lords that when communication is instantaneous, acceptance will be effective at the time the communication is received, rather than when it is sent. The House of Lords endorsed the view of Lord Denning in *Entores Ltd v Miles Far Eastern Corp* [1955] 2 QB 327 at 333 that, for acceptance to be effective, the communication must be received by the offeror and the contract is made at

the place where the acceptance is received. There are differing views whether the instantaneous communication or the postal rule applies to contracts formed through acceptances sent by email and other web-based electronic communications.

Under the general principles of contract law, e-contracts will be formed at the time and place the acceptance is received by the offerer, which could be when it arrives in the offeror's web server, when the email enters the offeror's email inbox or when it is actually read by the offerer. On the other hand, if the postal rule were to apply to e-contracts, the contract would be formed when the acceptance is dispatched by the sender's clicking on the word "send" in an email program. To overcome these uncertainties, the website should contain statements addressing matters such as the time and place an offer is considered to be accepted, a specified method of acceptance, trader's rights to accept or reject offers and whether the online trader will notify acceptance of the offer.

Consideration

Consideration is a fundamental element that is generally met by agreement between the parties. It may be in the form of money or otherwise. There must be a clear sufficient consideration to support the transaction. Often, the offeror desires to bind the offeree to certain terms and conditions of a contract by enforcing consideration. There are issues about terms that are not disclosed until after the user has already agreed to go forward with the transaction and has tendered the required consideration. Boss (2012) acknowledged that there is a series of conflicting cases often at variance in different jurisdictions with inconsistent regulatory overlay. That often makes it difficult for businesses to determine with certainty at the outset of the transaction whether the particular terms in any of these types of agreements would be enforceable. Boss (2012) specified that this is particularly the case in the United States with regard to such terms as dispute resolution clauses, forum selection clauses, disclaimers of warranty and prohibitions on use of data. Some countries address these types of issues under the category of consumer protection. Directives in the European Union, referring to Boss (2012), govern what terms will be recognized in standard form contracts. Other countries, such as the United States have originally addressed these types of issues under the notion of manifestation of assent, so that the result is great uncertainty.

Intention To Enter Into Contractual Relation

There must be an intention to create legal relations and a person accessing an online supplier with intention to buy a product or service is generally assumed to be intending to contract. The parties must have common intention to enter into legal obligations. This intention may be implied from the subject matter of the agreement, but it may also be expressed by the parties. In social and family relations such an intention is not readily implied, while in business and commercial relations intention is not readily implied.

In the present scenario, once an item has been supplied and the price has been paid, the consideration is executed and the requirement is satisfied. Problems may arise at a time when the consideration is merely executory. This arises when the seller's computer has done no more than "promise" to supply that item. A key intention that lies behind such promises is, of course, the intention to be bound by that promise. In other words, the intention to fulfill the promise. This however, can be seen as a corollary to the intention to create legal relations and thus does not

require separate treatment. Clearly the involvement of an autonomous computer in the contract formation process gives rise to considerable doctrinal difficulties and hence the conventional laws with respect to the contract between two or more legal persons embodied.

When parties are engaging in an electronic transaction online, it is important to make sure customer know that the transaction is governed by the contract. And it will be necessary to ensure that customers are clear about the terms of a contract. As pointed out in *Specht v Netscape Communications Corp*(2002) 306 F 3d at 29, regardless of apparent manifestation of his consent, a customer is not bound by inconspicuous contractual provisions of which he is unaware, contained in a document whose contractual nature is not obvious.

Although it is clear that one can validly assent electronically, it is still not clear what substantive rules govern assent that apply to the typical modes of contract formation in an electronic environment such as shrink-wrap, click-wrap and browse-wrap. Formation phase still, at some points, consider the issues of rules accommodating paperless negotiable transfer documents, the extent of the terms of the agreement, the degree of consumer protection involving electronic environment and the occurrence of error in the contracting process.

There are three main types of transactions in the world of electronic contracting. First is a shrink-wrap contract (when purchasing off-the-shelf software), when the purchased product is received, it comes with additional terms and conditions in the packaging or in the accompanying documentation. Second is a click-wrap agreement, made at or before the time of purchase on a web site. The purchaser is required to click "I agree" before the transaction will continue, the installation will proceed or the user will gain access to the web site. In the third type, the browse-wrap transaction, the user will visit the pages of a web site. Somewhere on the web site, terms and conditions are posted that purport to bind anyone who uses the web site or its services. Although the shrink-wrap transaction has been around for some time and actually exists in a paper environment, the click-wrap and browse-wrap transactions are unique components to electronic commerce. All three types have raised fundamental questions regarding assent.

In the United States, the court that heard appeals of a leading case on shrink-wrap, *ProCD Inc. v. Zeidenberg* ProCD, 86 F.3d 1447, 1449 (United States, 7th Circuit Court, 1996), upheld the use of shrink-wrap as a means of binding a purchaser to contractual terms. The user had purchased software and the vendor argued that the purchase was subject to license terms found in the software box and presented on the screen at the time of use, which required the user to indicate his assent. Rejecting the user's argument that the contract was formed at the time of purchase and adopting what has now been dubbed a "rolling contract" theory, the court held the consumer was bound by the terms of the license, even though he had not seen them at the time of paying for the product. Intention is evidenced by the parties' compliance with offer, acceptance and consideration.

Contractual Capacity

The Internet has indeed raises complex technological issues which may render difficult any attempt to establish formation of a valid and binding contract. Legal concepts need to adapt to borderless electronic commerce and Internet's speedy and automated transactions. On top of that, element of capacity is also relevant. Parties without capacity to enter into a contract are not bound by the contract. Online contracts face problem of ascertaining the real contractual capacity of the parties involved. Since online contracts are not done face to face, it is hard to know whether

you are contracting with a minor, a corporation or party estopped by law or even, electronic agents. Parties who are considered to have limited legal capacity include minors, the intoxicated, the mentally ill and corporations. The problem with legal capacity is that the contract is electronic and the parties may never meet and may even be in different countries.

Electronic agents are where e-commerce transactions are automated that is, offers are made, acceptances are communicated and contracts are concluded by electronic agents in the form of specially programmed computers. The transaction may involve interaction between a person and the other party's computer or may take place between specially programmed computers without any direct human participation. For example, where a consumer makes an offer to purchase a book advertised for sale on a website, the acceptance of the offer to purchase, the processing of the credit card payment and arrangement for dispatch of the book to the purchaser are likely to be handled without any direct human involvement. Computer-to-computer electronic agents are also used in industrial procurement and supply chain management.

CONCLUSION

From an earlier stage, agreement between parties is legally valid if it satisfies the requirements of law regarding its formation. Classically, referring to legal theories, the formation of an e-contract is no different to the formation of a conventional contract. The general common law of contract and the doctrine of international law are legitimate sources to establish the formation of an electronic contract via the Internet although there are few fundamental differences between the two. The law has recognized contracts formed using facsimile, telex and other similar technology. Moreover, Malaysian Contracts Act 1950 and Electronic Commerce Act 2006 provide a legal framework to support and encourage businesses and consumers to use electronic commerce by providing that the law shall treat electronic and paper-based commerce equally.

It is important to note that the Internet is not a single communication channel. The Internet is a collection of separate communication channels used to communicate over the same physical connection. The result is different legal issues will apply to different individual communication protocols. As a result, the physical world laws can be matched to the corresponding situations created by each of the individual Internet protocols. In this manner, the same principles govern the process of contractual creation and formation, regardless whether the process is faster or not.

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