Removing Barriers to Expanding E-Commerce

Introduction

The total value of global e-commerce is expected to increase to $3.9 trillion by 2004, a twenty-fold increase from 1999.¹ This phenomenal growth has raised two significant concerns about the certainty of conducting business over the Internet. The first is whether agreements made over the Internet will be legally enforceable.² The second is the problem of authenticating electronic documents and records. The technological means to authenticate electronic records continue to develop, but many legal questions remain unanswered: what will the law recognize as valid authentication, and what benefits will this status confer?

Recent provincial legislative initiatives attempt to answer these questions. Ontario, Manitoba, Saskatchewan, Nova Scotia and the Yukon have already enacted electronic commerce legislation,³ and British Columbia, Quebec and New Brunswick are in the process of developing similar laws.⁴ Aside from minor variations, these provincial initiatives implement a model statute developed by the Uniform Law Conference of Canada (ULCC) in 1998 and 1999.⁵ Titled the Uniform Electronic Commerce Act (UECA),⁶ this model statute is influenced by the United Nations model e-commerce legislation, which set an internationally acceptable standard in 1996.⁷ The Canadian situation mirrors a growing international trend toward introducing legislation to facilitate the development of e-commerce.⁸

Legislative responses around the world take a variety of approaches to the problems raised by electronic transactions. A recent international study noted three general categories of e-commerce legislative approaches.⁹ First, several older initiatives adopted a ‘prescriptive’ approach, enacting stringent guidelines pertaining to the use of specific technologies. Second, other legislation utilizes a ‘two-tiered’ approach, granting basic legal benefits to all electronic authentication techniques, and conferring additional legal benefits or presumptions upon documents authenticated by approved methods. Third, the ‘minimalist’ or ‘enabling’ approach makes no effort to enact specific standards for authentication techniques, focusing instead on...
the legal effect of electronic documents.

Canada’s model legislation, the UECA, follows the minimalist approach. It does not set out specific criteria to which all documents must comply to be considered authentic. Rather, it begins with the governing principle that all electronic information is legally valid, and then removes existing legal barriers that are in conflict with that rule. These barriers are found both in the common law of contracts and in statutory ‘writing’ requirements.

The Governing Principle

The governing principle of the UECA, as stated in section 5, is that “Information shall not be denied legal effect or enforceability solely by reason that it is in electronic form.”

Understanding the double negative structure of this provision is key to understanding the UECA. The UECA does not confer any special benefits on information in electronic form, regardless of its reliability. Instead, it seeks to eliminate prejudice against any electronic form of communication. While information in an electronic form, like information on paper, may have no legal effect for many reasons, this provision prevents a party from claiming that the document is invalid by the mere fact that it was conveyed electronically. In other words, electronic transactions are to be treated the same as their non-electronic equivalents. The remainder of the UECA deconstructs the legal barriers that would otherwise impede electronic transactions and e-commerce.

Removing Contract Law Barriers

Contract law has been successful at adapting to new communications technologies as they have developed. Thus, communication
of offer and acceptance are valid when sent through the mail\textsuperscript{11} or transmitted by facsimile machine.\textsuperscript{12} The adoption of paperless electronic communications, however, has raised new problems that the common law had not previously addressed. These include the use of non-traditional means to express offer and acceptance, the use of computers as intermediaries and the use of electronic authentication techniques.

At common law, evidence of offer and acceptance could be oral, written, or communicated by the action of one of the parties. Some electronic communication methods, however, do not fit neatly into these categories. Clicking on an icon on a website, for example, is an action that immediately results in the user sending an electronic message to the computer system of the host. The legal effect of this message-producing action has no directly analogous common law precedent. Section 20 of the UECA clarifies the common law by specifically permitting an offer, acceptance, or other matter material to the contract to be expressed in any of three ways.\textsuperscript{13} First, the communication may be made by means of an electronic document — an email message, for example. Second, a party to the contract can use an “action in electronic form”, which includes clicking on an icon on a computer screen. Third, the UECA creates a broad category of “otherwise communicating electronically in a manner that is intended to express the offer, acceptance or other matter.” This residual category allows for a broad range of current and future technologies to be used, including touching a number on a touch-tone phone, pressing a button on a handheld wireless device or giving a verbal command to a speech recognition device. The wording of this provision ensures that the expressed intent of the parties, rather than the particular communication medium, is relevant in determining whether a contract has been formed. The focus on the intent rather than the medium is true to the neutral, barrier-dismantling approach of the UECA.

Consumer groups in the United States have expressed concern that similarly worded U.S. legislation creates legal obligations where none existed before.\textsuperscript{14} This concern is probably unfounded, since courts have enforced such contracts on common law principles alone. In Rudder v. Microsoft,\textsuperscript{15} the Ontario Superior Court upheld the validity of a software licensing agreement that a consumer agreed to by clicking an icon labeled “I agree” while the contractual terms were displayed on the screen. Rejecting the plaintiff’s attempt to escape certain terms of the contract on the grounds that he did not assent to them, the judge concluded, “on the present facts, the Membership Agreement must be afforded the sanctity that must be given to any agreement in writing.”\textsuperscript{16} In light of this case, the provisions of the UECA appear not to create new legal obligations. Courts had already been willing to adapt the common law of contracts, where necessary, to enforce reasonable electronic contracts. The UECA simply creates greater certainty by ensuring consistent

\textsuperscript{11} Adams v. Lindsell (1818), 1 B. & Ald. 681.


\textsuperscript{13} UECA, supra note 6, s. 20(1).


\textsuperscript{16} Ibid. at para. 17.
treatment for all present and future technologies through which contracts are formed.

A conceptually more difficult problem to fit into the common law of contracts occurs where one or both parties to the contract use a computer as an intermediary. When selling goods through a web site, for example, a vendor will program its server to offer to sell a particular item to a prospective purchaser who expresses interest in the item. Similarly, a trader in securities may set a computer to monitor a share price and sell a given number of shares as soon as the price reaches a determined level. In both of these situations, when the other contracting party communicates the offer or acceptance, the first party may not be aware that the transaction has been completed. The issue becomes whether there was a meeting of minds sufficient to form a contract despite the lack of a temporal nexus.

The UECA solves this problem by introducing the concept of the “electronic agent”, meaning any electronic means to initiate or respond to an action without human review. Quite simply, the UECA allows a contract to be formed by the interaction of a person and an electronic agent, or by the interaction of two or more electronic agents. In effect, the intention of the person using the electronic agent is expressed in the instructions the person gives the agent, and remains valid until those instructions are changed.

The UECA also contains special provisions to deal with a “material error” made by persons dealing with an electronic agent. If the electronic agent does not allow the person to review and correct the transaction before it is made final, the person may escape the agreement by notifying the other person of the mistake and returning any consideration. If a company is purchasing computer systems from a vendor’s website, for example, and mistakenly orders 55 rather than 5, the web site should provide at least one chance for the purchaser to correct the transaction before it is made final. If it does not, and the company receives 55 computers before the mistake is noticed, the purchaser may notify the vendor and return the computers, and will not be obligated to pay for them. This consumer protection provision will increase, rather than decrease, certainty in contracting by encouraging all parties using electronic agents to include adequate review mechanisms into their programs.

Although web-based e-commerce sites are the most obvious current example of the use of electronic agents, the UECA definition is broad enough to cover any technologies that initiate communication or respond to another person’s communication without human intervention. This technology neutral approach will allow emerging and yet undiscovered technologies to be given immediate legal recognition as they gain acceptance.

One of the most frequently discussed aspects surrounding the

---

17 Supra note 6, ss. 19, 21.
18 Ibid., s. 21.
19 Ibid., s. 22.
emerging e-commerce framework has been legal recognition of authentication techniques. The UECA approach to authentication techniques in commercial relations is relatively straightforward compared to legislative approaches in other jurisdictions.20 Aside from situations in which a signature is specifically required by law,21 the UECA does not mention authentication. In the case of a private contract to which no statutory requirements apply, the use of authentication technologies is covered by the governing principle of the UECA,22 and by the general contracting provision which states that any matter “material to the formation or operation of a contract” may be expressed electronically.23 In other words, where no statutory requirements are involved, parties are free to use any authentication mechanism they agree upon, and feel comfortable with, in the context of the transaction.

Removing Statutory Barriers

In addition to the challenges faced in adapting contract law to accommodate electronic communication, the UECA addresses provincial statutory requirements that may conflict with the general provision, giving legal validity to electronic communication. Many business transactions are subject to statutory requirements which, interpreted literally, could prevent their translation into electronic media. Numerous provincial statutes require documents to be “in writing”, to be “signed” by one party, or in other ways suggest paper-based communication.24 In most of these cases, however, the intent of the statute is not necessarily to have the document on paper, but to take advantage of one or more of the benefits that particular requirement provides. The UECA removes these statutory barriers to electronic communication by allowing electronic media that fulfill the purposes intended by each paper-based requirement. This approach is known as the “functional-equivalent” approach.25

Basic writing requirements translate fairly easily to their electronic equivalents. Where a statute simply requires something “in writing”, for example, an electronic record must simply be “accessible for future reference” to comply.26 Where one party must “provide” another with a document in writing, the UECA adds the further requirement that the electronic information must be “capable of being retained”.27 Information posted on a corporate web site, for example, would usually meet a requirement that the information be in writing, but would not meet a requirement to provide the information in writing to another party unless it was in a form in which that party could transfer it to his or her own computer for storage.

Other statutory requirements apply to electronic information with somewhat greater difficulty, due to inherent characteristics of electronic
communication. For example, where a law requires an “original” document, a literal interpretation would exclude almost all forms of electronic information. Even the most securely encrypted electronic document, when transmitted from one device to another, is sent as a copy of the original document. The UECA recognizes that the purpose of requiring an original document is to verify that the information contained therein is the same as it was at the time of its creation. Thus, it deems an electronic document to be original “if there exists a reliable assurance as to the integrity of the information contained in the electronic document from the time the document to be presented or retained was first made in its final form”\(^{28}\). In a similar vein, where a law requires more than one copy of a document to be provided, the recipient of the document can easily reproduce it and may not wish to receive multiple electronic copies of the document. Providing a single electronic document, therefore, fulfills such a requirement under the UECA.\(^{29}\)

Where the law requires a document to be signed, the UECA contemplates the use of electronic signatures. Rather than setting stringent reliability standards, however, the UECA simply allows electronic signatures where they achieve the same purposes as their pen-and-ink counterparts. Since the basic function of a signature is simply to link a person with a document,\(^{30}\) an electronic signature is defined as information “created or adopted in order to sign a document” that is associated in some way with the person signing the document.\(^{31}\) The combination of the intent of the signer and the UECA of affixation or association sufficiently achieve the functions of a written signature in most situations.

In some cases, however, the public interest may demand a higher standard of reliability for certain classes of documents. In such cases, the UECA as drafted allows the provincial government to make a regulation that an electronic signature relating to a document of that particular class must meet a reliability standard.\(^{32}\) The requirement is twofold: the electronic signature must reliably identify the person signing the document, and it must be reliably associated with the document. This higher standard is not a departure from the functional equivalence approach, but rather recognition that in certain circumstances the statutory signature requirement intends to create a lasting positive identification of the signer. One class of documents where such a regulation may be enacted is contracts relating to the disposition of land, which in most provinces are not enforceable unless in writing and signed by the person charged.\(^{33}\) Because of the importance of maintaining a high standard of reliability in real property contracts, provincial governments that have adopted the UECA will likely enact regulations stating that an electronic signature pertaining to such a contract must meet the reliability requirements.

\(^{28}\) Ibid., s. 11(1)(a).

\(^{29}\) Ibid., s. 14.


\(^{31}\) UECA, supra note 6, s. 1(b).

\(^{32}\) Ibid., s. 10(2).

\(^{33}\) See e.g. Law and Equity Act, R.S.B.C. 1996, c. 253, s. 59(3).
Conclusion

Rather than setting up a new legal framework for electronic commerce, the UECA takes a minimalist approach. It does not grant special benefits to certain classes of electronic information, but rather sets out the simple rule that information in electronic form should not be prejudiced. To achieve this result with greater certainty, the UECA addresses specific concepts in contract law, easing their translation into the electronic realm. In addition, the UECA specifically allows electronic information to satisfy statutory writing requirements that were never intended to exclude electronic information. This enabling, barrier-removing approach achieves greater certainty in the e-commerce realm while allowing parties the freedom to use whatever channels of communication they find most desirable. The provinces’ adoption of the UECA model should facilitate the continued growth of e-commerce in Canada.