# 1

# The law of electronic commerce

Electronic commerce refers to all commercial transactions based on the electronic processing and transmission of data, including text, sound and images. This involves transactions over the internet, plus electronic funds transfers and Electronic Data Interchange (EDI).

On one level, electronic commerce began in the mid-1800s, when the first contract was entered into using the telegraph or telephone. However, the expression 'electronic commerce' is typically used in connection with the expansion of commerce using computers and modern communications, most notably the internet and cyberspace. The development of security protocols has aided the rapid expansion of electronic commerce by substantially reducing commercial risk factors.

The advantages of electronic commerce to commercial parties include ease of access, anonymous browsing of products, larger choice, the convenience of shopping from the computer and enormous efficiencies. The disadvantages include the potential for invasion of privacy and security risks. There are also questions regarding jurisdiction, standards, protection of intellectual property, taxation, trade law and many other issues. Nevertheless, acceptance of electronic products and services has grown substantially.

Security is of paramount importance in electronic commerce. Public key cryptology was invented in response to security concerns and has revolutionised electronic commerce. Communications are now relatively secure: digital signatures or certificates permit the authentication of the sender of a message or of an electronic commerce product.

This book addresses legal issues relating to the introduction and adoption of various forms of electronic commerce. Whether it is undertaking a commercial transaction on the World Wide Web, sending electronic communications to

enter into commercial arrangements, downloading material subject to copyright or privacy concerns about our digital personas, there are legal considerations. Parties must consider the risks of electronic commerce, whether electronic writing and signatures are equivalent to paper writing or wet ink signatures; which jurisdiction and which law governs a dispute between parties, if the parties are in different countries from the servers. This book addresses intellectual property, cybercrime, surveillance and domain name usage and disputes.

## Electronic commerce law

An examination of the law of electronic commerce must begin with a fundamental understanding of the law and its role in society as it has evolved over the centuries. It necessitates understanding terrestrial norms, social behaviour and the application of the rule of law. These principles must be applied to new circumstances, infrastructure and contexts, even if this challenges such foundations of society as sovereignty and human rights. It is an exciting time to be charting the course and watching as legislators, courts, merchants and the populace wrestle with this new epoch. In the 18th and 19th centuries there may have been a similar opportunity to observe principles evolving, as there were new developments in relation to consideration (in contract law) and the postal acceptance rule (also in contract law), and as principles of equity matured. But such development was at a snail's pace compared with the eruption of the law of electronic commerce over the last two decades.

The majority of legal problems arising through the use of electronic commerce can be answered satisfactorily by the application of standard legal principles. Contract law, commercial law and consumer law, for example, all apply to the internet, email communications, electronic banking and cyberspace generally. However, cyberspace gives rise to unique and unusual circumstances, rights, privileges and relationships that are not adequately dealt with by traditional law. This has necessitated legislation, international agreements and a plethora of cases before the courts to resolve myriad questions. The expression 'electronic commerce law' is used to describe all changes and additions to the law that are a result of the electronic age.

Justice Fryberg,[1] in an address to the Australian Conference on the Law of Electronic Commerce, asked, 'Is there such a thing as Electronic Commerce Law? I suggest there is not',[2] although he acknowledged that he had completed a keynote address on precisely that topic. Joseph Sommer[3] argued that 'cyberlaw' was non-existent as a separate body of law, and that cyberspace 'is a delightful new playground for old games':

**1** Justice of the Supreme Court of Queensland.
**2** Supreme Court of Queensland publications: archive.sclqld.org.au/judgepub/2003/fry070403.pdf.
**3** 'Against cyberlaw', (2000) 15 *Berkeley Tech L J* 1145.

> [N]ot only is 'cyberlaw' nonexistent, it is dangerous to pretend that it exists. A lust to define the future can be very dangerous, especially when we cannot even agree on the present. A lust to define the law of the future is even worse, since law tends to evolve through an inductive accretion of experience. It is much safer to extract first principles from a mature body of law than to extract a dynamic body of law from timeless first principles. An overly technological focus can create bad taxonomy and bad legal analysis, at least. At worst, it can lock us into bad law, crystallizing someone's idea of a future that will never be.[4]

Judge Frank Easterbrook[5] initiated the debate with his article 'Cyberspace and the law of the horse'. Easterbrook argued that cyberlaw is unimportant because it invokes no first principles.[6] He made reference to the comment of a former Dean of the University of Chicago Law School that a course in the law of the horse was not offered: 'Lots of cases deal with sales of horses; others deal with people kicked by horses; still more deal with the licensing and racing of horses, or with the care veterinarians give to horses, or with prizes at horse shows.' Nevertheless there is no discrete body of horse law.[7] Judge Easterbrook argued that there was no reason to teach the 'law of cyberspace', any more than there was reason to teach the 'law of the horse', because neither, he suggested, would 'illuminate the entire law'. By analogy he proclaimed that cyberlaw did not exist.[8]

In his article 'The law of the horse: What cyberlaw might teach', Lawrence Lessig[9] responded to Easterbrook's assertions. Through a series of examples he demonstrated that cyberlaw or electronic commerce law, however described, forms a unique area of legal discourse. Lessig referred to privacy and spam in cyberspace. He argued that any lesson about cyberspace requires an understanding of the role of law, and that in creating a presence in cyberspace, we must all make choices about whether the values we embed there will be the same values we espouse in our real space experience. Understanding how the law applies in cyberspace in conjunction with demands, social norms and mores, and the rule of cyberspace, will be valuable in understanding and assessing the role of law everywhere.

Easterbrook and Lessig's disquisitions are now dated by a decade in a field which has advanced more quickly than any other field of law. The law of electronic commerce has increasingly become a distinct class of study, with legal specialists, dedicated monographs and courses in every law school. Legislation has been deemed necessary for several cyber issues. Those who scorned words like 'cyberlaw' and 'cybercrime' perhaps winced at the introduction of the Australian *Cybercrime Act 2001* (Cth). Traditional laws proved inadequate,

**4** Ibid.
**5** Now Chief Judge of the US Court of Appeals for the Seventh Circuit.
**6** 'Cyberspace and the law of the horse', (1996) *U Chi Legal F* 207.
**7** Interestingly, the US law firm of Miller, Griffin and Marks advertises that it specialises in 'commercial, corporate and equine matters'.
**8** See also James Boyle, 'Foucault in cyberspace: Surveillance, sovereignty, and hard-wired censors', (1997) *University of Cincinnati Law Review* 66, 177.
**9** 'The law of the horse: What cyberlaw might teach', (1999) 113 *Harv L Rev* 501.

necessitating legislation on computer-related crime, credit card fraud, bank card fraud, computer forgery, computer sabotage, unauthorised access to computer systems, unauthorised copying or distribution of computer programs, cyber stalking, theft of intellectual property and identity theft.

Spam has become a real economic waste for virtually all business, resulting in legislation and international agreements.[10] The digitalisation of data results in real privacy concerns. In response to this the Australian *Privacy Act 1988* (Cth) was overhauled in 2000 to make the private sector accountable. The Australian Law Reform Commission (ALRC) is currently undertaking a further review, with recommendations to expand privacy laws so that they deal with technological developments.

Domain names are valuable business identifiers, traded in the millions of dollars and subject to numerous disputes. Most national domain name administrators have introduced dispute resolution procedures. The courts have dramatically expanded the tort of passing off, in a manner not contemplated until recently, in an attempt to provide remedies.

Conflict of laws principles in cyberspace have been inadequately served by traditional principles established over centuries. The courts have formed new approaches. Online defamation, for instance, is unlike the static occurrences. Now, a defamation statement can be published continuously worldwide 24 hours a day. The courts have had to reconsider the single publication rule, and the applicability of local laws to a website intended for another jurisdiction, but with global reach.

Child pornography, terrorism, suicide materials, spyware and censorship are issues on which laws vary dramatically internationally, and yet each website is typically available globally. Nations have different ages at which a person is no longer regarded as a child; freedom of speech issues arise with terrorism issues (plans to make a bomb) and suicide information, but the law must address the easy reach of such material in the digital age, in ways that in other contexts may be considered draconian. Censorship laws for print and television are ineffective for online materials. What is electronic writing, and an electronic signature? The range of issues related to electronic contracting has resulted in the Electronic Transactions Acts internationally. Evidentiary issues arise in relation to digitising paper documents and printing out electronic documents. The internet raises a range of intellectual property issues, such as peer-to-peer file sharing (music and videos in particular), digital rights management, time shifting and format shifting. Electronic commerce by its nature does not recognise borders and it raises questions regarding security of transactions, standards and protection, legally and otherwise, in an international context.

**10** For example the *Spam Act 2003* (Cth) and the Memoranda of Understanding between Australia, South Korea and the US. See Chapter 16.

Many international organisations have spent considerable time and resources on resolving legal issues and difficulties in electronic commerce: the UN Commission on International Trade Law (UNCITRAL), the International Chamber of Commerce (ICC), the Asia-Pacific Economic Cooperation (APEC), the Organisation for Economic Cooperation and Development (OECD) and the World Trade Organization (WTO) are some examples.[11]

The law of electronic commerce (or cyberlaw) has emerged as a new, disparate and coherent body of law.

## Internet use in Australia

According to the Australian Bureau of Statistics (ABS), as at the end of the March quarter 2007, there were 6.43 million active internet subscribers in Australia, comprised of 761 000 business and government subscribers and 5.67 million household subscribers. The number of non dial-up subscribers was 4.34 million; the number of dial-up subscribers was 2.09 million. Non dial-up subscribers increased by 16 per cent between September 2006 and March 2007, while dial-up dropped by 16 per cent. The growth in non dial-up was driven mainly by household subscribers. Non dial-up subscribers represented 67 per cent of total internet subscribers in Australia at the end of March 2007, compared with 60 per cent at the end of September 2006. Digital Subscriber Line (DSL) continued to be the dominant access technology used by non dial-up subscribers (3.36 million or almost 78 per cent of total non dial-up subscribers were connected this way). Connections with download speeds of 1.5 Mbps or greater had increased by 43 per cent by March 2007 to 1.56 million (there were 1.09 million at the end of September 2006).

Home internet access across Australia reached 67 per cent in 2007, up from 35 per cent in 2001. In 2006, 66 per cent of homes in major cities had internet access, compared with 42 per cent for very remote Australia. Broadband was used by 46 per cent of homes in major cities and 24 per cent in very remote Australia.[12]

The ABS report also found that income and education were key factors in people's internet access. Households with an income of $2000 or more per week were three times more likely to have broadband than households on less than $600 per week. Families with children under 15 (or dependant students) were three to four times more likely to have internet access than other families. People in low-skill occupations were about a quarter less likely to have broadband than those with higher skills. People not in the labour force were 18 per cent less likely to have broadband than those in the labour force. Unemployed people

**11** Other bodies include the Free Trade Agreement of the Americas, the International Telecommunications Union and the International Organisation for Standardisation. See Chapter 19.
**12** In 2006 the ACT had the highest connection rate, with 75% of all homes connected and 53% of these on broadband connections. Similar rates were seen in New South Wales (63% total and 42% broadband), Victoria (63% and 42%), Queensland (64% and 41%) and Western Australia (65% and 41%). The lowest connection rate was in Tasmania (55% and 28%).

were 12 per cent less likely to have broadband than employed people. Indigenous households are about half as likely to have broadband as non-indigenous households.

## Judicial consideration in Australia

The High Court of Australia has had few opportunities to consider the impact of electronic commerce, cyberspace and the operation of the internet. *Dow Jones v Gutnick*[13] in 2002 was one such opportunity. The court considered defamation on the World Wide Web and whether it was appropriate for the Supreme Court of Victoria to exercise jurisdiction over a US-based website. This was the first real opportunity for the court to consider its role in law making and the common law in the context of cyberspace and electronic commerce.

The nature and essence of the common law makes it amenable to development, subject to the Constitution and statute.[14] The judiciary, scholars and commentators debate the length and breadth of acceptable developments using various forms of legal reasoning to justify their individual approaches. Whether the approach is principle-based, a coherence-based incremental method or policy-based, development is an integral part of the common law and of our socio-legal structure.[15]

In a joint majority judgment Gleeson CJ, McHugh, Gummow and Hayne JJ accepted the evidence before the judge at first instance, Hedigan J, regarding 'the unusual features of publication on the internet and the World Wide Web'. The majority accepted that the internet is 'a telecommunications network that links other telecommunication networks . . . [that] enables inter-communication using multiple data-formats . . . among an unprecedented number of people using an unprecedented number of devices [and] among people and devices without geographic limitation'.[16] The majority expressed concern regarding the lack of evidence adduced to reveal what electronic impulses pass or what electronic events happen in the course of passing or storing information on the internet. Nevertheless the majority took the opportunity to define a broad range of internet terms:

> 14. The World Wide Web is but one particular service available over the Internet. It enables a document to be stored in such a way on one computer connected to the Internet that a person using another computer connected to the Internet can request and receive a copy of the document . . . the terms conventionally used to refer to the materials that are transmitted in this way are a 'document' or a 'web

**13** *Dow Jones v Gutnick* [2002] HCA 56.
**14** See *Theophanous v Herald and Weekly Times Limited* [1994] HCA 46, especially Brennan J at para 4. See also *D'Orta-Ekenaike v Victorian Legal Aid* [2005] HCA 12; (2005) 223 CLR 1 and *Arthur J S Hall & Co v Simmons* [2000] UKHL 38; [2002] 1 AC 615.
**15** For a considered and valuable discourse see Russell Hinchy, *The Australian legal system: History, institutions and method*, Pearson Education Australia, Sydney, 2008, in particular, Part Three.
**16** *Dow Jones v Gutnick* [2002] HCA 56, para 13.

page' and a collection of web pages is usually referred to as a 'web site'. A computer that makes documents available runs software that is referred to as a 'web server'; a computer that requests and receives documents runs software that is referred to as a 'web browser'.

15. The originator of a document wishing to make it available on the World Wide Web arranges for it to be placed in a storage area managed by a web server. This process is conventionally referred to as 'uploading'. A person wishing to have access to that document must issue a request to the relevant server nominating the location of the web page identified by its 'uniform resource locator (URL)'. When the server delivers the document in response to the request the process is conventionally referred to as 'downloading'.

In the same case Kirby J was more philosophical in discussing the ramifications of technological developments, quoting Lord Bingham of Cornhill, who said that the impact of the internet on the law of defamation will require 'almost every concept and rule in the field . . . to be reconsidered in the light of this unique medium of instant worldwide communication'.[17]

In any reformulation of the common law, Kirby J continued, many factors would need to be balanced: the economic implications of any change, valid applicable legislation, the pros and cons of imposing retrospective liability on persons, and social data and public consultation.[18] Most significantly, reform is the purvey of government; it is not the primary role of the courts. Nevertheless, as Kirby J pointed out, courts have reversed long-held notions of common law principle when 'stimulated by contemporary perceptions of the requirements of fundamental human rights'.[19]

As they have recognised the enormity of the impact of the internet as a revolutionary communications giant, courts all over the world have been forced to reconsider basic principles. Kirby J appropriately quoted noted US jurist Billings Learned Hand:

> The respect all men feel in some measure for customary law lies deep in their nature; we accept the verdict of the past until the need for change cries out loudly enough to force upon us a choice between the comforts of further inertia and the irksomeness of action.[20]

Of this passage Brennan J, in *Theophanous v Herald and Weekly Times Limited*,[21] remarked, 'Other judges find the call to reform more urgent.'[22] To varying degrees the judiciary acknowledges its role in the law-making process, balancing consistency, cohesion and precedent in an analytical ballet of deductive, inductive and abductive reasoning. On the one hand, the common law is the

**17** Matthew Collins, *The law of defamation and the internet*, Oxford University Press, Oxford, 2001.
**18** *Dow Jones v Gutnick* [2002] HCA 56, paras 75 and 76.
**19** *Dow Jones v Gutnick* [2002] HCA 56, para 77.
**20** Hand, 'The contribution of an independent judiciary to civilisation', in Irving Dillard (ed.), *The spirit of liberty: Papers and addresses of Learned Hand*, 3rd edn, Alfred A Knopf, New York, 1960.
**21** [1994] HCA 46.
**22** [1994] HCA 46, para 5.

rock and the foundation of modern English and colonial law (including Australia's law). On the other hand, it has remained sufficiently flexible to adapt to modern developments. And so it should. With the advent of new and novel factual circumstances the judiciary must find solutions for the benefit, stability and protection of society and commerce. This has been described as the 'genius of the common law': that the courts may adapt principles of past decisions, by analogical reasoning, 'to the resolution of entirely new and unforeseen problems'.[23] When the new problem is as novel, complex and global as Gutnick's case, an opportunity – indeed a duty – arises to fashion and build the common law.[24]

Two examples illustrate the best and worst of judicial malleability. The common law crime of larceny dictates that the prosecution must prove certain elements of the crime to elicit a conviction. One key element is to prove that the accused intended to deprive another of property. This is problematic for intangibles. Where a person accesses a computer and 'steals' a computer file a curious thing happens: the information is both stolen and left behind. The development of common law larceny failed to predict or consider this. Attempts at prosecution failed. The courts could not or would not modify the well-established common law offence of larceny to accommodate this development. It was left to the legislature to enact cybercrime legislation to encompass offences that could not be imagined only a matter of years earlier.[25] A reading of the US Supreme Court decision of *Reno v American Civil Liberties Union*[26] provides a similar missed opportunity in the US context. On the other hand, the English Court of Appeal, in the domain name case *Marks & Spencer v One in a Million*,[27] moulded, twisted and interpreted the five established elements of the tort of passing off to provide a remedy where one previously did not exist. The result is such a departure from traditional passing off that it is referred to as 'domain name passing off'.[28]

This extension of principle when faced with domain name piracy is to be applauded. In the words of Kirby J, 'When a radically new situation is presented to the law it is sometimes necessary to think outside the square.'[29] Kirby J reflected on the specific issue of defamation in the Dow Jones appeal and theorised a re-evaluation and formation of a new 'paradigm', and a 'common sense' approach to change. His Honour questioned the wisdom of refusing to find a new remedy in new circumstances, describing it as 'self-evidently unacceptable'.[30]

**23** *Dow Jones v Gutnick* [2002] HCA 56, para 91, per Kirby J.
**24** For a view of the role and limitations of the judiciary see the judgment of Brennan J in *Mabo v Queensland (No. 2)* [1992] HCA 23; (1992) 175 CLR 1.
**25** See Chapter 16.
**26** 521 US 844 (1997). See also *American Civil Liberties Union v Reno* 929 F. Supp 824 (1996), particularly the joint judgment of Sloviter CJ, Buckwalter and Dalzell JJ.
**27** [1999] 1 WLR 903; [1998] EWCA Civ 1272.
**28** See Chapter 9.
**29** *Dow Jones v Gutnick* [2002] HCA 56, para 112.
**30** *Dow Jones v Gutnick* [2002] HCA 56, para 115.

Change is not new. The *lex mercatoria*, for example, emerged from the customs and practices of merchants from the Middle Ages. Rules governing bills of exchange and letters of credit were crafted by commercial parties long before the law makers had the opportunity to legislate. Their aim was commerce, but the result was that commercial customs and practice became recognised by the courts and then the legislature, both institutions responding to commercial realities.

In the context of reconceptualisation, Kirby J (in Gutnick's case) dabbles with new rules for a 'unique technology' and the 'urgency' of considering such changes:

> To wait for legislatures or multilateral international agreement to provide solutions to the legal problems presented by the Internet would abandon those problems to 'agonizingly slow' processes of lawmaking. Accordingly, courts throughout the world are urged to address the immediate need to piece together gradually a coherent transnational law appropriate to the 'digital millennium'. The alternative, in practice, could be an institutional failure to provide effective laws in harmony, as the Internet itself is, with contemporary civil society – national and international. The new laws would need to respect the entitlement of each legal regime not to enforce foreign legal rules contrary to binding local law or important elements of local public policy. But within such constraints, the common law would adapt itself to the central features of the Internet, namely its global, ubiquitous and reactive characteristics. In the face of such characteristics, simply to apply old rules, created on the assumptions of geographical boundaries, would encourage an inappropriate and usually ineffective grab for extra-territorial jurisdiction . . .
>
> Generally speaking, it is undesirable to express a rule of the common law in terms of a particular technology. Doing so presents problems where that technology is itself overtaken by fresh developments. It can scarcely be supposed that the full potential of the Internet has yet been realised. The next phase in the global distribution of information cannot be predicted. A legal rule expressed in terms of the Internet might very soon be out of date.[31]

In some instances, such as electronic banking and finance, commercial parties have embraced electronic commerce, forging new paths and boldly leading the way, even in the absence of any adequate laws. In other instances the law makers have taken the initiative: the UN Commission on International Trade Law (UNCITRAL) in 1996, with the Model Law of Electronic Commerce, is an important example.[32]

There are many pitfalls, warnings and surprises in the regulation of electronic commerce, both practical and legal. These voyages are examined in this book. The law relating to electronic commerce, the internet and cyberspace requires careful management by legislators and structured application and development of existing legal principles by the courts.

**31** [2002] HCA 56, paras 119 and 125.
**32** For details see Chapter 3.

## Further reading

Justice George Fryberg, Keynote Address to the Australian Conference on the Law of Electronic Commerce, Brisbane 2003, Supreme Court of Queensland publications: archive.sclqld.org.au/judgepub/2003/fry070403.pdf.

Billings Learned Hand, 'The contribution of an independent judiciary to civilisation', in Irving Dillard (ed.), *The spirit of liberty: Papers and addresses of Learned Hand*, 3rd edition, Alfred A Knopf, New York, 1960.

Russell Hinchy, *The Australian legal system: History, institutions and method*, Pearson Education Australia, Sydney, 2008, Part Three.

Neil MacCormick, *Legal reasoning and legal theory*, Clarendon Law Series, Oxford University Press, Oxford, 1979.