Keeping Pace: On-line Technology and ADR Services

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On-line dispute resolution is more than just the delivery of alternative dispute resolution (ADR) services through the Internet. The introduction of new technology poses opportunities and challenges for dispute resolution policies and practices. Policies and practices that specifically apply to specialized on-line dispute resolution services will of course need to be developed. But equally, dispute resolution services that do not necessarily see themselves as "on-line" will continually need to adapt to take account of the increasing availability and quality of new forms of communication.

1. Anything that is in the world when you're born is normal and ordinary and is just a natural part of the way the world works.
2. Anything that's invented between when you're fifteen and thirty-five is new and exciting and revolutionary and you can probably get a career in it.
3. Anything invented after you're thirty-five is against the natural order of things.

—*Douglas Adams,* The Salmon of Doubt. *London: Pan, 2003, p. 95.*

As Adams suggests, what we mean by "new" depends on our own experience and perspectives. At one stage, fax machines, desk-top computers, electronic whiteboards, and video cameras were revolutionary technologies. In the current age, on-line and convergent technology present

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similar challenges and opportunities. The way such technology pervades everyday life, however, means it cannot be considered an optional or ancillary feature of dispute resolution practice.

Adopting and Adapting to On-line Dispute Resolution

Dispute resolution practitioners, like everybody else, orient themselves to new technology in different ways as a result of life experiences, value systems, capabilities, and prejudices. People have been said to belong to separate "technology adoption life cycle" groups consisting of *innovators* (the technology enthusiasts), *early adopters* (the visionaries), the *early majority* (the pragmatists), the *late majority* (the conservatives), and the *laggards* (the skeptics) (Tammelin, 2000).

As more and more groups adopt new processes, various phases of development occur. In ADR, these phases have been described as pioneering, growth, rivalry, and coordination (National Alternative Dispute Resolution Advisory Council, 2001). In relation to on-line dispute resolution, the phases have been characterized as the "hobbyist, experimental, entrepreneurial, and institutional" (Conley Tyler and Bretherton, 2003). These phases, of course, are not smooth and continuous. They may be more like a series of faltering steps, and often not in a clear direction.

In the mid-1990s, on-line dispute resolution (ODR) was probably something of a curiosity, an idea rather than a new area of practice. ODR was something for the hobbyists, innovators, and experimenters, such as the CyberTribunal founded in 1996, which was essentially an experimental and academic venture. It closed down, due to lack of funding, in December 1999 after having succeeded in a pioneering demonstration of the potentials of ODR (Centre for Information Technology and Dispute Resolution, 2004).

The pioneers pointed the way for others, especially the early adopters and entrepreneurs who set up a range of ODR services in the late 1990s. Bruce Beal's business vision showed how an idea could be turned into an enterprise. "By 1997 it became clear that the Internet was going to revolutionize the way everything is done in the business world, communications, transactions, and yes, even mediation. At the time, I was looking for a way to apply my experience and skills to the Internet. I determined that online mediation, or 'virtual' mediation, as some term it, was a service that would become useful in the Internet revolution" (Beal, 2000). Later, programs

became even more savvy, especially by integrating ODR into core business practices.

These phases in the development of ODR were to some extent quarantined from mainstream dispute resolution practice. ODR was seen as a distinct area of practice that did not affect practitioners on a day-to-day basis.

Most dispute resolution practitioners now recognize the value of the Internet and use it on a day-to-day basis, especially to provide, access, and exchange information. The needs analysis of ODR conducted for the Victorian Department of Justice by the International Conflict Resolution Centre indicated that while service users were generally positive about the potential of ODR, some practitioners remain resistant (Conley Tyler and Bretherton, 2003; Conley Tyler, Bretherton, and Bastian, 2003). David Larson (2004, p. 129) has observed that "[c]ompared to other professions, [dispute resolution practitioners and scholars] may have been one of the slowest groups [to embrace technology]." Colin Rule (2003) has made a similar observation, noting that "many mediators . . . are profoundly skeptical about . . . ODR."

This resistance parallels that shown by traditional lawyers to the advent of ADR itself. In the early days of ADR, lawyers questioned the need for a third-party mediator in settlement negotiations. Now that ADR is entrenched, traditional dispute resolution practitioners may well have difficulty dealing with the entry of the "fourth party" (Rifkin, 2001).

Accepted wisdom is challenged. Automated negotiation and other new processes do not always fit traditional definitions of ADR. Moreover, the global nature of the Internet also makes it harder to hang on to locally developed and highly prized ways of doing things.

Discomfort with on-line communication is reflected in commonly held but untested assumptions about on-line ADR. The first assumption (Gibbons, Kennedy, and Gibbs, 2002, p. 13) is that "physical presence face to face dispute resolution is superior to dispute resolution mediated by other communication." As Rule (2003) has observed, some practitioners may even go as far as to say that face-to-face communication is essential.

The fact that possibly hundreds of thousands of cases are now being dealt with through on-line ADR directly challenges this assumption (Conley Tyler, 2004). A paper by Australia's National Alternative Dispute Resolution Advisory Council on technology and dispute resolution (National Alternative Dispute Resolution Advisory Council, 2002) that summarizes the advantages of on-line versus face-to-face communication

indicates an enormous range of factors that need to be considered. In many cases, such as where parties are geographically distant, it is not a choice between on-line or face-to-face ADR but of on-line ADR or nothing.

A second common assumption is that ODR is suitable only for impersonal disputes in the on-line environment and is not relevant to family and other interpersonal disputes. This assumption makes intuitive sense and it is certainly true that much on-line ADR was pioneered in the e-commerce context. The assumption is largely untested, however, and it is possible that the opposite could be true. On-line communication may better serve to structure and control communication between those who have a long history and whose interpersonal dynamics interfere with substantive negotiation (Hardy, 1998; King, 2000). On the other hand, as the e-Bay pilot showed (Katsh, Rifkin, and Gaitenby, 2000), face-to-face, telephone, or other more personal contact may help build trust and a "relational context" between electronic buyers and sellers who had previously communicated only through on-line text.

A third assumption is that ODR is just text based. Although many of the early on-line ADR services were text based, on-line communication increasingly takes multiple forms. In 2004, choices include, for example, synchronous and asynchronous and interactive and noninteractive forms of text, audio, and video communication. (Interactive communication is two way, allowing messages to go back and forth between the participants. By contrast, noninteractive communication, such as accessing a Web site, is essentially a one-way flow of information. Synchronous communication, such as videoconferencing, occurs in "real time" so that participants are engaged simultaneously in their interaction. Asynchronous communication, such as e-mail, involves a series of messages transmitted from sender to receiver.)

Many more choices may become available in the future, such as virtual meeting rooms or holographic images. Artificial intelligence, which can essentially replicate higher-order human thinking processes, could assist dispute resolution, for example, by replicating judicial decision making. The continued convergence or integration of separate information technologies is likely to drive further change. Being able to link voice with text and visual images, assisted by artificial intelligence, greatly increases the power and convenience of communications.

Not all concerns about ODR lack legitimacy. There are legal risks associated with the medium—for example, the confidentiality, privacy, and security of on-line communications. There are also practitioners who have

tried on-line communication but abandoned it as ineffective. In some cases, this judgment may be premature. It may not have been that the medium did not work, but that the way it was used did not work. Moreover, advances in technology, and the skills with which technology is used, may overcome some of the problems experienced.

Responding to the Challenges and Opportunities of ODR

As mentioned earlier, technical failure is often forgiven in traditional dispute resolution practice. But in areas such as medicine, up-to-date equipment and technological competence are absolutely central to safe practice. In a similar way, the question will arise as to the technological requirements of dispute resolution services and the technological competence of dispute resolution practitioners.

Standards will depend on the communication channel used, whether face to face or on-line (where on-line can include computer-assisted off-line ADR, hybrid or mixed, virtual or entirely on-line; Gibbons, Kennedy, and Gibbs, 2002). Functional equivalence suggests that the same standards should apply regardless of the technical context of service delivery, that is, face to face, telephone, video, or text. While existing standards could be contextualized to suit the on-line environment, some unique standards may also be needed, especially for processes conducted entirely on-line (Wentworth, 2001).

In its 2001 report *A Framework for ADR Standards,* the National Alternative Dispute Resolution Advisory Council (NADRAC) recommended that dispute resolution service providers adopt a code of practice that addressed several key elements. Examples of how new technology affects these elements follow.

First, NADRAC recommended that the nature of the process needs to be described clearly so that participants can make informed choices about the extent and nature of their participation. On-line information about dispute resolution services would need to comply with external standards like the disability standards published by the World Wide Web Consortium (www.w3.org) and government requirements or legal information standards, such as the Legal Information Standards Council (http://www.lawfoundation.net.au/lisc/recommend/bpguide.html).

Practitioners will need to ensure that those who lack computer literacy are supported and provided with information in different forms. They may also need to ensure that the benefits of the technology are not overstated.

In automated processes, the role of the computer program will need to be described. The rules for terminating an on-line dispute resolution process need to be considered, for example, the circumstances under which a practitioner may sever an on-line connection or permanently block text messages from a vexatious party.

Second, NADRAC recommended that the process offered be appropriate for the particular dispute and accessible to participants with diverse needs. As summarized in Table 1, the appropriate use of information technology in dispute resolution may require breaking each process into separate tasks and determining which form of communication best meets the needs of that task. Accessibility issues relating to technology need examination, and practitioners may be obliged to use technology to overcome accessibility and fairness issues. The power dynamics occurring in the on-line environment need examination, as do the security and privacy of computer records. Technical requirements also need to be considered. For example, what bandwidth should be used for conducting mediation by videoconference? Should it be the standard often recommended for court hearings (384 kps) or the more economical but lower-quality standard typically used in community facilities (128 kps)?

Third, NADRAC recommended that practitioners have the knowledge, skills, and ethics appropriate for the work they are undertaking. Table 2 examines how these may need to be adapted. Practitioners engaged in ODR will need training in the use of different media and will require certain levels of technical competence. Different criteria may be needed for selecting on-line practitioners. For example, written communication skills and typing speed may become more important than oral communication skills and body language. The appropriateness of delivering training and supervision on-line may also need to be considered.

Finally, NADRAC recommended that there be a system in place to deal effectively with complaints and to address any problems of compliance with standards. New technology, especially on-line communication, creates ambiguities in the expectations of clients and practitioners, which in turn can give rise to complaints. For example, a client may expect an e-mail to be handled like a telephone call, requiring an immediate response in colloquial language. An ODR practitioner and that practitioner's clients could be located anywhere in the world and have very different ideas of service standards. ODR services may introduce on-line feedback and complaint-handling systems. Such systems may need to use

Table 1. Matching the Medium to the Task

Form of Communication	*Requirements*	*Benefits*	*Limitations and Risks*	*Current and Potential Applications*
Face-to-face meeting	Physical meeting venue and waiting room facilities Parties need to be able to travel to the venue and to be capable of face-to-face communication	Allows for full "real-time" communication; verbal, nonverbal, and body languages; exchange of written information; clear authentication; signing off Creates a sense of occasion and ritual	Negative personal dynamics, intimidation, physical violence	A favored and common form of interaction
Face-to-face meeting complemented by IT or AV	Software and hardware	May overcome some problems associated with face-to-face meeting and give additional tools to the dispute resolution process	The benefits may not be worth the expense and effort of setting up such systems	May need to match needs of parties with specific needs and problems
Letters	Stationery and postage facilities	Formal, authentic (signed)	Slow Eliminates nonverbal factors	Formal letters of introduction, final agreements, and so on

(*continued*)

Table 1. Matching the Medium to the Task (*continued*)

Form of Communication	*Requirements*	*Benefits*	*Limitations and Risks*	*Current and Potential Applications*
E-mail	Access to computer, Internet, and Internet service provider by parties and dispute resolution service (low bandwidth) Keyboard skills and computer literacy Appropriately secure access and authentication protocols	Enables exchange of complex written information Neutralizes negative interpersonal dynamics Gives people time and space to consider responses Enables ready storage, forwarding, and retrieval of messages	Conveys limited interpersonal information Too slow to type Difficult to develop trust Asynchronous communication Gives rise to ethical, security, and privacy concerns over storage, forwarding, and retrieval of messages	Not commonly used to conduct entire dispute resolution process, but often used as adjunct to face-to-face and telephone communication, especially for information and document exchange
Automated processes	As above, but keyboard skills less important	Private, quick, and accessible Face saving Neutralizes personal dynamics Parties' offers and demands can be totally protected and eventually deleted	Impersonal Lacks personal engagement of a dispute resolution practitioner Current programs may be rigid, lacking intuition	At this stage, programs are unsophisticated and limited to simple quantitative (such as monetary) matters that are amenable to a compromise solution Artificial intelligence may become more "intuitive" over time

Video or audio streaming	As above, although bandwidth and computing capacity requirements may be higher	May be more effective than text in conveying messages, especially emotions	Asynchronous communication	Not used extensively in dispute resolution process itself
Telephone and teleconference	Access to telephone lines, preferably with conference call capacity	Availability Ease of use Immediacy of communication May reduce some negative aspects of-face-to-face communication such as violence and intimidation	Reliant on oral communication only; unable to exchange written information or to authenticate material	Very commonly used, especially for information, intake, and follow-up; also used to overcome geographic distance
Videoconference	Availability of compatible equipment (cameras, microphones, and other equipment), software, and high bandwidth—dependent on quality of signal required Parties usually need to travel to appropriate video conference venue (but in long term may be able to access such facilities readily in ordinary home or office environments)	Approximates face-to-face interaction by providing for oral and visual communication May reduce some negative aspects of face-to-face communication such as physical violence and intimidation (although visual and verbal intimidation is still possible)	Aspects of communication lost or distorted through time lag, eye contact, two-dimensional image Loss of other sensory data (smell, taste) Some technical and cost barriers (but these are declining in significance)	Used successfully by some dispute resolution service providers, especially to overcome geographic distance

(*continued*)

Table 1. Matching the Medium to the Task (*continued*)

Form of Communication	*Requirements*	*Benefits*	*Limitations and Risks*	*Current and Potential Applications*
Integrated technologies: video, audio, text, voice recognition	Appropriate bandwidth, software, and equipment	Combines benefits of video, telephone, and text.	As for videoconferencing, some aspects of communication are lost	Emergent technology; likely to be commonplace in the next few years. Has potential to create a "critical mass," increasing the acceptance and uptake of on-line communication
Virtual reality	Currently fairly stylized; requires specialized equipment and large bandwidth	Three-dimensional interactivity	For most applications, benefits not yet worth cost and inconvenience for what is predominantly a verbal process	Rarely used in dispute resolution, if at all May have specialized uses, such as training, therapy, sensory-motor, nonverbal interaction, overcoming specific disabilities
Holography	Huge bandwidth Not currently feasible	May be visually indistinguishable from face-to-face interaction	Lacks physical touch	Still in the realm of science fiction

Source: NADRAC, 2002.

Table 2. Practitioner Knowledge, Skills, and Ethics

Existing Standard		*Contextualized to Information Technology*
Knowledge	Conflict	Knowledge of the types and nature of conflict in the virtual environment
	Culture	The "virtual" culture, cultural change, and technology; *cultural attitudes toward physical space, venue, and time;* technological subcultures
	Negotiation	Dynamics of on-line negotiations
	Communication	Effects of communicating on-line or through audiovisual device; communication styles in the virtual environment
	Context	Technological context for dispute resolution, globalization, and legal environment
	Procedure	Procedures for resolving disputes on-line, such as blind bidding
	Self	One's own attitude to technology and change, and how one relates to the virtual world
	Decision making	Role of information technology and artificial intelligence and the "fourth party" in decision making
	ADR	Knowledge of emerging forms of ODR, such as automated processes
Skills	Assessing a dispute for ADR	Assessing suitability of different forms of technology for parties and disputes
	Gathering and using information	Using the Internet, intranets, and other sources to gather information; using information technology to process information
	Defining the dispute	How information technology influences how disputes are defined, for example, extent to which automated processes ascribe numerical values to disputes
	Communication	Communication skills on-line or through audiovisual devices (for example, clarity, avoidance of ambiguity); literacy in on-line language
		Keyboard and *computer* skills
	Managing the process	Organizing the facilities (such as videoconferencing); *effectively using technology and outside assistance*

(*continued*)

Table 2. Practitioner Knowledge, Skills, and Ethics (*continued*)

Existing Standard		*Contextualized to Information Technology*
	Managing interaction between the parties	Using the technology to manage interaction (for example, use of conference facility in teleconferencing to have separate and joint discussions)
	Negotiation	Using information technology to facilitate negotiations
	Being impartial	Ensuring that impartiality is maintained, such as when using tele- or videoconferencing or e-mail, especially if one party is local and the other remote)
	Making a decision	Natural justice consideration may need to be considered.
	Concluding the ADR process	Authentication of an on-line agreement; use of virtual closing rituals
Ethics	Promoting services accurately	See service standards above
	Ensuring effective participation by parties	Using strategies to ensure fairness and accessibility in on-line environment and in tele- and videoconferencing
	Eliciting information	Verifying and authenticating information provided on-line or through other telecommunications media
	Managing, continuing, or terminating the process	Managing parties "hanging up"; managing technical failure; ensuring that automated processes do not prematurely end or indefinitely continue negotiations
	Exhibiting lack of bias	Considering how the use of facilities can lead to a perception of bias; considering geographic location of practitioner and how this may affect parties' perception
	Maintaining impartiality	Maximizing transparency in on-line and audiovisual communication, for example, explaining physical settings; taking account of technical disadvantage but avoiding overcompensating
	Maintaining confidentiality	Ensuring that automated processes are secure; employing risk management strategies to secure information
	Ensuring appropriate outcomes	International legal context (such as enforcement) and notions of fairness may be relevant

alternate technologies because a party who has had a bad experience with ODR may be reluctant to register a complaint via the same medium.

This creates a number of challenges for policy and legislation. For example, the use of technology may shift costs. A technologically supported ADR session, such as a videoconference, may reduce travel costs for the parties but increase overhead for the ADR service provider. Different funding and fee-for-service arrangements that take account of the availability of new technology may need to be developed.

The criteria for the use of ADR may need to be changed as different forms of communication become available. On-line ADR, of course, makes mediation possible where it was previously not feasible or affordable, such as in overcoming geographical distance or immobility. It also changes judgments about the appropriateness of ADR. For example, mediation is often seen as inappropriate where there has been violence or a gross power imbalance. On-line communication can also be used in an intimidating way and may also give rise to other sources of power imbalance, for example, access to bandwidth. However, access to on-line ADR changes some of the assumptions about safety and power dynamics, which in turn may require courts and other agencies to reassess their referral processes.

Many regulators, policymakers, and ADR practitioners are taking steps to respond to the challenge of the information age. As mentioned earlier, the Victorian Government commissioned a needs analysis on ODR in recognition of the growing demand for this type of service (Conley Tyler and Bretherton, 2003). The Organisation of Economic Cooperation and Development (OECD) has also undertaken to build trust in the on-line environment through developing on-line ADR processes for the resolution of cross-border e-commerce disputes. The UN forums on On-line Dispute Resolution bring people together to share information about developments around the world.

Conclusion: Keeping Pace with Change

ADR users and practitioners need to adjust to new forms of communication, which can cause both excitement and discomfort. It is vital that dispute resolution practitioners keep pace with the needs of their current clients as well as potential future clients. Many practitioners and clients will be at the cutting edge, while others may require practical support and encouragement in order to make the best use of available channels of

communication. Critically, policies and standards should enable and not constrain the best use of available forms of communication.

Table 2 indicates how a dispute resolution practitioner's knowledge, skills, and ethics, identified in NADRAC's 2001 report *A Framework for ADR Standards,* may need to be adapted to new technological environments. Specific elements already listed in the standards report are shown in italics.

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