

# Technology and Innovation – Supporting Women and Justice

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## Abstract

"Innovation and technology hold promise for advancing women and girls' access to justice, offering new tools to address persistent barriers such as distance, cost, and discrimination within justice systems. Innovative approaches can enhance reach, efficiency, and responsiveness, particularly for women and girls in marginalized contexts. Challenges, however, remain, including digital divides, privacy and data security concerns, and technology solutions that lack local grounding or sustainable funding. This paper will explore the guiding principles for success and addressing limitations."

## Introduction

Technology is reshaping the justice system however the impacts remain uneven for three reasons. First, the digital divide means that many do not have access, digital literacy, connectivity or the technological tools to engage with options that can support more effective access to justice systems. Second, justice options around the world vary extensively. In some countries, justice systems are digitised and support access while other more traditional justice systems remain focused on outdated processes that can exclude participation. Third, where the technological approaches mimic processes that exclude vulnerable people, it is unrealistic that technology can address the system inadequacies that remain. However, the opportunities that technological changes can provide to vulnerable populations including women and children are significant and technology can reshape not only access to justice but also the outcomes and experience of those involved in the justice system. This paper considers both the justice opportunities and risks provided by supportive, replacement and disruptive technologies to women and girls.

The potentially helpful technological changes include technologies that support low level assistance that can enable better quality access to information and advice as well as procedural access (ie through interactive case management systems and online processes), to artificial intelligence (AI) used for decision support (ie outcome prediction and "nudging" technologies).<sup>1</sup> In previous work, the author has defined technology as being either "supportive, replacement or disruptive" or some combination. At present, technologies used to support disputants are more likely to be "supportive" (eg, using simple chat bots and

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<sup>1</sup> See Tania Sourdin, "Justice in the Age of Technology: 'The Rise of Machines Is upon Us'" (2017) 139 *PrecedentAULA* 4.

technology that enables remote access (eg via Teams or Zoom), or “replacement,” that is technologies that replace humans (such as agentic AI, more sophisticated Gen AI, as well as case management systems that produce correspondence etc to platforms that enable users to lodge and manage court processes via mobile phones and apps). More disruptive technologies, feature more evolved forms of Artificial Intelligence as well as more complex machine learning.<sup>2</sup>

### **Supportive Technologies**

The use of supportive technologies that enable people to access the justice system without requiring physical attendance at a court or for court related activities accelerated as a result of worldwide restrictions imposed during the COVID pandemic. They offered considerable promise and for many people they have supported access that might otherwise be possible because of geographical distance, disability, carer responsibilities, or other limitations. For women and children who may have particular access issues, such technologies can enable significant advantages. There have however been concerns raised about how people interact with one another using videoconferencing and the impacts on those who may be more vulnerable or less technologically able or connected. Some concerns are linked to procedural fairness and relate to whether or not a person has an environment in which they can engage or whether they are supported.

For many women, the benefits include reduced travel and child minding costs however there have also been instances where children have overheard difficult or high conflict exchanges or where domestic violence perpetrators have guided witness testimony or the way in which women engage with court activities. For some, the environment within which the videoconference takes place may be “less stressful”. Joining in from a home environment may be more comfortable and the environment in which a remote court interaction takes place can be more supportive and more familiar. However, many may not have safe or comfortable environments or good connections. There is also some evidence that women may be more fatigued than men in online video interactions partly because they may be more responsive to visual cues and also because they may be more concerned about self presentation.<sup>3</sup>

Other supportive technologies include the rapid increase in generative AI that since 2023 has transformed the way in which people obtain advice about everything from medical issues to personal challenges. For many seeking basic advice, despite the numerous

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<sup>2</sup> For a detailed discussion relating to this framework see Tania Sourdin, *Judges, Technology and Artificial Intelligence* (Elgar Law, 2021).

<sup>3</sup> See Tania Sourdin, 'Mediating via Zoom', *Australasian Dispute Resolution Journal*, 31, 280-293 (2022)

limitations (that include hallucinations, errors and inaccurate or biased information that is not relevant to many jurisdictions including those in the Global South) the experience of Gen AI is 'better than google.' As Gen AI improves, there are opportunities for courts to tailor GenAI to meet the needs of more vulnerable court users. For others, particularly those with literacy or language barriers, Gen AI can help to draft letters and materials so that important messages can be sent in a way that makes it more likely that such messages are read and understood.

Other supportive technologies can be more problematic. The capacity to film anyone at any time, track women and children can provide opportunities for those engaged in coercive control and domestic violence. Social media which can be used to support social connection, can also be used to bully and harass. Apart from privacy concerns, many technologies provide opportunities to harass, abuse and limit engagement particularly where access to technology is restricted and where women and children have limited options to address cyberstalking and related forms of abuse.

### **Replacement Technology**

Replacement technologies that replace people at all levels of the justice system have the capacity to reduce cost and time. The introduction of the 'online' court in some parts of China, has enabled thousands of people to access courts via a mobile phone with many resolving issues in less than 15 minutes. Other replacement technologies include AI agents that can assemble and collate materials, interrogate financial records and assist with everything from supporting parenting arrangements to devising options to support viable financial support options. At its simplest, AI agents are already being used in the consumer sector to deal with and manage complaints, often more effectively and simply. The capacity to communicate in a range of languages and to support voice to text capacity has particular benefits for women and children who may face particular issues that are linked to literacy and capacity. The growth in the 'law as code' movement can also ensure that agent AI is effective and to support accurate legal advice in relation to simpler matters where there is limited judicial discretion.

Agentic AI in contrast, offers the capacity to have a network of AI agents that can communicate and prepare material at a lower cost and more quickly. For those involved in litigation, agentic AI together with Gen AI can result in better quality health and financial document preparation and can reduce court costs. While agentic AI is still in its infancy in many countries, it is likely to have a significant impact on access to justice over the next decade particularly if courts use agentic AI to support more interactive and engaging processes so that litigants can receive meaningful updates and information.

## **Disruptive Technologies**

The future of technological innovation includes the development of various types of neurotechnology as well as robotic technologies that can support people and enable interactions that can promote greater independence. Whilst wearable technologies can encourage dangerous behaviour, it can also support access to the internet, translation tools and support women and children who may need support from the authorities or others when in precarious situations. Other disruptive technologies can impact on justice access by providing support through self driving cars and technologies such as drones can support engagement by ensuring that non human support can be available to those who might not otherwise be able to receive a secure document delivery.

However, many disruptive technologies remain expensive and are likely to provide limited support to women and children unless there are cheaper alternatives available to support equal access. There are other issues with disruptive technologies that are linked to cost. As quantum computing revolutionises the way that technology impacts on our lives, there is more capacity to inequality as the gap between the 'haves' and 'have nots' widens. From a justice perspective, these impacts are already being experienced. As large, well funded law firms access better and more effective forms of AI, the gap between those who cannot afford or access well funded lawyers becomes more important. This is already an issue in some jurisdictions where public funded or pro bono lawyers have limited access to high quality legal AI. The impacts are likely to be felt on an uneven basis and women and children who often do not have access to economic resources particularly when in crisis.

## **Conclusions**

Technology has the capacity to support women and children and enable greater access to the justice system. However, the extent to which the support will be effective will depend in part on the extent to which the justice system will support innovation. Technological advances, will have limited impacts if court processes remain cumbersome and inaccessible. If courts retain overly complex systems, if court forms and processes remain incomprehensible, and if AI advisory services are not supported, technological innovation is likely to have limited impacts.

There are also opportunities to promote biases that already exist and impact on women and children. Such biases may be the result of legislative inadequacies but can also be the result of procedural barriers that preference male perspectives and abilities.