



The future operation of the Courts and Justice Services

Potential implications for the
prosecution of serious crime

Acknowledgments

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INTRODUCTION

This briefing shares ideas about possible future operation of the courts and justice services from the perspective of Crown prosecutions and Crown prosecutors. It will sit alongside the long-term insights briefing prepared by the Ministry of Justice which considers the future operation of the courts and justice services more broadly.

Our companion briefing considers what Crown prosecutions and the role of Crown prosecutors may look like in 20 years.

Our insights focus on two trends:

- Courtroom technology: the adoption and development of digital tools inside our courtrooms.
- Artificial intelligence (AI): the growth and increasing use of AI in legal work, and the risks associated with fake evidence.

We share insights about how these trends may impact Crown prosecutions and Crown prosecutors in the next 20 years. We also highlight the key implications of these changes and identify some strategic choices that arise for governments, the judiciary, and the legal profession.

We have identified strategic choices that impact the criminal justice system more broadly. This reflects the fact that Crown prosecutors are embedded within the criminal justice system and a comprehensive consideration of opportunities, risks to manage, and strategic choices needs to reflect the system in which they operate.

Process

As required by the Public Service Act 2020, we undertook two public consultation processes:

- In conjunction with the Ministry of Justice, we sought public submissions on our proposed briefing topic.

What is a long-term insights briefing?

Long-term insights briefings are strategic explorations of long-term issues facing New Zealand.

They are developed independently of Ministers and separate from immediate policy priorities. The briefings encourage public debate and thinking about significant future challenges and opportunities.

They are future focused think pieces that can help inform long-term decision-making.

Under the Public Service Act 2020, Departmental Chief Executives must produce these briefings at least once every three years to identify medium- and long-term trends, risks, and opportunities relevant to their department's responsibilities.

- Following release of our draft long-term insights briefing, we sought public submissions and held a workshop with stakeholders to discuss the draft.

This final long-term insights briefing has been developed through analysis of public submissions and the workshop with stakeholders to discuss the draft, research and analysis of global drivers and megatrends, national and criminal justice data, internal Crown Law workshops and peer review, meeting with Crown prosecutors, obtaining feedback from the Māori Crown prosecutors Rōpū, participating in workshops the Ministry of Justice held to develop their draft long-term insights briefing, speaking to academics and public sector leaders, and using futures thinking tools (including the horizon scanning tool).

Valuable insights from all submitters, stakeholders, experts, and workshop participants aided immensely in the verification of trends, and the identification of opportunities and risks. We thank everyone who provided input; this briefing is significantly improved as a result.

AOTEAROA NEW ZEALAND'S PROSECUTION SYSTEM

New Zealand's criminal justice system involves a range of prosecutors who prosecute on behalf of the State. The Solicitor-General (who is also the Chief Executive of the Crown Law Office) has general oversight over all public prosecutions.¹ There are more than 40 agencies and organisations that can conduct public prosecutions.

We have two main types of public prosecutions in New Zealand: Crown prosecutions² and non-Crown prosecutions³. The Solicitor-General has direct responsibility for Crown prosecutions. Our long-term insights briefing therefore focuses on Crown prosecutions and Crown prosecutors.

Crown prosecutions

Crown prosecutions are public prosecutions for serious offences. These include murder and manslaughter, as well as serious sexual, violent, drug, and dishonesty offending. They also include all prosecutions in the High Court and all jury trials. Whether a prosecution is a Crown prosecution or a non-Crown prosecution is determined by the Crown Prosecution Regulations 2013. Crown prosecutors conduct Crown prosecutions.

¹ As codified in section 185 of the Criminal Procedure Act 2011. In practice, this oversight is exercised by the Deputy Solicitor-General (Criminal).

² These generally relate to more serious offences. They are conducted by Crown prosecutors.

³ These involve a range of offences, including regulatory offences. The relevant department or agency is responsible for these prosecutions. They are conducted by Police and in-house departmental prosecutors.

Crown prosecutors

A Crown prosecutor is someone conducting a Crown prosecution on behalf of the Solicitor-General. Crown prosecutors are often Crown Solicitors or lawyers working for Crown Solicitors but include prosecutors on panels doing complex prosecution work such as for the Serious Fraud Office. A Crown Solicitor is a lawyer in private practice appointed to prosecute on behalf of the Solicitor-General within a particular geographic area. Crown Solicitors are appointed for a particular district, usually in a centre with a High Court.

There are currently 17 Crown Solicitor warrants in New Zealand.⁴ Crown Solicitor warrant areas can be changed to reflect population shifts when needed. For instance, in 2015, the Auckland region was split into two new Crown Solicitor warrants – Auckland and Manukau.

NAVIGATING GLOBAL MEGATRENDS AND NATIONAL SHIFTS

This section identifies trends that have more specific implications for Crown prosecutors and Crown prosecutions and our long-term briefing topics.

Demographics are changing



The global population is ageing with the median age increasing across the world.⁵ This is mirrored in New Zealand. Statistics New Zealand data shows that the median age of New Zealanders increased from 31.5 in 1991 to 38.1 in 2024.⁶ New Zealand is also becoming more multicultural with the percentage of people identifying with a non-European ethnicity increasing in the five years from 2018 to 2023. This includes people identifying as Māori (16.7% to 17.5%), Pacific (8.3% to 8.9%), Asian (15.7% to 18.7%) and Middle Eastern, Latin American and African (1.6% to 2.0%).⁷ The Ministry for Ethnic Communities notes that New Zealanders speak more than 160 languages and are associated with 45 faiths.⁸

⁴ These comprise Auckland, Christchurch, Dunedin, Gisborne, Hamilton, Invercargill, Manukau, Napier, New Plymouth, Palmerston North, Rotorua, Tasman, Tauranga, Timaru, Wellington, Whanganui, and Whangārei.

⁵ PwC *Megatrends: Five global shifts reshaping the world we live in* (September 2024) at 13.

⁶ Stats NZ “Summary figures for the NZ population: 1991-2024” (updated 1 March 2024) <www.stats.govt.nz>.

⁷ Stats NZ “Estimated resident population (2023-base): At 30 June 2023” (16 April 2025) <www.stats.govt.nz>.

⁸ Ministry for Ethnic Communities *Ethnic Evidence: Increasing the visibility and value of New Zealand’s diversity* (December 2024) at 9.

Concurrently, the divide between how generations understand and use technology is increasing. Generation Z (those born in the late 1990s to early 2010s)⁹ have lived their entire lives with widespread internet use and modern technology. A submitter on our draft briefing noted the generational changes at the bar, noting a step change in the ability for new graduates to navigate, use, and exploit new technologies. During workshops on our consultation topic and our draft briefing, we heard concerns about how the digital divide was creating or exacerbating inequitable access to goods and services.

“The impact of this generational shift will likely be profound. Compared with their predecessors, [Gen Z] will likely bring very different assumptions and expectations related to society, technology and ethics, and the role of private companies in providing public goods.”¹⁰

The increasing ethnic diversity in New Zealand will likely drive demand for more accessible justice services – including for Crown prosecutions – such as multilingual options, and translation and interpretation services. The rise of generations that have grown up immersed in technology will also impact how readily new tools will be adopted, including by investigators, defence counsel, and Crown prosecutors.

Accelerating innovation and use of technology

Technology is changing our lives in profound and rapidly accelerating ways. This is unfolding in two dimensions: technology is simultaneously being integrated into more areas of our lives; and in increasingly deep and immersive ways.



This means there are significant volumes of digital information being created. The quantity of this data is outstripping human ability to synthesise and respond.¹¹ New technologies are being developed in diverse sectors with PwC estimating that we may reach a tipping point in the next five to 10 years as decreasing costs drive more widespread use and even greater innovation.¹² A recent Sense Partners report noted that “strong global connectivity means techno-social tipping points, once reached, tip quickly” such as ChatGPT reaching 100 million users in just two months.¹³

This will impact how Crown prosecutors work and conduct Crown prosecutions. The exact impacts and their extent are not clear: given the pace of change, future technologies are

⁹ Oxford English Dictionary “Generation Z: meaning and use” <www.oed.com>.

¹⁰ EY *Are you reframing your future or is the future reframing you? Understanding megatrends will help you see opportunities when others don't* (2020) at 19.

¹¹ Deloitte New Zealand *State of the State 2023. Into the wind: capabilities to navigate uncertainty* (2023) at 13.

¹² PwC, above n 5, at 10.

¹³ Sense Partners *We're all in this together: How can business and government collaborate to address shared challenges out to 2050?* (August 2023) at 12.

impossible to predict. What is clear is that new technologies will continue to develop and emerge quickly. Crown prosecutors will need to be nimble and adapt to this rapidly changing environment including adopting technology to improve productivity and outputs, as well as adapting (sometimes within the course of a single trial) to new technologies that are used by investigators and defence counsel.

Social cohesion and polarisation



Polarisation is intensifying globally, eroding social cohesion, and resulting in an increasingly fractured political landscape.¹⁴ This is linked to declining trust in governments and institutions.¹⁵ The OECD partially attributes this polarisation to disinformation and misinformation.¹⁶

New Zealand is not immune to the global rise in social polarisation. According to Statistics New Zealand's General Social Survey, public trust in key institutions – including Parliament, the Police, and the courts – has declined.¹⁷ Research from Koi Tū Centre for Informed Futures highlights the role of misinformation and disinformation in deepening these divisions.¹⁸

Social polarisation could cause some people to actively challenge the legitimacy of Crown prosecutors or the jurisdiction of the courts. Distrust in institutions may also impact jury trials if jurors are less likely to trust defence counsel and Crown prosecutors, including the authenticity of the evidence that they present in court.

Additionally, Deloitte points to persistent social and economic inequities as a significant driver of division,¹⁹ noting that broad measures such as average life expectancy can mask disparities in social outcomes for Māori and Pacific communities.²⁰

The data shows that Māori, among other groups, are over-represented in the criminal justice system as both defendants and victims.²¹ This is important to our later discussion on the use

¹⁴ Economist Group "EIU's 2023 Democracy Index: conflict and polarization drive a new low for global democracy" (15 February 2024) <www.economistgroup.com>. See also Deloitte New Zealand, above n 11, at 12.

¹⁵ PwC, above n 5, at 22 and OECD *Survey on Drivers of Trust in Public Institutions – 2024 Results: building trust in a complex policy environment* (July 2024) [OECD] at 19-33.

¹⁶ OECD, above n 15, at 21.

¹⁷ Stats NZ "New Zealanders' trust in key institutions declines" (25 September 2024) <www.stats.govt.nz>.

¹⁸ Koi Tū: The Centre for Informed Futures *Social cohesion and societal polarisation* (October 2023) at 3.

¹⁹ Deloitte New Zealand, above n 11, at 12.

²⁰ At 13.

²¹ See, for example: He mihi tēnei nā mātou te Paewhiri Tūtahi: Understanding Policing Delivery *Independent Panel Report 1* (Understanding Policing Delivery, 2024); Ministry of Justice *New Zealand Crime and Victims Survey, Key Results – Cycle 6* (Ministry of Justice, 2024); Professor Sir Peter Gluckman *Using Evidence to Build a Better Justice System: The Challenge of Rising Prison Costs* (Office of the Prime Minister's Chief Science Advisor, 2018); Moana Jackson *Māori and the Criminal Justice System: A New Perspective, He Whaipāanga Hou: Part 2* (Department of Justice, Policy and Research Division, Study Series 18, 1988).

of new technology; it will be important to ensure policies or processes adopted by Crown prosecutors relating to use of technology in courtrooms or use of AI enhance access to justice and do not unintentionally deepen divides or exacerbate existing disparities.

TRENDS IN CRIMINAL JUSTICE SYSTEM AND CROWN PROSECUTIONS

Our consultation confirmed that these megatrends do already – and will continue to – impact the criminal justice system in New Zealand.

Submitters on our long-term insights briefing topic discussion document said the criminal justice system does not reflect our diverse population, and was designed around a narrow, often urban and Pākehā user. Submitters said this included a lack of inclusive practices and communication supports for people with cognitive or neurological conditions. Given the trend shows increasing diversification, the gap the criminal justice system needs to bridge could become wider without intervention.

The acceleration of innovation and adoption of technology is a trend that submitters felt could assist the criminal justice system. Submissions on our long-term insights briefing topic included strong calls for a faster and more efficient justice system that is modernised with user-friendly digital tools. The justice system is under strain and there are continuing delays caused by a range of factors in criminal cases. Effective access to justice relies upon this access being timely, which is itself a key aspect of the rule of law.²² Submitters also saw technology, including the use of AI, as an opportunity to make the justice system more comprehensible by allowing better and faster translation and increasing integrated use of assistive technologies.

Sitting against this, participants at the workshops we jointly held with the Ministry of Justice sounded a note of caution about the digital divide. There was concern that modernisation and the uptake of technology in the justice sector, if not done well, could leave people behind. Workshop participants were also concerned that current digital justice offerings are too complex or inaccessible for those unfamiliar with legal or technological systems. Some participants at the workshop were concerned that technology could result in inequitable access to justice, with in-person systems being reserved only for those with the means to pay. It was noted that the impact of AI is already being felt with clients questioning defence counsel about case strategy based on (incorrect) ‘advice’ from Generative AI such as ChatGPT.

²² The draft Ministry of Justice long-term insights briefing and the Chief Justice’s Annual Report set out data on the new and active cases in the District Court and High Court, as well as current initiatives underway to improve timeliness (Ministry of Justice *The Future Operation of the Courts and Justice Services: Draft Long-term Insights Briefing for Public Consultation* (October 2025) and Office of the Chief Justice *Annual Report for the period 1 January 2024 to 31 December 2024* (2 September 2025)).

Changing demographics, the uptake and use of technologies, and increasing social polarisation have, and will continue to, impact the scale and complexity of prosecutions.

In general, the average lifespan of a Crown prosecution is increasing, while the proportion of Crown prosecutions as a percentage of all public prosecutions is also increasing.

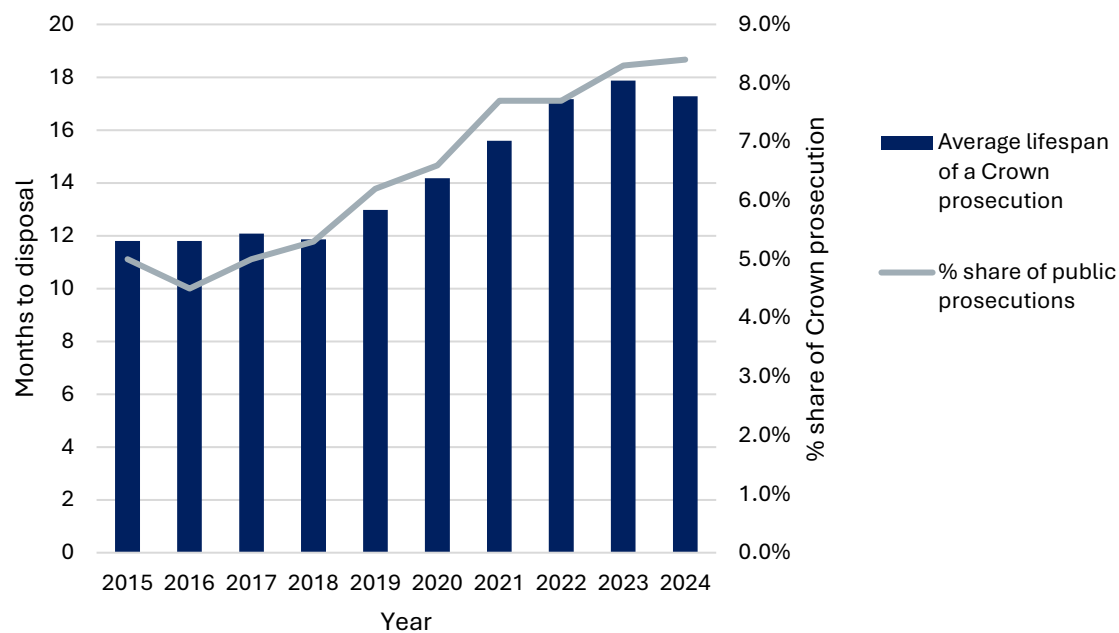


Fig 2. Average disposal times for Crown Prosecutions and percentage (%) share of public prosecutions²³

The increase in the proportion of Crown prosecutions as a percentage share of all public prosecutions is driven by two matters:

- A numerical increase in the number of Crown prosecutions from 4,469 disposals in 2015 to 6,794 disposals in 2024. This represents a 52% increase over 10 years. This appears to be due, at least in part, to more people electing jury trial (which are Crown prosecutions).²⁴
- A general decrease in non-Crown prosecutions from approximately 95,000 disposals in 2015 to approximately 75,000 disposals in 2024. This represents a 21% decrease over nine years. This is consistent with the trend in Ministry of Justice data indicating a general reduction in the number of people charged (from 72,243 in 2019 to 67,399 in 2024) and convicted (58,924 in 2019 to 50,689 in 2024).²⁵

²³ The above chart has a +/- 5% error rate.

²⁴ Ministry of Justice *Improving Jury Trial Timeliness Discussion Document* (September 2024) at 8.

²⁵ Ministry of Justice *Trends for people with finalised charges in court* (March 2025) at fig 1.

A number of factors contribute to the long-term trend we see of the average lifespan of Crown prosecutions increasing. In particular, there has been a significant increase in average lifespan post 2020, in part explained by the COVID-19 pandemic lockdowns (nationwide as well as those focused on Auckland and the Far North) that resulted in court delays and backlogs. Other, more persistent, factors contributing to this increase include:

- increased complexity of Crown prosecutions (eg, with multiple defendants or extensive electronic evidence);
- more people pleading later in the process which results in more hearings with attendant resource implications;
- system limitations, with delays to hearings caused by the lack of resources;
- an increasing length of time between conviction and sentencing; and
- an increased number of jury trials due to more people electing jury trial.

TREND ONE: TECHNOLOGY IN COURTROOMS

Emerging trends in courtroom technology

Courts around the world are evolving as digital tools become more sophisticated and widely adopted. There is exciting potential for such tools to support access to justice, significantly streamline processes, reduce costs, and improve the court user experience, including for victims. A recent report by the OECD provides examples of how digital technologies and data have been used positively in different countries.²⁶ This shift is also increasingly evident in New Zealand. Over the next 20 years, technology will drive significant change in the criminal justice system, including in jury trials, and will enable more legal processes to move away from physical courtrooms.

In New Zealand, the judiciary's responsibilities in relation to conducting the business of courts and tribunals include the control and supervision of the use of technology for court business. Ministry of Justice responsibilities include the provision, maintenance and operation of that technology.²⁷ The judiciary and the Ministry work together to make decisions about technology for use in the court system, consistent with their respective responsibilities. The Chief Justice has developed the Digital Strategy for Courts and Tribunals which sets out the judiciary's objectives and guiding principles for the use of technology in the courts.²⁸

²⁶ OECD *Governing with Artificial Intelligence: The State of Play and Way Forward in Core Government Functions*, OECD Publishing, Paris, <https://doi.org/10.1787/795de142-en>, chapter on "AI in justice administration and access to justice" (2025) at pp 265-278.

²⁷ "Principles observed by Judiciary and Ministry of Justice in the Administration of the Courts" (29 November 2018) <www.courtsofnz.govt.nz> at [3.1(g)], [4.2(c)].

²⁸ Te Tari Toko i te Tumu Whakawā | The Office of the Chief Justice *Digital Strategy for Courts and Tribunals* (March 2023) [Digital Strategy for Courts and Tribunals].

The signs of change are already apparent. The Ministry of Justice’s *Te Au Reka* case flow management system aims to replace paper-based systems with fully digital case management.²⁹ At the same time, the use of audio-visual link (AVL) technology overseen by the judiciary has increased over time, particularly for procedural matters.³⁰ This growing reliance on remote and hybrid hearings signals a broader, long-term transition.

Other jurisdictions are experiencing similar shifts. In England and Wales, digital hearings expanded rapidly during the COVID-19 pandemic, with some courts now exploring whether aspects of jury trials can occur remotely.³¹ In the United States, courts and prosecutors are adopting virtual platforms for evidence presentation and early-stage hearings. These developments raise important questions about fairness, access, and public confidence – issues that continue to be debated internationally.³²

Long-term Insight

Technology is advancing and becoming an integral part of court processes, driving significant change. While the exact future is hard to predict, court proceedings will evolve. At the very least, legal proceedings will depend less on paper and physical courtrooms, relying more on digital systems and enabling participation from different locations.

²⁹ Ministry of Justice *Te Au Reka capability model* (October 2022) [Te Au Reka]. Te Au Reka is the Ministry of Justice’s digital case flow management system is being developed and will be rolled out in stages, beginning with the Family Court.

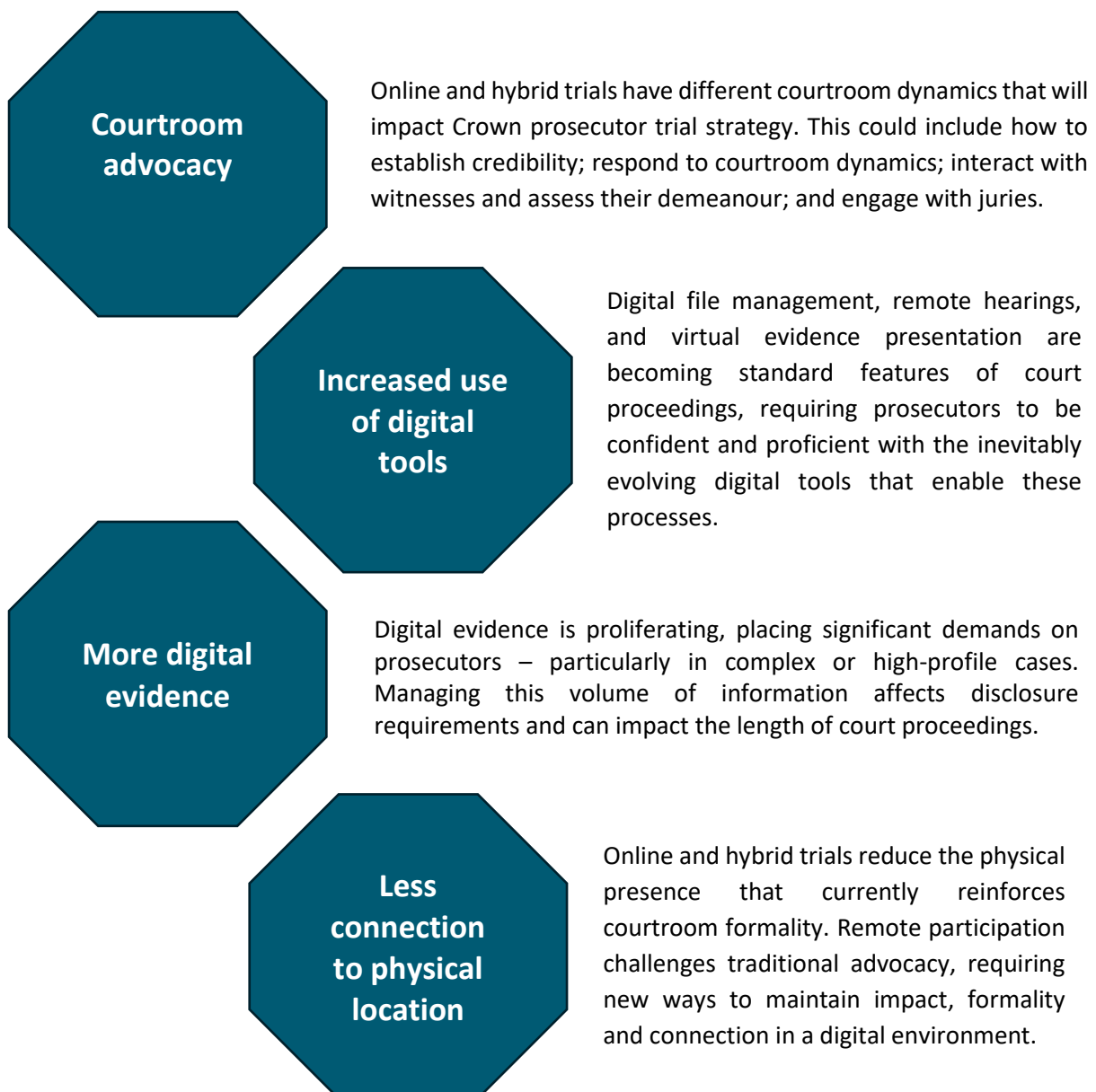
³⁰ The judiciary has developed protocols for the use of remote participation that are available on the Courts of New Zealand website <[courtsfnz.govt.nz](https://courts.fnz.govt.nz)>.

³¹ Richard Susskind “The Future of Courts” *The Practice* (online ed, Harvard Law School, May 2025).

³² Prosecutors’ Center for Excellence *Technology and Prosecution: The Evolving Courtroom* (March 2024).

Implications for Crown Solicitors and Crown Prosecutions

These developments will have wide-ranging impacts on Crown prosecutors. This long-term insights briefing focuses on their perspective, but similar effects will be felt by defence counsel and other participants in the justice system. We capture some key impacts below.



A digital future: opportunities and risks

The shift towards online and hybrid hearings and increasing use of technology is set to continue. When applied well, remote participation can broaden access to justice, speed up proceedings, and provide benefits for all participants, including victims. While some current cultural and legal traditions may favour physical court processes, thoughtful integration of technology into court hearings – particularly trials – can uphold these principles while supporting fair trial processes.

“Technology has the potential to be transformative by better enabling access to the courts and reducing the cost and complexity of proceedings. However, its use must be consistent with fair process, and with a justice system run by and for people.”³³

Unlocking opportunities: The potential of courtroom technology

There are clear potential benefits of courtroom technology. Remote appearances can improve access to justice – especially for vulnerable or geographically isolated witnesses – and reduce the time, cost, and logistical burden of attending court in person. For victims, these technologies can make participation less intimidating and potentially less retraumatising, as they can engage with the court process without being in the same room as the defendant. Pre-trial hearings can be scheduled more flexibly, and prosecutors can spend less time travelling. This will be especially useful in rural areas or in large urban areas such as Auckland, where there are multiple courts across the region.

Remote appearances can also help reduce logistical burdens, particularly for defendants and witnesses in custody. Minimising transfers between facilities reduces cost, disruption, and security risks – particularly in large, multi-defendant cases. This may help ease pressure on the system, including when there are difficulties securing a courtroom of sufficient size, or for a sufficient length of time. It is currently well recognised that there is considerable potential to increase remote participation for procedural appearances. Prosecuting and defence counsel too can save considerable travel and waiting time by attending court remotely. Remote appearances also support them to appear in different regional courts on the same day, which helps with the scheduling and progress of different cases for which they are responsible.

The time and cost savings are particularly relevant in the context of the trend toward more and longer Crown prosecutions identified above.

Technology can support the management of complex evidence. Technological advances, including digital exhibits and real-time transcripts, can improve clarity, reduce delays, and streamline presentation. Technology will inevitably provide new ways to present evidence to

³³ See Annual Report, above n 22 at 70.

the fact-finder. These tools are likely to be especially valuable in information-and data-heavy prosecutions, as identified above in the trend towards more complex Crown prosecutions.

These benefits could be better realised as technology rapidly advances. For example, advancements in holographic communication could allow remote witnesses or evidence to appear in court as three-dimensional projections. This technology enables cross-examination in a way that closely resembles in-person testimony. If New Zealand was to adopt this technology, then holographic witnesses could even hold and display exhibits in 3D.³⁴ While still experimental, such innovations could help address concerns about the limitations of remote appearances.

Remote participation also creates opportunities to improve accessibility. For example, simultaneous interpretation and use of real-time subtitles could improve accessibility for non-English speakers or those with disabilities including hearing impairments. This is likely to become more important given the trend to a more diverse and multicultural society in New Zealand. At our workshops, the ability for technology to improve access to justice for our diverse communities was identified as a key benefit.

There are also potential opportunities for increasing jury participation rates by making it easy for jurors to participate. This could occur on a spectrum, from a system that allows jurors to complete parts of the selection process online, to jurors attending court online. This would save time and reduce costs for jurors, including childcare and transport, and could therefore increase juror participation rates.³⁵ This is consistent with the trend towards more defendants electing jury trials.

Navigating risks: a secure and equitable digital justice system

An important issue to consider in expanding the use of technology is its effect on trial fairness and the perceived legitimacy of proceedings. Remote hearings could influence how participants perceive the process; diminish the formality of proceedings; and impair a Crown prosecutor's ability to read or influence the room. Tone, body language, cadence, and delivery – key advocacy tools – may lose their impact. The challenges become more pronounced when participants rely on varied devices and uneven internet connections, making it even more important for Crown prosecutors to stay abreast of technological developments and to develop a broad suite of advocacy skills and styles.

Advances in technology will not, on their own, eliminate barriers to justice. If the digital divide persists, access to justice will remain uneven. Currently, not everyone has the same level of internet connectivity, digital literacy, or equipment. Data shows that those most at risk of digital exclusion are Māori, disabled people, Pacific peoples, people in social housing, seniors,

³⁴ Prosecutors' Center for Excellence, above n 32, at 8.

³⁵ National Center for State Courts *Preserving the Future of Juries and Jury Trials* (December 2024).

unemployed and underemployed, and those in remote communities.³⁶ These gaps raise fair trial concerns: if participants struggle to see or hear what is happening, or if poor technology undermines a participant's presentation, the fairness of a trial could be compromised. At the workshop on our draft briefing, it was noted that these concerns extend to people who choose not to use technology because they distrust it.

We heard from some Crown prosecutors that not having judges in the same room as defendants can diminish the level of engagement by defendants and reduce the gravity of the legal process.³⁷ Crown Solicitors' experience is that a high percentage of decisions to plead guilty are made shortly before a defendant is due to appear in court in person, including on the morning of a trial. Having trial participants, including Crown prosecutors, in different locations connected by AVL or other remote access technologies may also lead to challenges in incorporating tikanga Māori or other cultural practices (where appropriate), as imagined in Te Ao Mārama.³⁸ Remote appearances could also reduce engagement and make justice seem more distant.³⁹ For Crown prosecutors, whose work depends on visible fairness and public trust, this could weaken public confidence in the system.

Research by the American Psychological Association (APA) has shown that online trials can influence perceptions of credibility. Participants may respond differently to witnesses or lawyers depending on camera angles, sound quality, or visual settings— all factors unrelated to the substance of the case.⁴⁰ This adds a layer of complexity for Crown prosecutors, particularly in serious criminal matters.

Ensuring security and transparency in remote settings is a growing challenge. New processes may be needed to verify who is present with a witness during their testimony, and to prevent unseen influence on evidence. These concerns raise questions about procedural integrity, open justice, and defendants' rights. As technology advances and online hearings become more common, the ability to surreptitiously record court proceedings will increase. Combined with AI tools capable of manipulating images or audio, this creates heightened potential for breaches of suppression, increased online harm, and victimisation of participants.

Translation technologies are expected to improve significantly over the next 20 years, particularly if opportunities are taken to develop culturally informed tools. However, current AI-powered interpretation poses challenges. These include the quality and cultural

³⁶ Digital Government "Report: Digital inclusion user insights – Māori" (updated 20 May 2021) <digital.govt.nz>. and New Zealand Institute of Economic Research *Addressing the digital divide: the economic case for increasing digital inclusion* (June 2022).

³⁷ Rt Hon Dame Helen Winkelmann, Chief Justice of New Zealand "Bringing the Defendant Back into the Room" (Keynote Speech, Annual Criminal Bar Association Conference, University of Auckland, 3-4 August 2019).

³⁸ District Court of New Zealand | Te Kōti-ā-Rohe o Aotearoa Te Ao Mārama: *Best practice framework* (December 2023).

³⁹ Dame Helen Winkelmann, above n 37, at 8-9.

⁴⁰ Zara Abrams, "Can justice be served online?" *Monitor on Psychology* (online, American Psychological Association, May 2025).

appropriateness of translations for te reo Māori, where concepts and terminology often lack direct English equivalents, as well as similar issues in other languages.

The experience of different types of participants will also need to be addressed. Technology can transform how justice is delivered, but different participants will experience those changes and their effect on the proceedings differently. For some, being physically present in court provides a necessary sense of closure or catharsis. For others – especially victims (as noted above) – court attendance can be retraumatising. A shift to remote participation could alleviate harm for some, while diminishing the emotional and symbolic weight of the justice system experience for others.

Strategic choices

As Professor Richard Susskind has observed, “we are at the foothills of the transformation in court services”⁴¹ – the leap from physical courts to remote hearings is just the beginning.

This section identifies some strategic choices for governments, the judiciary, and the legal profession that will influence the success of integrating technology into the courtroom through to 2045. We consider a strategic, considered, and consultative approach – rather than one that is ad hoc and reactive – will drive the success of this endeavour.

Current remote participation settings present some challenges, and these may evolve as technology develops over the forecast period. Decisions made by governments and the judiciary – working with the profession – will shape how Crown prosecutors adapt to an increasingly digital environment. We have identified the following factors likely to influence Crown prosecutors and inform future strategic choices:

- **Extent to which in-person elements are maintained:** To what extent should courts go digital? Decision-makers will need to decide which parts of the justice process should remain in-person, and which can be managed fairly and effectively online. In some cases, core elements such as examination and cross-examination may not be sufficiently effective or rights-protecting when conducted online. Other aspects may not be readily transferable to remote formats. For instance, collaboration, confidentiality, and collective decision-making in jury deliberations presently rely heavily on in-person interaction. Cultural considerations, impacts on victims, and practical supports that enhance access to justice will be relevant to these decisions. These assessments may evolve as advances in technology reduce, or potentially eliminate, current differences between in-person and virtual settings. A balanced approach that weighs these factors based on the nature of the proceeding will protect the integrity of trials as the justice system modernises.

⁴¹ Susskind, above n 31. Professor Susskind is the president of the Society for Computers and Law, technology adviser to the Lord Chief Justice of England and Wales, and Chair of the advisory board at the Oxford Internet Institute.

- **National standards:** International experience shows that digital justice must be actively managed to avoid bias, distortion, or misuse. The judiciary, governments, and the legal profession all have a role in determining whether further national standards are required to guide the use of courtroom technology, and in developing such standards as new or better technologies emerge.
- **Decisions around the balance of physical and digital infrastructure:** If courts are to evolve into more integrated digital environments, as opposed to largely physical spaces, sustained investment will be required for accessible, reliable, nationwide, and integrated digital court services. This includes reliable audiovisual systems, secure evidence platforms, robust cybersecurity, and interoperable systems that maintain access to justice for defendants and victims.⁴² At the same time, long-term planning for physical infrastructure remains critical. As more proceedings move online, the number and role of courtrooms may change, impacting how Crown prosecutors and other justice participants work. Decisions about physical spaces and technology must be coordinated to ensure courts function effectively as both physical and connected digital environments.
- **Keeping pace with rapid technological change:** The accelerating speed of technological innovation in the justice system means Crown prosecutors must adapt quickly to new tools and processes. Digital advocacy, remote communication, and the management of digital evidence are no longer optional – they are becoming core competencies. Capability development will be critical for prosecutors to keep pace as courts increasingly rely on integrated digital environments and advanced technologies. To achieve this ever-evolving capability there will need to be investments in resourcing and training across the system, including for prosecutors, defence counsel, the wider profession, and law schools.

⁴² See Digital Strategy for Courts and Tribunals at above n 28. This sets out the judiciary’s objectives and guiding principles for use of technology in courts which emphasises the importance of reliable, secure and fit-for purpose infrastructure.

TREND TWO: ARTIFICIAL INTELLIGENCE

AI is developing rapidly, both in its abilities and accessibility. This section considers two aspects of the use of AI:

- the growth and increasing use of AI in legal work; and
- the problem and increasing risk of fake evidence or “deep fakes”.

What is Artificial Intelligence (AI) and Generative Artificial Intelligence (GenAI)?

We adopt the definitions from the Responsible AI Guidance for the Public Service: GenAI,⁴³ which are themselves based on OECD definitions.

AI system: A machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment.

GenAI: A type of AI system that can create or generate new content such as text, images, video and music based off models and patterns detected in existing datasets.

The trajectory of AI in Crown prosecutor work: from routine tasks to strategic decision making

AI is evolving at a pace that will fundamentally reshape legal practice over the next two decades. While current applications focus on routine tasks, such as contract analysis and document review,⁴⁴ the trajectory points towards AI playing a role to support prosecutorial decision-making. By 2045, AI could assist Crown prosecutors with functions such as evidence analysis, automatically compiling material relevant to charging decisions, or research and analysis on available sentence outcomes.

Recent developments illustrate this shift in other legal contexts. In May 2025, the Solicitors Regulation Authority in England and Wales approved Garfield Law to deliver legal services through AI for debt recovery. Although regulated solicitors remain accountable for formal steps, this milestone signals a future where AI is embedded in core legal processes rather than peripheral tasks.

Governance and public trust

As AI moves into assisting Crown prosecutors with more complex decision making, maintaining public confidence will be critical. Crown prosecutors will need to consider

⁴³ Digital Government “Glossary of AI terms” (3 February 2025) <www.digital.govt.nz>.

⁴⁴ Thompson Reuters “How AI is transforming the legal profession” (2025) <www.legal.thomsonreuters.com>.

frameworks for transparency, explainability, and auditability of AI-driven processes. The growing volume of data in Crown prosecutions raises questions of ownership, privacy, and control.

Beyond Crown prosecutors, New Zealand's Strategy for Artificial Intelligence considers the risks of misappropriation and loss of Māori data sovereignty and notes work by Te Puni Kōkiri to support the appropriate use of Māori cultural intellectual property.⁴⁵ Frameworks and strategies governing AI will need continuous evolution to address emerging risks such as bias, misuse, and intellectual property concerns.

Strategic opportunities

AI offers significant potential to enhance efficiency, consistency, and access to justice. Legal resource providers are already leveraging AI for conversational search, document drafting, and gap analysis in legal arguments. Looking ahead, the opportunity lies in using AI not just to automate tasks but to augment human analysis and judgement, supporting prosecutors with real-time insights while preserving accountability.

Strategic Insight

By 2045, AI will not simply assist legal work: it will transform it. Crown prosecutors will need to harness the benefits in a way that promotes accountability and trust.

Implications for Crown prosecutors and Crown prosecutions

The pace of change in AI makes it difficult to predict impacts on Crown prosecutions and Crown prosecutors with any degree of certainty. However, we identify the opportunities and risks that are likely to apply to all new technologies.

"The future of AI development is surrounded by significant uncertainty. This includes uncertainty around the development of future capabilities and safety systems, as well as how people and businesses use AI and the resultant impacts..."⁴⁶

AI in the justice system: opportunities and risks

The development of AI is occurring rapidly and in unpredictable ways. The opportunities and considerations relevant to current AI tools (such as GenAI) will not be the same in 20 years' time. We extrapolate opportunities and considerations arising from current GenAI systems, but acknowledge that the pace of change is such that it may manifest in different ways from

⁴⁵ New Zealand Government *New Zealand's Strategy for Artificial Intelligence: Investing with confidence* (July 2025) at 13.

⁴⁶ UK Government Office for Science *AI 2030 Scenarios: Helping policy makers plan for the future of AI* (January 2024) at 19.

that outlined below. The below focuses on Crown prosecutors, but may apply to other participants in the system, potentially in different ways.

Unlocking opportunities: advancing Crown prosecutor legal practice through AI

A recent bi-annual snapshot on the use of AI and how it impacts productivity in New Zealand based on survey data shows that 91% of businesses reported efficiency gains along with savings on operational costs.⁴⁷ At the same time, the report shows that barriers to AI adoption and operation are trending down.⁴⁸ For Crown prosecutors, similar benefits are within reach. AI can streamline labour-intensive tasks such as document review, disclosure, legal research, and data analysis, freeing prosecutors to focus on complex, judgement-intensive work.

Consistent with this, AI has great potential to increase Crown prosecutor productivity, including by streamlining labour-intensive processes, such as document review, disclosure, legal research, summarising information, analysing data and predicting outcomes.

But AI offers far more than efficiency gains. For Crown prosecutors, AI could:

- **Streamline core processes:** automate disclosure, document review, and legal research to reduce administrative burden and accelerate case preparation.
- **Enhance decision-making:** use predictive analytics to assess risk, prioritise cases, and support bail or sentencing recommendations, potentially reducing human bias and improving consistency.
- **Strengthen advocacy:** generate draft arguments, test trial strategies, and identify weaknesses in legal reasoning. AI could even model alternative scenarios for plea negotiations or sentencing outcomes.
- **Improve evidence integrity:** summarise large volumes of data to detect inconsistencies in testimony or evidence, and flag anomalies in real time during hearings.
- **Enable real-time support:** provide prosecutors with instant access to relevant case law, objections, and evidentiary correlations during trial.
- **Advance fairness and transparency:** deploy AI-driven auditing tools to monitor for bias and ensure decisions align with legal and ethical standards.

⁴⁷ AI Forum New Zealand | Te Kāhui Atamai Ihiko o Aotearoa *AI in Action: Exploring the Impact of Artificial Intelligence on New Zealand's Productivity* (August 2025) at 11.

⁴⁸ At 16-18.

Used responsibly, these capabilities could reduce workloads, improve timeliness, and allow prosecutors to concentrate on tasks requiring judgement and reasoning. This shift is not just operational: it is strategic, with the potential to help shape a justice system that is more efficient, equitable, and resilient.

Navigating risks: building trust and accountability in GenAI adoption

The pace of change and uptake of GenAI has been rapid within the legal profession, mirroring other sectors. We outline several known risks that Crown prosecutors, and the wider justice system, will need to address as GenAI becomes more embedded in legal practice. Over the next two decades, building and maintaining trust in the way GenAI is used to support prosecutorial decisions will hinge on the integrity of the AI models, the inputs to the models and the understanding of how the models work. The challenges identified here reflect current risks, but they may not be the same issues that will emerge over the next 20 years. Nonetheless, they provide a useful indication of the considerations that will shape the immediate future and inform longer-term strategies:

- **Accuracy:** While GenAI models will continue to improve and reduce the frequency of hallucinations, the risk will not be eliminated. This is due to several factors:
 - **Complexity of legal contexts:** Law involves nuanced interpretation, development through the common law and jurisdiction-specific rules, which AI may still misapply.
 - **Data limitations:** Incomplete or biased training datasets can perpetuate errors despite technical advances.
 - **Persistent human oversight needs:** As AI becomes deeply embedded in workflows, undetected inaccuracies could have greater consequences, making auditing and explainability essential.

Even with improvements, GenAI may still produce fabricated cases, incorrect factual information, or outputs that miss critical nuances in the New Zealand legal context.⁴⁹ Crown prosecutors will need to invest time verifying work prepared with GenAI, as risks and assumptions are not always obvious. Strategic investment in verification processes, explainability standards, and training will remain essential to ensure AI strengthens rather than undermines fairness and confidence in the justice system.

⁴⁹ See OECD “Generative AI: Risks and Unknowns” (accessed 20 May 2025) www.oecd.ai (risks of GenAI hallucinating), *Wikeley v Kea Investments Ltd* [2024] NZCA 609 at footnote 187, and New Zealand Law Society “Beware of legal citations from ChatGPT” (30 March 2023) <www.lawsociety.org.nz>. There are numerous examples overseas where counsel and self-represented defendants have been reprimanded for the use of GenAI resulting in hallucinated cases in court documents. See, for example, *R (Ayinde) v London Borough of Haringey* [2025] EWHC 1383, which sets out in an appendix various examples of GenAI material being put before courts in England and Wales, the United States, Australia, New Zealand, and Canada.

- **Privacy and security:** Crown prosecutors hold large volumes of information that is highly sensitive. This raises challenges for sensitive, legally privileged, confidential, or suppressed information.
- **Bias and transparency:** GenAI systems learn from large datasets, and if those datasets contain cultural, racial, or gender biases, the outputs can perpetuate or even amplify discriminatory practices.⁵⁰ The OECD has warned that GenAI may inadvertently reinforce existing social inequalities.⁵¹ In the New Zealand context, this risk is heightened because most training data reflects overseas jurisdictions rather than local realities. At the same time, it is often unclear how GenAI models are trained or what data they rely on, creating challenges for Crown prosecutors who remain accountable for the accuracy of information derived from these tools. Mitigating these risks will require diverse, representative datasets, cultural oversight, bias-auditing mechanisms, and greater transparency in model development to ensure AI supports equity and accountability, and does not amplify or exacerbate discrimination.
- **Human lens:** Crown prosecutors need to make nuanced decisions, considering a wide range of factors. For instance, the Solicitor-General’s Prosecution Guidelines variously refer to the “public interest” and “interests of justice” at different points. Nuanced concepts of this type involve a complex balancing of factors that may not be amenable to analysis by data driven models.

The above applies not only to Crown prosecutors’ use of GenAI tools, but also their use by other participants in the system. By way of example, experts and investigators may use GenAI in a way that is not immediately apparent, but which gives rise to challenges that will need to be managed.

As to the use of AI in the future more generally:

- **Keeping pace with change:** Crown prosecutors will need to adapt to emerging technologies at a pace that aligns with developments in the justice system. A more risk averse approach, reflecting prosecutorial obligations, could result in slower adoption compared to other parts of the justice system, creating operational disadvantages. Feedback gathered during development of this draft long-term insights briefing indicates that prosecutors are currently taking a conservative approach to using AI for legal purposes, while emphasising the need for all stakeholders, including investigating and prosecution agencies, to advance together so no part of the prosecution system falls behind.

⁵⁰ Molly Callahan “Algorithms Were Supposed to Reduce Bias in Criminal Justice – Do They?” (online, The Brink, Boston University, 23 February 2023).

⁵¹ OECD, above n 49.

- **Cultural integrity:** Care is needed to ensure that AI does not misinterpret or mishandle evidence relating to Māori cultural practices, spiritual beliefs, or traditional knowledge.⁵² AI systems may have difficulties in recognising and appropriately incorporating Mātauranga Māori (Māori knowledge) and alternative justice paradigms, reinforcing the need for human and cultural oversight.
- **Workforce impact:** Quite aside from the productivity gains presented by emerging technologies, the accelerating evolution of AI could reshape the skills required of Crown prosecutors, particularly if traditional tasks such as writing, analysis, and legal research are automated or performed by GenAI. Managing such a transition will be critical to maintaining capability and ensuring the workforce remains equipped for the demands of a technology-enabled justice system.

Strategic choices

Decisions made over the next two decades will shape how AI is used in Crown prosecutions and how associated risks are managed. While Crown Law and Crown prosecutors will not lead AI development, they will need to respond effectively to changes in the justice ecosystem and ensure prosecutorial obligations are upheld. Strategic choices will need to be made by Crown Law, Crown Solicitors, governments, justice sector agencies and others to reflect both immediate needs and long-term considerations:

- **Guidelines:** determine whether existing frameworks, such as the Solicitor-General's Prosecution Guidelines, should be supplemented with specific advice on AI use. These could address practical issues for Crown prosecutors and public prosecutors more broadly, while aligning with guidelines developed by the judiciary and the profession.
- **Workforce capability development:** consider moving beyond basic digital literacy training to structured workforce capability development for prosecutors. This might include practical guidance on mitigating risks, cultural competency (including how overseas-developed AI systems may impact New Zealand), and new skill sets such as digital literacy, data interpretation, and ethical reasoning. Embedding technical competencies into recruitment and professional development will help maintain capability as traditional tasks become automated.
- **Technology governance and standards:** consider how to implement protocols for explainability, bias auditing, and cultural oversight in AI systems used for prosecutions.
- **Cross-Sector collaboration:** Crown prosecutors and public prosecuting bodies may see benefit in leveraging relationships with the Law Society, Bar Associations, law schools,

⁵² The risk of 'digital colonisation' is explored further by the Ministry for Culture and Heritage (Manatū Taonga | Ministry for Culture and Heritage He Whakamāramatanga mō Ngā Tirohanga Wā Roa | *Long-term Insights Briefing 2025: Te Ahurea i te Ao Matihiko | Culture in the Digital Age* (June 2025) at 21).

Māori governance bodies, and technology providers to co-design culturally appropriate and legally sound AI solutions. Collaboration will be essential to ensure consistency and cost-effectiveness across the justice system.

- Regulatory changes: assess whether legislative or regulatory changes are needed to address specific risks from AI use in prosecutions. Any regulation should consider the responsibilities of other actors in the justice system and the pace of technological change.
- Scenario planning and foresight: build capability to anticipate how AI might evolve over the next 20 years and stress-test policies against different futures. This will help ensure strategic choices remain relevant as technology advances.

In pursuing any strategic choices regarding the use of AI, the requirement for Crown prosecutors to meet their obligations as prosecutors, lawyers, and officers of the court must remain central.

Problems and increasing potential of fake evidence or “deep fakes”⁵³

The judiciary in both the United States and Canada have expressed concern about the production of false images or “deep fakes” in Court.⁵⁴ GenAI can be used effectively with little skill or experience. For example, a person involved in a criminal prosecution – whether a defendant, victim, or witness – may be able to feed a GenAI tool an image of a person and manipulate it to show a convincing injury,⁵⁵ or create a deep fake video from an image and audio file.

As GenAI advances, fake evidence will be increasingly undetectable to the human eye. Dr Andrew Chen was consulted during the development of this briefing.⁵⁶ He provided information on the current “race” between AI which creates deep fakes, and AI which aims to detect them. Both use the other to improve their performance in a cyclical manner. This

⁵³ We have focused our long-term insights briefing on the admissibility of evidence that is, or is challenged as being, fake. There are other criminal justice issues related to deep fakes such as using technology to create child sexual abuse material and the use of AI-mediated evidence. These are canvassed in the by the Law Commission of Ontario in its report *Law enforcement use of AI* (April 2025) at p 23.

⁵⁴ *People v. Beckley*, 110 Cal. Rptr. 3d 362 (U.S. Cal. Ct. App. 2 Dist. 2010) at 515 (quoting Parry, Digital Manipulation and Photographic Evidence: Defrauding the Courts One Thousand Words at a Time” (2009), 2009 J.L. Tech. & Pol’y 175, 183); the Court’s comment was referred to by a Canadian Court in *R v Andalib-Goorani* 2014 ONSC 4690 at 33.

⁵⁵ This is not anticipated to pose much of an issue where a complainant in a criminal prosecution has disclosed abuse immediately and, for example, the photographs to be produced have been taken by Police. However, commonly, disclosure of abuse (in particular sexual or domestic violence) is not immediate; a report to Police may be made well after the injuries occurred, if not years after the alleged violence.

⁵⁶ Chief Advisor, Technology Assurance – New Zealand Police.

dynamic means that detection will never be static – it will demand constant and consistent innovation and investment.

We anticipate that expert evidence on the authenticity of digital evidence, particularly images, videos, and audio⁵⁷ will become more common in criminal prosecutions. Crown prosecutors will need to stay aligned to new evidential standards or verification protocols as they emerge.

Long-term insight

The ability of GenAI to facilitate the production of fake evidence will increase and could challenge evidential integrity in the justice system. This will impact the criminal justice system – primarily through evidential and admissibility issues – but could also impact public trust in the criminal justice system.

Impacts on Crown prosecutors and Crown prosecutions

Advances in GenAI technology enabling the manipulation of evidence pose unique challenges for Crown prosecutors, and investigating and prosecuting bodies including the Police. This is particularly an issue for Crown prosecutors because the prosecution carries the burden of proof in a criminal prosecution. The risks run in both directions, that fake evidence will be admitted with negative impacts on the court proceeding, and that genuine evidence is unable to be admitted because its authenticity cannot be sufficiently verified.

We identify the following impacts:

- **Evidential integrity under pressure:** Traditional assumptions about the reliability of visual and audio evidence will erode. In the next 20 years, prosecutors will need to become more adept at recognising when to challenge the authenticity of defence evidence proactively and be prepared to respond to defence challenges about the authenticity of Crown evidence.
- **Trust and confidence:** If fake evidence is admitted in proceedings, or if genuine evidence is excluded due to unverifiable authenticity, the credibility of the justice system could suffer, undermining public confidence in Crown prosecutors. Crown prosecutors may contend with increased scepticism from juries, judges, and other participants in the system about the authenticity of digital evidence. Juries may come to expect expert verification of Crown evidence, and without it, be unwilling to accept such evidence at face value.

⁵⁷ The admissibility of expert opinion evidence is subject to the Evidence Act 2006, s 25. Where the authenticity of evidence is in question, it is anticipated that expert evidence on that subject will meet the test of substantial helpfulness (s 25(1)).

- **Rapid policy and legislative reform:** Prosecutors will play a critical role in interpreting and applying new evidential standards as law evolve.
- **Procedural complexity:** Crown Prosecutors will need to navigate the procedural complexity of both challenging, and responding to challenges, of digital evidence including how AI-driven detection tools can be used to verify the authenticity or otherwise of digital evidence.

We are not suggesting that prosecutors or defence counsel will seek to admit evidence that they know or suspect to be false. Rather, there may be questions about the authenticity of evidence which has been submitted in good faith by the prosecutor or defence, about which genuine questions are raised in the course of proceedings.

Strategic choices

Over the next 20 years, the New Zealand justice system will need to examine in more detail how to respond to the challenge of fake evidence.

During our research, we asked Crown prosecutors whether they had experienced problems with fake evidence in practice. While current cases suggest the issue is not yet widespread, early signs, such as allegations during cross-examination and claims in media reports, signal that authenticity challenges will become more common as technology advances.⁵⁸ The question is not *whether* this will impact prosecutions, but how the system will adapt to maintain evidential integrity and public confidence.

This challenge is not unique to New Zealand and other jurisdictions, such as the United States, are already exploring whether new evidential rules and structured processes for challenging authenticity are required. For instance, the Advisory Committee on Evidence Rules in the United States is discussing whether new evidence rules are needed. Various iterations were discussed but they generally involved a two-step process.⁵⁹ A party challenging the authenticity of evidence would need to demonstrate to the court that a jury could reasonably find that the evidence has been fabricated by GenAI. If this is satisfied, the party seeking to admit the evidence must demonstrate that it is more likely than not to be authentic. Ultimately the Committee agreed to a back pocket evidence rule being developed while it

⁵⁸ Crown prosecutors were not aware of any issues where fake evidence had been admitted as evidence. However, they did report increased awareness and scepticism of AI. In one case there was an allegation during cross-examination of a Crown witness that Crown evidence was doctored in some way. In another, a Crown prosecutor was questioned (without basis) about using GenAI to write submissions. Media reports also indicate a self-represented defendant in a murder trial claimed that CCTV footage relied on by the Crown was fake. The Crown challenged the evidence given by the accused and he in turn alleged the Crown had produced false CCTV and other evidence (See Sam Sherwood “Murder accused’s evidence ‘false, fake’, Crown alleges” (2 December 2024) www.stuff.co.nz).

⁵⁹ Daniel Capra “Memorandum to Advisory Committee on Evidence Rules re: Artificial Intelligence, Machine-learning, and Possible Amendments to the Federal Rules of Evidence” (1 April 2025) <www.uscourts.gov>.

monitored AI developments, but was unconvinced that the general admissibility rules were insufficient to deal with the challenge at the time it was discussing the issue.⁶⁰

In parallel to considering mechanisms to address the challenge of fake evidence, other technologies will have a role in providing the solution. Technology is developing alongside GenAI that can assess whether images, video, and audio are authentic or have been generated or manipulated by GenAI. Digital forensic tools can already detect anomalies or mismatches, and cryptographic watermarking can track origin. These tools will continue to develop and will be useful to experts when they are called on to verify the authenticity of evidence, even while the credibility of AI-driven tools may itself be open to questions and heightened scepticism.

Governments will have strategic choices about whether current methods to assess the authenticity of evidence in the criminal justice context are sufficient to deal with GenAI-created evidence (eg, the adversarial system, the use of experts, the duties of lawyers to the court, the professional obligations of lawyers, actions available to the court to control its own processes, and admissibility rules under the Evidence Act 2006) or if other intervention is necessary. We outline some of these below.

- **Addressing challenges to the authenticity of prosecution evidence:** An important aspect of this is who should verify the authenticity of prosecution evidence in a Crown prosecution.⁶¹ We have identified two high-level strategic choices:
 - Private sector experts: Crown prosecutors could instruct experts to provide evidence of the authenticity of evidence, such as a private computer forensics analyst. This would have the general benefits associated with private sector provision, including resourcing being driven by demand.⁶²
 - Specialist public sector capability: A new unit or organisation could be established within the public service with specialist capabilities and responsibilities to verify the authenticity of certain types of evidence. Such a group could be formed or incorporated into an existing organisation, such as a public research organisation, or within a prosecuting agency such as Police. This would ensure expertise is contained within the public service with expectations

⁶⁰ Advisory Committee on Evidence Rules “Minutes of the meeting of November 8, 2024” at 8-13 <www.uscourts.gov>.

⁶¹ If a Crown prosecutor or the Police seek to validate an image or video to be produced by a Crown witness, this could be carried out at an early stage of a prosecution (or before charges are laid, during the Police investigation stage). Notably, if the problem of fake evidence becomes widespread, it could become standard Police procedure to analyse any evidence that will be relied on by a Crown witness, to enable assurances to be made to a future jury of its authenticity. Defendants themselves may seek to inspect images and videos relied on in the Crown’s evidence. The Criminal Disclosure Act 2008 enables the inspection of original files.

⁶² For instance, in Ontario, under Subrule 53.03 of the Rules of Civil Procedure, experts are required to certify the authenticity of authorities, documents, and records referred to in their expert reports. However, this requirement does not apply to those authorities etc that the expert themselves analyse after the party engaging them provided it.

that this unit or organisation would remain up to date with rapid developments in AI. This approach may also ensure there is greater availability of these services to the prosecution in Crown prosecutions.

- **Addressing challenges to the authenticity of defence evidence:** Different issues relate to the verification of evidence produced by defence counsel. While the Crown has disclosure obligations,⁶³ defendants' disclosure obligations are much more limited in scope.⁶⁴ Typically, a Crown prosecutor only learns of defence images or videos to be relied on by the defence *during* trial – at the same time as the Judge and jury, and during a witness's or defendant's evidence. This leaves little or no time to have questionable evidence analysed. Verification procedures could delay trials which would not be desirable. If verification of defence evidence becomes a regular occurrence, we have identified two high-level strategic choices for governments:
 - **Enhanced disclosure requirements:** Consider whether legislative change is needed to require defendants to disclose any digital images, videos, or audio files which they intend to rely on in evidence, prior to the commencement of trial. This disclosure would need to allow sufficient time for experts to undertake appropriate analysis. We note that this would be a significant change to criminal prosecutions as it has implications for the burden of proof and defendants' rights.⁶⁵ Careful and detailed policy work would be required prior to changes being made.
 - **Admissibility thresholds:** Consider introducing an admissibility threshold for digital evidence – for instance, requiring any digital evidence to be accompanied by a certificate of authenticity from a duly authorised expert.⁶⁶ If this threshold were to apply to all digital evidence, it would impose a significant additional burden on both prosecution and defence in a criminal proceeding.

⁶³ Criminal Disclosure Act 2008.

⁶⁴ Generally, a defendant has no disclosure obligations to the Crown, with some exceptions – for example, a defendant must give notice of the intention to adduce alibi evidence and must disclose an expert witness' brief of evidence 10 working days prior to trial (Criminal Disclosure Act 2008, ss 22 and 23).

⁶⁵ There are more significant defence disclosure obligations in other common law countries. Notably, in the United Kingdom, "defence statements" are disclosed to the prosecution prior to trial: "A defence statement is submitted to the prosecution in Crown Court cases and in some Magistrates' Court cases, which sets out the defence to the allegations and can point the prosecution to other lines of inquiry. The disclosure officer will then review all of the material held by the investigator and decide whether in the light of the defence statement, additional material is now relevant or meets the test for disclosure because it supports the case for the accused". <www.cps.gov.uk>.

⁶⁶ In Canada, if there is a question about the authenticity of digital evidence, the court must hold a "voir dire" to determine its admissibility before it can be considered by the judge or jury. "The admissibility test has two branches, both of which must be satisfied: authenticating the record itself; and authenticating the integrity of the device on which the record is stored". Daniel Brown and Lindsay Board "Catch me if you can: Using and challenging digital evidence" (2021) 40(2) Adv J 13 [Brown and Board] at 3.

- **Prosecutor capability:** Equip Crown prosecutors with foundational knowledge and skills to recognise the basic hallmarks of altered or fake evidence and know when to challenge defence evidence or proactively seek verification of proposed prosecution evidence. Basic training (perhaps in conjunction with other investigating and prosecuting agencies such as Police) could be provided or required for all Crown prosecutors.⁶⁷ This could include training on recognising signs of digital evidence tampering, such as it being stripped of its metadata (the details about file size or the date the document was created).⁶⁸ Training should evolve alongside technology and include collaboration with Police and forensic specialists.

Participants at the workshop on our draft briefing noted that if challenges to authenticity become more common, verifying authenticity may have impacts on time to trial, trial length and cost. This is particularly the case due to the dynamic nature of trials where, for instance, a complainant or other witness may remember something close to trial so there is limited time to assess the evidence. Looking ahead to the next 20 years, Crown prosecutors will play a role in ensuring authenticity mechanisms and processes are integrated without compromising efficiency or fairness.

CONCLUSION

The transformation of courtroom technology, the rise of AI, and the challenge of fake evidence are not distant possibilities: they are already reshaping the criminal justice landscape. For Crown prosecutors, this means reimagining advocacy in digital environments, mastering new rules of evidence, and leveraging AI responsibly to enhance both efficiency and fairness. It also means confronting complex questions about authenticity, bias, and cultural integrity. These shifts will require sustained investment in capability, clear governance frameworks, and strong partnerships across the justice sector.

The challenge for the Crown is to embrace innovation while managing risks in a way that maintains public trust. This long-term insights briefing has enabled us to identify certain matters that are likely to impact Crown prosecutors and Crown prosecutions and as a result we are better prepared to respond to policy and practice changes. With thoughtful planning, clear rules, and sustained investment, Crown prosecutors can help lead this transition – poised to reap the benefits of technology in a way that ensures justice remains open, robust, and future-ready.

⁶⁷ John Swinson “Judge, Jury, Client and Algorithm: Are Lawyers Ready for AI?” (2024) 8 CTLR 203. In Swinson’s view, lawyers are not well equipped to deal with technology change as, unlike those in engineering and business, lawyers do not take a systematic approach to considering emerging technologies and how they will affect people, society, and the legal system.

⁶⁸ Brown and Board, above n 66, at 15.

Appendix: Summary of submissions

We received five submissions on our draft briefing. These generally supported the identification of the trends, risks, and opportunities we identified. The submissions focused on a few key areas:

- Concerns about the digital divide across generational, ethnic, and disabled/abled divides and the importance of ensuring access to justice and fair trial rights as technology continues to evolve and new technologies emerge.
- Suggestions to place more emphasis on the impacts to victims and highlight the importance of impacts on victims being factored into the strategic choices.
- Suggestions to include more information on impacts to other participants in the criminal justice system (such as defence counsel, defendants, and witnesses) as well as Crown prosecutors.

Some suggestions were outside the scope of this briefing, such as impacts on non-Crown prosecutions, general justice system impacts, and impacts on other departments' appropriations.