CHAPTER 5

Practice of Law – Courts

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A. INTRODUCTION

05.001 Courts can play a significant role in innovation and the adoption and development of technology in the legal system: the courts are still at the centre of much dispute resolution, and are where persons most associate with getting wrongs righted, and rights enforced. In recognition of that centrality, the courts in Singapore, under the leadership of the various chief justices, have always striven to be open to technology, and to help push, where necessary, the adoption of new technologies and tools. Courts that are ill-equipped, or which use antiquated systems or processes, not only impede their own efficiency but also endanger access to justice, the achievement of just outcomes in disputes, and weigh down the entire legal system. It is with that responsibility in mind that the Judiciary in Singapore has always aimed to never be complacent and to always aim to improve its systems.

B. HISTORY

05.002 In 1979, a Committee for National Computerisation was created to help Singapore implement a computerisation programme for the whole of the Government. A five-year National Computerisation Plan was proposed. This in turn evolved into the Civil Service Computerisation Programme, and led to the establishment of the National Computer Board.[1] Various large scale plans followed, including the IT2000 Vision of an Intelligent Island, the National IT Plan, the e-Commerce Hotbed

1 See generally, Lulin Reutens, *Innovationation: 25 Years of Infocomm in Singapore – The Big Switch* vol 1 (Infocomm Development Authority of Singapore, 2006); National Computer Board Act (Cap 195, 1985 Rev Ed) (repealed).

Programme, Singapore ONE, Infocomm21, and Intelligent Nation 2015. These programmes all had a catalytic effect on the rapid adoption of computers in Singapore.

05.003 However, what is less well known is that the legal profession in Singapore had been specifically guided in its adoption of technology by the efforts of the Attorney-General's Chambers, the Singapore judiciary and the Singapore Academy of Law. This work began as early as in the 1980s, starting with the computerisation of the laws of the land.[2] Computerised case management systems seen in other countries led quickly to the decision to include the courts as a firm pillar of LawNet. All chief justices and attorneys-general have remained fully committed to the increasing computerisation and digitalisation of legal processes in the courts and in the wider legal community. Successive presidents of the Law Society and the Chairpersons and members of various IT Committees of the Law Society have also helped tremendously to evangelise the adoption of technology by Singapore lawyers.

05.004 These efforts first bore fruit, where court procedures are concerned, in March 1997 when the Electronic Filing Service ("EFS") was launched.[3] EFS created a more efficient way of transmitting documents to the court for civil disputes. The overall approach was to allow lawyers and other court users to move bits instead of atoms (that is, paper documents). The aspirational goal of achieving a "paperless" court system has obvious advantages for the administration of justice – from increased efficiency in filing and processing documents, to avoiding the physical movement and risks of moving hardcopy files, and the ability to electronically serve documents as between parties. The rare but nevertheless disruptive occurrence of misplaced files in transit and the fact that multiple persons could not access the same file concurrently are also addressed by electronic filing. All in all, the advantages of EFS were significant. In 1997–2000, when EFS was progressively implemented, it was clear that Singapore was one of the first few jurisdictions to introduce electronic work processes throughout the entire value chain. While there were, as would be expected, challenges and some pain in the transition, the early adoption of EFS by the legal profession ensured that technological change became an accepted part of legal life in Singapore.

05.005 EFS was, however, just the first step. The next version of the courts case management system for civil cases was the eLitigation

2 See Robin Hu, Lee Seiu Kin & Charles Lim, "Computerizing the Law Office for the 1990s" [1991] 2 MLJ lxxxiii (part 1); [1991] 2 MLJ lxxxix (part 2).

3 Tan Ee Sze, *Innovationation: 25 Years of Infocomm in Singapore – The Great Campaign* vol 2 (Infocomm Development Authority of Singapore 2006) at p 21.

system ("eLit"), progressively implemented from January 2013 onwards. The main shift from EFS to eLit is that eLit features much more "digitalisation". Content, once entered by a law firm in e-forms, could be more comprehensively reused in other court filings. In many "first-generation" court filing systems, the focus tends to start and end with the transmission of scanned documents to the courthouse. While this brings about improvements in productivity, it also tends to result in repeated entry of data in structured data entry forms, over and above incorporating such data in the document itself. Apart from the tedious and error-prone nature of such data entry, this duplicated effort caused some frustration on the part of lawyers. Even after submission, the risk of discrepancy meant that court officers had to validate and ensure that data entry was accurate and matched the data that was incorporated within the scanned documents.

05.006 A number of other important systems were also implemented in the last few decades. An Automated Traffic Offence Management System allows for the easy payment of certain court fines. This was launched in 1996.[4] More recently, some payments, including bail, court fees and court fines, can be paid using common e-payment mechanisms (for example, AXS and PayNow, common payment gateways used in Singapore) without the citizen having to travel to a courthouse in order to use a designated kiosk. In 2013, the Integrated Case Management System ("ICMS") was launched. This deals with criminal cases and is a multi-agency system through which enforcement and prosecuting agencies (like the police and the Public Prosecutor, respectively) file charges, documents, and perform case management tasks. If an accused person is convicted, sentences are recorded electronically. Accused persons may also directly access their own matters using the National Digital Identity ("NDI") infrastructure without having to establish a special subscription or account with ICMS.

05.007 In addition, from 2017 onwards, the Community Justice Tribunals System was launched to allow for access to Small Claims Tribunals, Community Disputes Resolution Tribunals and Employment Claims Tribunals cases.

05.008 The implementation of all these systems exemplifies the constant push within the courts to introduce technology where it aids the administration of justice, particularly by eliminating paper movement, ensuring greater speed, productivity and integrity. These efforts have aided the courts and benefited the users of the system.

4 Criminal Procedure Code (Amendment) Act 1996 (Act 31 of 1996).

05.009 In addition to filing documents to court, the "last mile" for lawyers would be the way in which arguments and evidence can be adduced in court. Early experimentations with "Technology Courts" meant that many courts in Singapore are equipped with state-of-the-art projection and image-capture equipment. Digital presentation "whiteboards" on which "live" annotations can be made by counsel or witnesses are available, and object and document projection capabilities can be used to ensure that witnesses and counsel all obtain a clear view of evidence at the same time as the judge. The facilities have been used in a number of cases, especially those with voluminous documentary or electronic evidence, but it would be fair to note that greater effort can still be made to encourage their use and adoption by lawyers.

05.010 Finally, video conferencing has been introduced in the Singapore courts as early as 2002. Originally requiring special phone-like terminals, the technology used for video conferencing has evolved over the years, to use common commercial solutions which are not dependent on specific brands of hardware or any "subscription" or monthly charge. Solutions such as Skype and Zoom have been deployed effectively to reduce the need for counsel to come to a courthouse if their matters can be dealt with remotely. While use of video-conferencing was common in some areas of practice, such as for pretrial conferences in criminal cases, it was not as widely adopted as it should have been. A number of possible reasons may have been behind the slow spread of videoconferencing: the lack of a pressing need given the small size of Singapore; a belief that human interaction was promoted by physical hearings; and an inertia against what was perceived as unnecessary technology. But, as outlined later in the chapter,[5] the demands of safe distancing in the midst of the COVID-19 pandemic, as well as greater familiarity with the available systems, and perhaps a maturing of software and a growing acceptance of technology by the profession, have led to widespread use of remote hearing technology.

05.011 The pace of development is unrelenting and additional enhancements are added iteratively, in line with the Government and the Judiciary's adoption of "Agile" development methodology in developing new software.

C. LEGISLATION AND PROCEDURES TO SUPPORT THE USE OF TECHNOLOGY IN SINGAPORE COURTS

05.012 In order to properly support the use of technology and to ensure that rules are clear, such that resources are not squandered on

5 See paras 05.031–05.035.

unnecessarily procedural challenges, the approach of the Singapore courts has been to ensure that legislation and practice directions fully cater for the technology that is contemplated, *before* such technology is made available to court users. Examples of the key changes implemented in Singapore legislation follow.

1. Rules of Court

05.013 Order 63A of the Rules of Court[6] prescribes who the users of the eLit system can be, and the fees payable by such users. Crucially, Order 63A rule 8 stipulates that:

> Where a document is required to be filed with, served on, delivered or otherwise conveyed to the Registrar under any other provision of these Rules, it *must be so filed, served, delivered or otherwise conveyed using the electronic filing service* in accordance with this Order and any practice directions for the time being issued by the Registrar. [emphasis added]

In other words, the use of eLit is mandated, and paper-filing by producing a hardcopy document at a court counter and having it stamped is not possible (with a few minor exceptions).

05.014 To deal with the possibility that a lawyer may not have the technology infrastructure or such infrastructure might be malfunctioning, a "service bureau" was established. The operators of the service bureau effect electronic filing on behalf of the lawyer or the litigant, but for all intents and purposes, the court considers that the filings are effected electronically.

05.015 Guidance is also provided as to the date and time that an electronic transmission is deemed to have been "filed, served, delivered or conveyed"; and the ability to use electronic transmission as between different eLit users.

2. Criminal Procedure Code

05.016 The Criminal Procedure Code[7] ("CPC") and subsidiary legislation made pursuant to the CPC make it clear that filings for criminal cases are to be done through eLit or ICMS. In addition, the CPC and Regulations allow for "pleading guilty by electronic means" for certain offences.[8] In order to facilitate digital workflows, the CPC also

6 Cap 322, R 5, 2014 Rev Ed.
7 Cap 68, 2012 Rev Ed.
8 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 226; Criminal Procedure Code (Pleading Guilty by Electronic Means) Regulations 2010 (S 804/2010).

allows for the service of notices, orders and documents to be effected via e-mail provided that the intended recipient had agreed to this mode.[9]

05.017 Provisions allowing for video attendance are also in the CPC. This can be used for not just administrative or "organisational" meetings and pretrial conferences but also for the taking of evidence (with special safeguards).[10] In order to allow for vulnerable witnesses to give evidence without having to be in the same physical space as the alleged offender, provisions in the CPC allow for "live video or live television link".[11] For some appearances, the "default" is that proceedings be via video.[12]

05.018 Some important restrictions in the CPC should be highlighted. *First*, remote video attendance to give evidence is not allowed on the part of the accused. *Secondly*, the witness must be in Singapore. This second condition does not apply in respect of civil proceedings. This is because "in criminal proceedings it will be against public interest for foreign witness, who are effectively outside the courts' jurisdictions and who can perjure with relative impunity, to exonerate an accused by their evidence".[13] These restrictions have, however, been adjusted in the COVID-19 (Temporary Measures) Act 2020[14] ("CTMA").

05.019 Two other recent developments in respect of digital evidence should be highlighted. The first is the specific power that now exists for an authorised police office to require that information be furnished in a "specified electronic format".[15] The purpose of this is to allow for "machine processible" data which would be much more amenable to analytics and automated processing. Secondly, the CPC also allows for certain interviews of witnesses to result in "audiovisual recordings" in lieu of written statements.[16] Because of this, specific rules regulate how such recordings may be disclosed to guard against misuse or abuse of such recordings.[17] Furthermore, in certain situations, an audiovisual recording of an interview (for example, with a victim) can be used at

9 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 3.
10 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 281.
11 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 281(1).
12 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 281(3).
13 See Richard Magnus, "The Confluence of Law and Policy in Leveraging Technology: Singapore Judiciary's Experience" (2004) 12(3) Wm & Mary Bill Rts J 661 at 668.
14 Act 14 of 2020. See paras 05.024–05.030.
15 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 20, read with the Criminal Procedure Code (Production of Document or Other Thing) Regulations 2019 (S 56/2019).
16 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 22(3)(*b*).
17 Criminal Procedure Code (Cap 68, 2012 Rev Ed) ss 23(6), 162, 166, 214, 218, 225B, 235 and 428.

trial instead of calling the witness.[18] This is to avoid additional trauma on certain victims of having to repeatedly recount the circumstances of the alleged incident.

3. Evidence Act

05.020 Largely consistent with the CPC, the Evidence Act[19] also allows evidence to be given via a "live video or live television link".[20] The key requirement is that the court must be "satisfied that it is expedient in the interests of justice" to allow the remote testimony. The Court of Appeal has rendered a decision, explaining how the discretion to allow testimony by video link should be exercised.[21]

05.021 The Evidence Act also provides careful guidance as to the relevance of evidence regarding electronic records;[22] when electronic records could be considered to be primary evidence;[23] when charts, summaries and other explanatory material, including electronic documents, may be adduced to aid the court's comprehension of evidence;[24] and the presumptions that may apply in respect of electronic records.[25]

4. Electronic Transactions Act

05.022 The Electronic Transactions Act[26] ("ETA") is relevant to the courts' ability to receive and deal with electronic evidence. The Act, first passed in 1998 and then re-enacted in 2010, provides: (a) legal recognition of electronic records;[27] (b) that requirements for writing and signature can be adequately satisfied by electronic "writing" and "signatures";[28] and (c) detailed guidance as to when the date and time of sending and receiving of messages is deemed to have taken place.[29]

05.023 Crucially, the ETA also allows for "originals" to be satisfied by electronic records, eliminating the traditional reliance on hardcopy

18 Criminal Procedure Code (Cap 68, 2012 Rev Ed) s 264A.
19 Cap 97, 1997 Rev Ed.
20 Evidence Act (Cap 97, 1997 Rev Ed) s 62A.
21 *Anil Singh Gurm v J S Yeh & Co* [2020] 1 SLR 555.
22 Evidence Act (Cap 97, 1997 Rev Ed) s 9.
23 Evidence Act (Cap 97, 1997 Rev Ed) s 64.
24 Evidence Act (Cap 97, 1997 Rev Ed) s 68A.
25 Evidence Act (Cap 97, 1997 Rev Ed) s 116A.
26 Cap 88, 2011 Rev Ed.
27 Electronic Transactions Act (Cap 88, 2011 Rev Ed) s 6.
28 Electronic Transactions Act (Cap 88, 2011 Rev Ed) ss 7 and 8.
29 Electronic Transactions Act (Cap 88, 2011 Rev Ed) s 13.

originals of documents.[30] Further detailed rules are in place for "secure" electronic records and "secure" electronic signatures, for which there are important evidentiary presumptions.[31]

5. COVID-19 (Temporary Measures) Act 2020 and its (possible) successor

05.024 Any review of the law regarding the use of technology in Singapore courts would not be complete without discussing the CTMA. This legislation, enacted in the light of the most serious global pandemic in more than a hundred years, sought to allow the courts to resume their regular functions as quickly as possible by leveraging off remote communication technology.[32]

05.025 The general rule is that if the Chief Justice approves of a "remote communication technology" (for example, the video conferencing systems known as Zoom, Webex, *etc*), then, provided the courts are satisfied that adequate measures can be put in place to ensure that the proceedings can be conducted safely, the court can allow for remote attendance and even evidence to be taken using such remote communication technology.[33]

05.026 Unlike the "pre-COVID" situation, accused persons can appear and give evidence via video. In such a case, additional safeguards are required – she can only attend from Singapore, via a facility in a courtroom or in a prison. If the person giving evidence seeks to testify as to facts (as compared to expert evidence) then consent between the parties to allow for such remote testimony is necessary.[34] This is to minimise the potential of challenges that a witness is a "convenient" witness who testifies safely from a location outside of Singapore, and therefore out of the enforcement jurisdiction of the Singapore police.

05.027 The constraint that in criminal proceedings, a remote witness can only testify from a remote location *within* Singapore is dispensed with by the CTMA which applies "[despite] any written law or rule of law requiring the presence of any accused person or any witness in any court proceeding … or the giving of evidence in person".[35] Similarly, the

30 Electronic Transactions Act (Cap 88, 2011 Rev Ed) s 10.
31 Electronic Transactions Act (Cap 88, 2011 Rev Ed) ss 17–19.
32 *Parliamentary Debates, Official Report* (7 April 2020), vol 94 "Second Reading Bills: COVID-19 (Temporary Measures) Bill 2020" (Edwin Tong Chun Fai, Senior Minister of State for Health and Law).
33 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) s 28(1).
34 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) s 28(2).
35 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) s 28(1).

exclusion of the accused from testifying by video is also not applicable in the context of the CTMA.

05.028 The court may choose to impose such conditions as it considers appropriate, to help ensure that there is no surreptitious coaching of witnesses, and that only authorised persons known to the court are at the remote venue with the witness.[36] Undergirding all this is that the use of video link must be "in the interests of justice".[37]

05.029 Finally, the CTMA also makes it clear that court proceedings are not affected simply because the judge or judicial officer attends remotely and is not physically present in a designated courthouse when she presides over a case.[38]

05.030 It is likely that some of the clarity that was specifically legislated in the CTMA will be made permanent (as the CTMA has a "sunset clause").

D. HOW THE COURTS ADJUSTED TO COPE WITH COVID-19

05.031 As has been recounted elsewhere the COVID-19 pandemic has provided the impetus for more change in a few short months than would otherwise have been possible in years.[39] This is because of a confluence of factors that resulted in a complete alignment between the various stakeholders involved in the work of the courts. Lawyers and prosecutors wished for cases to proceed and not be unduly delayed,[40] and also wished to minimise their own exposure to possible infection. At the same time, the courts needed to ensure that a "backlog" did not result from the "Circuit Breaker" or other national control measures to reduce the spread of COVID-19.[41]

05.032 As recounted above in explaining the CTMA, one of the key pillars of the effort in Singapore was to allow for remote communication technology for all parties concerned – the court, lawyers/prosecutors and witnesses. Where it was appropriate to do so, Singapore courts provided

36 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) s 28(5).
37 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) ss 28(5)(*g*), 28(6)(*e*) and 28(7).
38 COVID-19 (Temporary Measures) Act 2020 (Act 14 of 2020) s 28(10).
39 Andy Lee, "How Covid-19 Spurred Singapore's Digital Transformation" *Business Times* (13 July 2020).
40 Nicole Hong & Jan Ransom, "Only 9 Trials in 9 Months: Virus Wreaks Havoc on N.Y.C. Courts" *New York Times* (2 December 2020); Dominic Casciani, "Covid and the Courts: 'Grave Concerns' for Justice, Warn Watchdogs" *BBC News* (19 January 2021); Magdalena Osumi, "Justice Delayed? Pandemic Tests Japan's Court System" *The Japan Times* (19 July 2020).
41 Sundaresh Menon, Chief Justice of Singapore, address at the Opening of the Legal Year 2021 (11 January 2021).

detailed guidance, training and equipment especially to layperson users of the court system who might not have access to computing facilities to allow them to participate effectively in remote hearings.[42] This included the publication of video guidance for the use of the public, and the piloting of "zoom rooms" or "zoom pods" to allow laypersons to participate in suitable surroundings if they were unable to do so from their homes.

05.033 More important than hardware and software were the constant dialogue and communication channels that were opened with all stakeholders. This helped to ensure that members of the legal profession – both lawyers in private practice and prosecutors – and the courts were fully aligned and geared up to support remote hearings. While there was undoubtedly some initial pain and trepidation it was clear that most, if not all, lawyers had become comfortable with the use of remote hearing technology just a few weeks into the use of remote hearings.[43]

05.034 Other practical measures that were put in place included the procurement of equipment and stipulation of settings so that judges could replicate the atmosphere and setting appropriate for judicial hearings, as far as possible. Examples include the use of specified virtual backgrounds, standalone web cameras, and other equipment with higher-end specifications. The balance between performance and cost to the public purse was always borne in mind. Open justice was ensured by allowing public observation of open-court proceedings, in court rooms equipped with screens, so that remote hearings could continue to be observed.

05.035 As can be seen from the above, the push for social distancing and safe working practices, as well as restrictions on travel, have heightened the need for remote hearings. These, of course, depend greatly on technology. An important lesson for the courts drawn from the initial responses to the COVID-19 outbreak has been to work towards the early adoption of technology solutions in normal times, so that all stakeholders are ready to deal with crises when they arise. For example, while remote hearing technology was present even before the outbreak, its adoption both within the courts and in the wider community was,

42 See, *eg*, the availability of special assistance if a litigant in person does not have access to an electronic device capable of supporting video conferencing: "Frequently Asked Questions on Family Justice Courts' Matters in the Immediate Post 'Circuit Breaker' Period (from 2 June 2020)" *Family Justice Courts Singapore* <http://www.familyjusticecourts.gov.sg/covid-19/faqs> (accessed 31 January 2021).

43 See *eg*, K C Vijayan, "Family Court Cases via Zoom the New Normal" *The Straits Times* (29 June 2020).

with some exceptions, largely tepid. It took the response to COVID-19 to drive faster and more widespread adoption. Moving forward, it is essential that the courts and its partners ensure that technology adoption continues apace and is not lulled by moments between crises.

E. FUTURE PLANS FOR THE COURTS OF THE FUTURE

05.036 The focus on stakeholder engagement is also one way in which the courts have sought to operationalise the ambitious Courts of the Future blueprint that was first unveiled by the Chief Justice in 2017. Hundreds of interviews, and multiple discussions and feedback sessions were undertaken before a portfolio of some 15 projects were identified and approved in January 2017. Funding was then secured to allow for actual work to commence on the projects. At the same time, changing circumstances, not least of which was COVID-19, and technology changes led to a review of the portfolio and saw the addition of more projects, and the deliberate decision to de-emphasise some projects.

05.037 The need for more efficient use of resources, avoiding duplication of effort led to the establishment of a centralised office ("the Office of Transformation and Innovation") by the Chief Justice to drive and manage innovation and transformation within the whole of the Judiciary, covering all the three court structures: the Supreme Court, State Courts and Family Justice Courts. This centralisation also allows easier engagement with partners such as government ministries, the law schools, the Law Society and the Singapore Academy of Law.

05.038 Guidance in the transformation of the work of the courts have been issued through a number of documents, including, most recently, the Chief Justice's speech identifying the need to address inadequate access to justice, using technology to close that gap, and rethinking the needs of justice and its delivery.[44]

05.039 With these objectives in mind, transformation plans within the Judiciary are organised into three themes: access to justice, efficiency and proper leveraging of data.

1. Access to justice

05.040 It is essential that the Judiciary ensures that the needs of the ultimate users of the system, the community at large, are borne in mind.

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44 Sundaresh Menon, Chief Justice of Singapore, "Technology and the Changing Face of Justice", speech at the Negotiation and Conflict Management Group (NCMG) ADR Conference 2019 (14 November 2019).

An increasingly technologically savvy and educated population will naturally wish to at least consider taking or responding to legal action without engaging a professional legal adviser. Some may not be able to afford legal representation, while others may choose to do without. The courts must serve their needs just as much as those who are represented. The adoption of new technology must not give rise to new or additional barriers to access to justice. Possible measures, including intensified outreach and, where necessary, the continued provision of legacy mechanisms, always need to be borne in mind.

05.041 Importantly, information about legal processes should be accessible to the layperson. This goes beyond the "technical" accessibility or ability to obtain information. The courts must make it easier for laypersons to understand legal processes. Therefore, the courts have embarked on a number of initiatives to better provide information on processes and procedures that is more readily digestible.

05.042 Firstly, the courts have embarked on a total rewrite of all the content on its different websites. The State Courts, Family Justice Courts and Supreme Court websites are being restructured as a single coherent website that provides thematic information to laypersons. Other means of better and more targeted information provision are also being explored, including the possible use of chatbots, or artificial intelligence ("AI")-assisted inquiries. In all of this, the courts are mindful of the need to ensure that information provision does not cross over into the giving of advice: various principles and guidelines have been instituted to govern this.

05.043 Specialised electronic services have also been created to provide "outcome simulators" so that laypersons might obtain some "preview" as to possible outcomes of certain legal disputes. For example, providing information as to the possible findings of liability on the part of two motorists involved in a car accident can help arm laypersons with sufficient knowledge so that they can approach any negotiation with more information at their disposal. The "outcome simulator" is therefore engineered to provide information based on what the user declares without making any evaluative assessment as to whether that information is correct or skewed in favour of the user. With that input from the user, and the accumulated wisdom of past cases, guidance can be provided as to the possible award values as well, based on the injuries, recovery time and other factors that the user declares. The courts are also exploring other areas of practice where such information could be useful for litigants in person, including small value civil claims. This will enable laypersons to better understand advice given to them by lawyers and weigh the appropriate course of action that they should pursue. These efforts will also hopefully encourage parties to use forms of dispute

resolution other than litigation, which will help reduce the load on the courts, reduce costs and hopefully encourage amicable outcomes.

05.044 In addition to the above, the provision of information and services to laypersons should aim to be in the forms that laypersons are most comfortable with. Increasingly, that means providing mobile- and web-friendly information. The courts are therefore redesigning its many electronic services to be "mobile-responsive".

2. Efficiency

05.045 The second theme centres on how our various systems can better support efficiency. This refers not just to the effort that needs to be expended by court administrators on a daily basis, but also the ease with which lawyers and laypersons interact with our systems. Wherever possible, we seek to see processes digitalised so that information can be comprehensively reused without the risk of re-keying errors (which in turn necessitate manual checks and eyeballing). If automated decision-making is possible, or perhaps decision-making *augmented* with alerts of atypical data, it can help further decrease the amount of time needed to process certain filings.

05.046 Technology also holds the promise, not always exploited, of reducing the cost of processes and eliminating paperwork. Much can be done by using even relatively modest technology to rethink and redesign current processes, many of which remain paper based. For instance, the use of authenticated court orders ("ACOs") has removed the need for certification of physical copies of court orders: in the past, this could have required the litigant to travel to a courthouse, pay for the hardcopy (or "certified true copy"), wait for it to be prepared (and this typically could not be done on the same day) and then arrange to travel to collect the hardcopy on another day. With ACOs, parties need only scan the Quick Response ("QR") code that is automatically included in recent court orders in order to obtain the court order in the same substantive form, directly from a centralised government server and without fear of any adulteration of the court order.

05.047 The courts have also been experimenting with AI-based technologies like automated speech recognition and transcription. It is hoped that this technology, perhaps coupled with easy access to the time-coded audio recordings, can help reduce the need for lawyers to take copious verbatim notes, or to devote a younger colleague to do such manual "transcription" work during hearings.

05.048 Another aspect of efficiency is to move beyond remote hearings and implement "asynchronous hearings" as far as possible. Traditional hearings still require that all parties and the court direct their attention

to the same matter *at the same time*, and devote shared time to deal with the matter. It is possible that "asynchronous hearings" will allow for formal, "on-the-record" communications to proceed via a secure mechanism. The court can raise a query and the parties can separately respond within a prescribed response time frame. This can help reduce and even eliminate "interstitial" time when lawyers have to wait for each other and other cases to conclude just for short organisational or other pre-trial hearings.

05.049 The courts are also experimenting with an even greater use of the NDI suite of products. This could allow for the secure signing (and witnessing) of documents without the deponent and the Commissioner for Oaths being in the same room. They may be able to securely sign documents sequentially, obviating the need for a single hardcopy "original" to be physically conveyed from the deponent to the Commissioner.

05.050 The NDI service may also allow for electronic service to a person even without foreknowledge of her current address or phone number. This will instead rely on delivery via the SingPass mobile application. This service, based on SG Notify,[45] can be used instead of "substituted service" and can help increase efficiency and reduce cost for litigants.

05.051 The actual work during litigation, particularly hearings, should also be made easier so that all those involved can focus on the actual issues rather than worry about logistics, bundling documents or photocopying materials. Working with various partners, the courts are exploring initiatives to allow lawyers to bundle evidence, authorities and other documents more easily, and in real time, for easier reference by the judge, lawyers and witnesses, whether in the court room or remotely.

05.052 Similarly, with remote hearings becoming mainstream, the need to accommodate judicial panels distributed across borders and time zones, especially in the Singapore International Commercial Court, presents additional technological challenges and issues. Systems to facilitate the sharing of information and secure real-time communications within such panels are being explored.

05.053 An important addition to the toolkit available to improve efficiency is the SG Courts app, a mobile application giving access to court information such as the hearing diary and eLit files. In line with the adoption of Agile development and deployment, additional features will constantly be added, with the objective of allowing judges, lawyers and eventually all court users access to important information wherever and whenever needed, and allowing mobile work to become

45 See <https://go.gov.sg/notify> (accessed 17 May 2021).

a reality. Another consideration in mind is eventual seamless integration wherever possible with systems used for legal research or with practice or document management systems. Of course, security and data integrity, as well as other considerations, will need to be borne in mind, but the objective is to ensure that access to legal systems and information is as easy as possible for all users.

05.054 The use of AI in assisting judging also promises greater efficiency. The intent is not to have AI replace the judges, but to use AI to make the work of judging more efficient, such as by assisting with legal research and the examination of evidence. An example of the latter would be to develop systems that will help cross-reference documentary evidence in complex commercial disputes, allowing the judge to see all relevant materials on a specific issue, phrase or event, for instance. While current e-discovery systems facilitate work for the lawyers, there is much to be gained from having similar systems to assist the judge in fact-finding.

(a) The promise of data

05.055 The third and final theme is on *data*. While the misuse of data threatens privacy and autonomy, the proper use of anonymised data allows better "sense-making" as to societal trends, the efficacy of government social initiatives and even nascent trends that may affect how the Courts deal with situations put before the courts. Thus, within the Judiciary, greater digitalisation of information processed by the courts can potentially lead to better workload forecasting, such as growth areas that lead to greater chance or volume of litigation, or alternatively, to help identify chokepoints that may benefit from changes to processes and rules. Internally, such mining of information will also help the Judiciary identify the proper allocation of resources, including perhaps the need for more officers, or training in specific areas, ahead of actual demand. Externally, data can better inform policies, such as in respect of pressures faced by low- or single-income families, difficulties in matrimonial maintenance, and the efficacy of alternative dispute resolution processes on long-term relationships. In criminal law, data can inform us about the efficacy of alternatives to imprisonment, areas of vulnerability and patterns of recidivism. And in commercial work, data can help provide empirical data about the relative viability of different restructuring alternatives, ascertaining the cost of legal transactions, and the appropriateness of damage awards.

05.056 Some of the existing systems do not allow for the ready extraction of data or require too much human involvement in data entry to be sustainable for the long term. Ensuring that future systems better facilitate data-mining will therefore be an important consideration in the roll-out of future iterations of the various court systems such as eLit.

The aim will be to ensure that these systems meet their specific objectives while allowing data to be obtained with as little add-on effort and cost as possible. Flexibility should also be worked in to allow new queries to be made: the possibilities of research cannot be predicted. Ingenuity and novel analyses can open lines of inquiry that were unknown just a few years before.

05.057 In all of this, the need to guard against potential abuse is, of course, uppermost, and the appropriate data standards and policies are enforced by trained officers, operating at a very senior level. Further measures safeguarding privacy and ensuring proper use of data will continue to be developed.

05.058 The passage of the Public Sector (Governance) Act 2018[46] also means that greater availability of information on a "whole of government" basis will allow for better sense-making. For example, visibility as to the geographical distribution of certain types of cases can help inform recommendations on where to build support centres to serve the needs of likely users of such services.

F. RETHINKING JUSTICE

05.059 In addition to these three "themes", the courts also have other initiatives that have an impact on how we deliver these outcomes. The pivot to therapeutic justice seeks to view family arrangements in the aftermath of divorce through the lens of "care". This requires a holistic review of the circumstances of the parties in a multifaceted and multi-disciplinary manner. The focus should not be on "legalistic" manoeuvring in strategic court applications calculated to hurt the other party, but instead on "healing, restoring and recasting of a positive future".[47]

05.060 In civil justice, greater use of judge-led processes may be adopted, which may require a reconfiguration of technology tools and application, to allow for greater management and more constant direction to be given by the judge in a specific case. The adoption of problem-solving courts in some contexts may require, for example, the participation of greater numbers of stakeholders in some hearings.

05.061 Any such effort will be aligned with the broader Courts of the Future portfolio, to enable policy agencies to have better insight as to

46 Act 5 of 2018.

47 See Debbie Ong, Presiding Judge of the Family Justice Courts of Singapore, "Today is a New Day", speech at Family Justice Courts Workplan 2020 (21 May 2020) at para 39, available at <https://go.gov.sg/newday> and cited with aproval in *VDZ v VEA* [2020] 2 SLR 858 at [75].

the long-term trajectory of persons involved in court cases. This can help identify areas where pre-emptive support can be offered early, to increase the possibility of "healing" and a "positive future".

G. CONCLUSION

05.062 The time to reimagine how Courts of the Future should operate is past due. As Richard Susskind notes, emphasising the need to think of outcomes rather than specific processes or methods:[48]

> All of this echoes the apocryphal anecdote I have told for nigh on thirty years, about the manufacturer of power tools that tells its new recruits that they sell 'holes' rather than drills because it is holes that their customers actually want.

The lesson for the courts, and those who serve in them, is to focus on the outcome: the proper administration of justice. All processes, rules and systems – existing or proposed – must have that objective in mind, and constant effort must be made to tack that line.

05.063 Courts may evolve away from being a physical place or location at which justice is done. Instead, the courts could offer a service to all who need it, without reliance on geography or physical presence, as far as possible. This is fundamental to the effort to enhance access to justice by providing better-quality information, and by lowering barriers to entry to the justice system.

05.064 Although COVID-19 demonstrated that, when it has to, the legal profession can relatively nimbly adopt new ways of doing things, the long-term challenges are still daunting. Lawyers, judges and court administrators must not be satisfied with new modalities which merely serve as proxies to old norms. Instead, there must be a willingness to embrace deeper disruption and change.

05.065 For example, the increased focus on AI in recent years can be intimidating but can also offer us many opportunities. Is it better for some citizens in need of solutions to get a "correct" solution after many months of bewildering court filings, or a quick "approximate" solution derived, at least in part, by algorithms? Conversely, is there a need to clearly identify and separate the processes that can be made "high tech" from those that require "high touch"?

05.066 The courts will continue to monitor and learn from the efforts of law firms, other public agencies and other jurisdictions. In learning from others, the aim has always been to adapt lessons and techniques

48 Richard Susskind, *Online Courts and the Future of Justice* (Oxford University Press, 2019) at p 47.

to be used in appropriate measures targeted at resolving local issues, rather than try to blaze a trail on the leading edge of technology for its own sake. Technology should not itself be the aim: it is always about harnessing technology for the better administration of justice for all.