

Family Property Division and the New Technologies

Prof. Patrick Parkinson*

University of Queensland

Forthcoming in *Ex Curia*, the journal of the Family Law Practitioners' Association of Western Australia

Both the federal government and senior members of the courts are committed to finding ways to reduce the costs to litigants of disputes about family property. This article reviews a number of new technologies that could help family law practitioners to reduce the time spent in preparing a case for the purposes of negotiation, mediation or litigation. Adoption of such technologies could thereby reduce legal costs for clients. The article also reviews a new government-funded program, developed under the leadership of the Legal Services Commission of South Australia, to assist people to resolve property disputes using artificial intelligence, without involving lawyers.

The forty years since the Family Law Practitioners Association of WA was founded have seen enormous changes in almost every aspect of family law. In the last twenty years or so, there have been amendments to the Family Law Act in most years. In recent times, there has been discussion of further changes to the court structure in the Eastern States.

Family property division may be the one area of practice that has seemed relatively insulated from change. Apart from the introduction of superannuation splitting in 2002, there has been little alteration in the approach the courts are supposed to take to the exercise of discretion since 1984. In that year, the High Court's decision in *Mallet v Mallet*¹ caused a re-evaluation of the structured and sensible approach to discretion that the Full Court of the Family Court had developed,² before the High Court retreated from its embrace of seemingly unbridled discretion two years later.³

* Prof. Parkinson is Dean of Law at the University of Queensland. He has served as Chairperson of the Family Law Council (2004-07), Chair of the Ministerial Taskforce on Child Support (2004-05) and President of the International Society of Family Law (2011-14).

¹ (1984) 156 CLR 605.

² *Wardman and Hudson (formerly Wardman)* (1978) 33 FLR 196; *Pothoff and Pothoff* (1978) 30 FLR 571.

³ *Norbis v Norbis* (1986) 161 CLR 513.

Since then, there has been constant flux in the interpretation of the legislation by differently constituted benches of the Full Court,⁴ although how much impact that has had on the practice of family law for practitioners dealing with relatively modest asset pools is questionable. Fluctuations in the approaches of different appellate benches may be concerning for trial judges, but may perhaps have relatively little impact upon settlement patterns in cases that have not travelled far down the litigation pathway.

The winds of change

It would be a mistake to think that current practices and ways of dealing with family property disputes will remain the same. There are a couple of factors that could drive change.

(a) Government initiatives on costs

The first is the concern in government, and the courts, about the legal costs in some family property disputes, as a proportion of the asset pool. Of course, it is the outliers that attract the most attention, but some of those are in Western Australia. These cases may not be representative of the large number of matters that settle relatively early through negotiation, mediation or conciliation conferences.

The Attorney-General, Christian Porter, warned the profession in his address to the 2019 FLPWA conference in Perth that he wanted something to be done about costs in family property disputes. While he did not want to go down the path of legislatively capped costs, he would not rule it out.

The Terms of Reference for the Joint Select Committee on Australia's Family Law System⁵ contain the following issues to consider:

The financial costs to families of family law proceedings, and options to reduce the financial impact, with particular focus on those instances where legal fees incurred by parties are disproportionate to the total property pool in dispute or are disproportionate to the objective level of complexity of parenting issues, and with consideration being given amongst other things to banning 'disappointment fees', and:

⁴ Patrick Parkinson, 'Why Are Decisions on Family Property So Inconsistent?' (2016) 90 *Australian Law Journal* 498.

⁵ These are available at https://www.apf.gov.au/Parliamentary_Business/Committees/Joint/Family_Law_System/FamilyLaw/Terms_of_Reference

- (i) capping total fees by reference to the total pool of assets in dispute, or any other regulatory option to prevent disproportionate legal fees being charged in family law matters, and
- (ii) any mechanisms to improve the timely, efficient and effective resolution of property disputes in family law proceedings.

Family lawyers will no doubt argue that crude measures designed to control costs in property matters are likely to be unfair. Rightly, it will be said that the cost of any matter depends in no small measure on how willing the parties are to negotiate a settlement, and the behaviour of the other party to the litigation. If a letter is sent, it is likely to need a response. If an interlocutory application is made by one party, the other needs to appear to argue the matter, unless agreement can be reached on that issue. Costs are therefore not necessarily within the control of the lawyer for one side.

Furthermore, many of the costs incurred in litigating property cases could be reduced if the courts were run differently or resources increased to reduce substantially the time between filing and trial for those cases that need adjudication. Time spent at court waiting to be called in a busy duty list is typically charged at hourly rates which make any visit to the court, even a mention, very expensive to clients. If a matter is listed but cannot be reached because the court has overlisted, substantial costs are thrown away. The longer the delays in the court, the more likely it is that there will need to be interim orders or interlocutory skirmishes. Valuations and affidavits may need to be updated, and balance sheets revised.

The Covid-19 pandemic, for all of its catastrophic effects in so many different ways, has at least had the benefit of driving some greater efficiencies. Long duty lists have been replaced with telephone appointments at, or around, a scheduled time, eliminating travel for practitioners and mostly avoiding the time waiting to be reached at court. Some hearings have been conducted online, including appeals. There will be many other potential savings from the efforts made, so successfully, to transition to an online environment as a matter of necessity. For example, and as a result of the experiences in 2020, there is no reason why a judge in City X, whose scheduled trial settles at the door of the court, should not take a case that has no judge available in City Y. The case can be heard online.

Whatever the force of the arguments about the limitations of lawyers' capacity to control costs, no-one should underestimate the concern within government, and indeed from the leadership of the Family Court of Australia, about the disproportionate costs of some family property disputes. No doubt this is shared by the Family Court of Western Australia. There is an appetite for forcing change which is reflected in the terms of reference of the parliamentary committee.

(b) *New legislation on overarching purpose*

One pathway to change may come from the Bill before the federal Parliament to merge the Family Court of Australia with the Federal Circuit Court. It contains some significant provisions about controlling costs.⁶ These are modelled on provisions in the *Federal Court of Australia Act 1976*.⁷

This is the version for Division 1 of the Court:⁸

- (1) The overarching purpose of the family law practice and procedure provisions is to facilitate the just resolution of disputes:
 - (a) according to law; and
 - (b) as quickly, inexpensively and efficiently as possible.
- (2) Without limiting subsection (1), the overarching purpose includes the following objectives:
 - (a) the just determination of all proceedings before the Federal Circuit and Family Court of Australia (Division 1);
 - (b) the efficient use of the judicial and administrative resources available for the purposes of the Court;
 - (c) the efficient disposal of the Court's overall caseload;
 - (d) the disposal of all proceedings in a timely manner;
 - (e) the resolution of disputes at a cost that is proportionate to the importance and complexity of the matters in dispute.
- (3) The family law practice and procedure provisions must be interpreted and applied, and any power conferred or duty imposed by them (including the power to make Rules of Court) must be exercised or carried out, in the way that best promotes the overarching purpose.
- (4) The *family law practice and procedure provisions* are the following, so far as they apply in relation to civil proceedings:
 - (a) the Rules of Court;
 - (b) any other provision made by or under this Act, or any other Act, with respect to the practice and procedure of the Federal Circuit and Family Court of Australia (Division 1).

The next section goes on to spell out the obligations for practitioners. Parties must conduct the proceeding (including negotiations for settlement of the dispute to which the proceeding relates) in a way that is consistent with the overarching purpose, and their lawyers must "assist the party to comply with the duty".⁹ Failure to do so may have costs

⁶ *Federal Circuit and Family Court of Australia Bill 2019*, ss.67-68 and 190-91.

⁷ See *Federal Court of Australia Act 1976*, ss. 37M and 37N.

⁸ Section 67 (notes omitted).

⁹ Section 68(1) and (2).

consequences, and a Judge may order a party's lawyer to bear costs personally, without being able to recover the costs from the client.¹⁰ Experience of similar provisions in other Australian jurisdictions suggests that such provisions have teeth.¹¹

It can be expected that if the Bill passes the federal Parliament then similar provisions will be enacted in Western Australia.

Reducing costs with technology

What then could be done using technology to reduce the costs of advising on family property disputes? The early stages of information gathering and working out the balance sheet can be quite time-consuming, and therefore costly to the client, as can preparing the documentation for obtaining consent orders. Technology can greatly reduce the costs involved in these tasks.

(a) Client intake processes

Technology can help attract clients and gather initial information, reducing the overhead costs for a firm involved in handling initial telephone inquiries and booking appointments. There has perhaps been most action in this area, with programs such as Automio¹² and LawSwitch¹³ offering chatbots and other products which can be used to attract clients and automate the process of getting initial information.

Settify¹⁴ was an early pioneer in developing a product specifically for family law. It describes its role as being an “intelligent engagement funnel”, drawing out the client's instructions before they first engage with a solicitor. The potential client can provide a range of details about their circumstances which saves time for lawyers in their initial interview with the client. It has been successful as a business introduction tool for many family law firms.

(b) Document assembly software

Document assembly software has been around for a considerable period of time. It is ubiquitous, but also underutilised. How many lawyers still dictate letters and draft

¹⁰ Ibid, subsections (5) and (6).

¹¹ See e.g. *Yara Australia Pty Ltd v Oswal* [2013] VSCA 337.

¹² <https://autom.io/>

¹³ www.lawswitch.com

¹⁴ www.settify.com.au

agreements utilising a template precedent, much as they would have done in the 1980s or 1990s?

Document assembly software relies upon a few details that are entered into the program once, such as names of the client, the other party, and the children. Each document can then be automated by drawing upon that data.

When I was working part-time with Watts McCray Lawyers in NSW and the ACT, we took automation much further than just drawing upon a database of the client details. We conducted a thorough review of our agreements and our most commonly used document templates, not only to update and improve them, but also to pre-code a variety of options into the law firm management software program that we used. As a result, a first draft of a letter, agreement or other document, based upon our own precedents, could be assembled within a couple of minutes.

An example is a child support agreement. Will the parties base the obligations on the statutory formula plus extras such as private health insurance and school fees, or a sum per child that is not dependent on the statutory formula? If the agreement deals with those extras, will the costs be shared equally, or in some other proportion, or borne entirely by the non-resident parent? If a sum of money is used as the basis of the obligation, how, if at all, will the obligation change if the paying parent's income drops substantially?

There are various options that can be pre-coded and from which the solicitor could choose. The questionnaire acts as a prompt to solicitors to consider a range of permutations and different issues. Of course, and as the partners emphasised, the document was only a first draft. It needed to be checked by the solicitor, and adapted as needed for the circumstances of the case. Nonetheless, the capacity to generate a first draft so quickly was a great timesaver and improved the efficiency of the firm.

(c) One click disclosure

Adieu¹⁵ has developed a service for family lawyers which allows for disclosure of a range of documents with one click. Clients provide an electronic authority to obtain documents. These include tax returns, notices of assessment, tax debts, superannuation balances, bank statements, and real estate and vehicle information and appraisals. Adieu facilitates the development of a balance sheet and disclosure schedule. The \$300 cost can be passed on to clients as a disbursement.

¹⁵ <https://www.adieu.ai/>.

Adieu uses the Illion BankStatements platform¹⁶ to access various of these records. In addition, Adieu provides an estimate of the value of real property and vehicles, using online valuation tools. The service, delivered in the capacity of an accounting firm, sources the client's disclosure information and documents for them, and provides the material to the lawyer. For an additional fee, Adieu can provide business information including bank and Business Activity Statements, as well as the standard available company information.

(d) Automated support for information gathering, financial analysis and dispute resolution

Family Property¹⁷ brings together various of the elements above, and is designed as an end to end solution for managing the entirety of a property or maintenance matter.

I conceived the basic idea about four years ago,¹⁸ which was as a technological solution to the process of information gathering. This must necessarily precede giving advice to clients on property division and negotiations with the other side. Even the initial conference can only give solicitors a general picture. More work typically has to be done to get details from the client. The Court's Financial Statement was designed decades ago as a paper form to gain relevant information, but it is only designed to provide a snapshot of current income and assets. It does not provide the information concerning contributions and future needs that lawyers and courts will need to apply the statutory considerations to the circumstances of the case. It is not a particularly user-friendly form.

I redrafted the information required by the financial statement into plain English, using decision tree technology, tailored to the circumstances of the parties. If there are no companies, family trusts, life insurance policies or investment properties, then the questionnaire will skip any questions that are not applicable. I then devised a detailed questionnaire on contributions and the relevant adjustment factors, with questions designed to prompt people to think about, and find details of, the assets they brought into the relationship, or acquired by inheritance, and relevant information about the growth of superannuation interests in the course of the relationship.

Family Property has come a long way since that initial idea. It has been developed by an accredited specialist in family law and mediator, and a technology solution architect. Launched in March 2019, Family Property provides a way of managing the whole process.

¹⁶ <https://bankstatements.com.au/>

¹⁷ <https://www.familyproperty.com.au/>

¹⁸ By way of full disclosure, I remain involved and am a shareholder and director of Family Property International Pty Ltd.

It is being used by lawyers and mediators, as well as Family Relationship Centres and Legal Aid organisations.

Family Property utilises a chatbot to attract and collect basic information from leads. The chatbot sends automated emails and auto-populates parts of the questionnaire.

The questionnaire, which the client can fill in over time, covers most, if not all, of the basic information needed to understand the current financial situation of the parties, their assets and debts, the superannuation, their contributions and future needs. A two-way disclosure portal allows them to upload and exchange documents required to be disclosed under the Rules with a shareable secure link, automatically generating a disclosure index.

Information on current spending patterns can be obtained if the parties give permission to access them through Illion BankStatements. It is capable of analysing the last year's bank statements into 52 different categories of expenditure, to get a snapshot of income and expenses. This technology is used by bank lenders to assess responsible lending. Its utility in spousal maintenance disputes is obvious, but it can also be used by lawyers to determine abnormal expenditure patterns and potential 'wastage' claims. Government documents such as Centrelink and tax records can also be obtained by these means.

The information provided by the parties auto-populates an interactive balance sheet which gives the asset values, and allows the user to see how different percentage splits would be translated into a division of the specific assets. At a glance, users can see where the parties agree and disagree, either on asset values or on how to divide the pool. Mediators can use the balance sheet to discuss offers and counter-offers between the parties.

Family Property automates documents directly from the information that has been provided, such as balance sheets, proposals and chronologies. Completing the end to end solution, it can turn any agreement reached into a first draft of terms of settlement, using some standard precedent orders, and partially complete an Application for Consent Orders.

Into the future? Artificial intelligence and family property division

Beyond the new technologies that are already well-developed, consideration must be given to the potential role of artificial intelligence. Can it give people some sense of 'what the court will do' on the basis of information provided on assets, contributions and future needs?

The Legal Services Commission of South Australia, working with a technology company, Portable,¹⁹ has developed a first generation AI tool called Amica. This has been funded by the federal government. Its development had input from legal aid lawyers around the country.

Amica provides a way of working out parenting arrangements and also property division. It does not deal with spousal maintenance. It uses AI to provide parties who are reasonably cooperative with an indication of how they could divide their property.²⁰

As the name of the program indicates, Amica is meant for people who are in relatively low conflict and who are capable of agreeing on some basic facts that provide the material to which the AI algorithm is applied. It is intended to help people agree on their own without the need for mediators or lawyers.

As technology for use by the general public, it is very well-designed, and a lot of effort was expended on getting user feedback from people who have gone through breakups. There is a screening tool on the website to suggest to people when it would not be appropriate for them to use Amica, but it is up to the individual to decide whether to use the program, even if he or she falls into one of the categories of people for whom use is contra-indicated.

(a) Using Amica for property division

After one person signs up, he or she can invite the other party to the relationship to engage with the process. The application facilitates a dialogue between the parties, which could take place over several days and weeks if needed. Only if both engage with the process all the way to the end and can agree on all the inputs, will the program provide a suggested split. Some former partners may need assistance to get over roadblocks to completion of the questionnaire, which of course a purely online program cannot offer.

When it comes to property division, the program requires one person to input data on dates of commencing cohabitation and of separation, the assets and their values, and income. The other is asked to indicate their agreement or disagreement with that data and of course, to add details of their own. The program allows people to upload evidence in order to verify claims if requested to do so by the other party. Once the inputs are agreed, the program then produces a suggested division of the assets in percentage terms. The users are told that "this suggested division is based on how lawyers would handle a case like yours." They can

¹⁹ www.portable.com.au

²⁰ <https://amica.gov.au/>

accept the suggestion or use it as a basis for negotiation, but if an offer is too far outside of the AI's suggested split, a warning notice will come up informing the user of this.

If and when the parties agree on the split, then further questions allow them to work out how those percentages translate into the detailed division of the assets. The program does not facilitate splitting superannuation, but of course the value of the superannuation is taken into account in the asset pool. Typically, the outcome will involve determination of future ownership of jointly owned assets, and a monetary transfer from one person to the other. The parties can then decide whether to implement this agreement informally, or to make an application for consent orders. The program assists them to create a consent order application.

(b) Evaluating Amica

Proper evaluation of Amica would require very detailed testing with a range of use cases. Here are some initial thoughts on the program.²¹

For the AI to be an effective tool for assisting parties to reach a property settlement, there are three necessary ingredients. First, the parties must have agreement on the asset pool and the relevant values. Amica, of course, has no capacity to deal with problems of non-disclosure or disputes about asset values. However, it is designed for very simple house and garden disputes and if the parties can agree on a valuation, based upon either a professional assessment, online free valuation tools²² or real estate agent estimates, that may be good enough. Problems may arise though if an agreement is based upon an approximate value, perhaps sourced from an online program, and the house is sold realising a value much greater or lower than this. Lawyers can draft terms of settlement which address such contingencies. Amica's tools for effecting a property division appear to be more basic, but the program provides a disclaimer to advise parties that the current approximate value may not be the actual sale value.

Secondly, the program needs sufficient inputs to which the AI can apply its algorithm. Amica is designed for people who do not have complex financial affairs, for example, family companies and trusts. It is essentially a 'house and garden' program. That meets the needs

²¹ In writing this section of the article and formulating these views, I have benefited greatly from discussion with those responsible for the project at the Legal Services Commission of South Australia and from feedback on a draft given by Portable. I am grateful for their willingness to discuss the issues and their openness to constructive feedback.

²² See e.g. <https://www.anz.com.au/personal/home-loans/calculators-tools/property-profile-reports/>

of most of the population, so it is not a significant limitation. However, the questionnaire designed to assess the relevant factors for determining the property division is quite limited.

A solicitor, preparing a case for the purposes of negotiation, will want quite a lot of information about the respective contributions of the parties, the future parenting arrangements, and other matters going to future needs. In my view, lawyers should always seek to get as accurate an assessment as possible of the value of superannuation around the time when the parties began living together, the nature and value of assets brought into the relationship, what has happened to them since, and any inheritances or damages awards received during the relationship. That way, as accurate a picture as possible can be obtained about the fruits of the relationship while the parties were living together, with contributions to the assets acquired during the course of the relationship being treated typically as equal. A range of factors may impact upon a future needs assessment, although in most cases just a few issues have much significance.

Amica has a few questions designed to identify relevant contributions such as on inheritances. However, the developers focused upon having a questionnaire which is very easy to use by people who might seek information and advice from National Legal Aid. It was extensively tested on users to achieve that functionality. The problem is that, as a result, users are asked very few, simple, questions, and the user is not prompted to provide the kind of detailed information about contributions and future needs that a lawyer would need to give advice. There is a narrow dividing line between questions being simple, and being simplistic.

The third ingredient is a sophisticated algorithm developed from sufficient information that could allow the program to approximate how family lawyers, given the relevant factual matrix, would settle the case. The website claims that the "artificial intelligence considers legal principles and applies them to your circumstances".²³ However, that is not really correct. Ultimately, the answer provided rests upon a mathematical formula that a computer is capable of applying. Artificial intelligence involves the translation of human reasoning into a computer code, not the replication of human reasoning.

With that qualification, a suggested settlement, proposed by the AI, might appropriately fall within the middle of the range that an experienced family lawyer might identify. The quality of the AI's answer will depend upon how much information it has in relation to an individual case (the second ingredient) and how much material it has been given, in a diverse array of circumstances, on which to identify appropriate settlements.

²³ <https://www.amica.gov.au/frequently-asked-questions.html> ('What does Amica do?')

It is undoubtedly challenging to try to capture the exercise of discretion by judges in family law cases. Indeed, arguably it is quite impossible. This is because the Full Court of the Family Court has been at such pains to eschew a mathematical approach of any kind, even in superannuation.²⁴ Dividing superannuation is well-suited to a mathematical approach, at least as a guideline for trial judges in assessing contributions.²⁵ The Full Court has also eschewed or walked back guidelines in other areas. For example, the Full Court reiterated in *Bishop and Bishop*²⁶ that “each case in this jurisdiction will depend on its own facts or circumstances”. It treated earlier guidance from the Full Court on how to deal with inheritances received late in the marriage²⁷ as not expounding any principle which is binding upon trial judges.

What AI can do is to utilise the wisdom of family law practitioners in translating this broad discretion into advice for clients, taking into account their circumstances. Practitioners seem to assess cases according to broad rules of thumb derived from their general experience of patterns of settlement within their local community of practice. These rules of thumb are based upon lawyers’ understanding of ‘what the court will do’. This may be more or less informed by the actual practice of the courts within the registry. Research indicates that there are wide variations in the outcomes when experienced family lawyers are asked to assess the same fact situation.²⁸ While some practitioners may be very confident of knowing ‘the range’, other experienced practitioners may have a different view of the range on the same facts. A further complication in having a national approach is that there is evidence that these rules of thumb may vary from one city to the next.²⁹

²⁴ *M and M* (2006) FLC 93-281.

²⁵ See e.g. *Palmer and Palmer* [2012] FamCAFC 159.

²⁶ [2013] FamCAFC 138 at [28].

²⁷ *Bonnici v Bonnici* (1992) ¶FLC 92-272; *Wall and Wall* (2002) FLC ¶93-110.

²⁸ This variation was evident in a 2003 study of 240 expert family lawyers in Australia who wrote arbitral decisions on an identical set of facts. On eight occasions, the groups of experts reached decisions which were apart by at least 35%. On a ninth occasion they were apart by 30%. That is, some lawyers gave the husband as little as 25%, while others gave him as much as 60%. Conversely, the wife received anything between 40% and 75%. When outliers were removed, the range was little different – that is, the range was not the product of one or two maverick decisions in each group: John Wade, ‘Arbitral Decision-making in Family Property Disputes — Lotteries, Crystal Balls, and Wild Guesses’ (2003) 17 AJFL 224.

²⁹ Rosemary Hunter et al, *Legal Services in Family Law*, 166-167 (2000). 58 solicitors in 8 different registries were asked to state the norm in a house and garden case of a relatively long marriage (10 years +) where the wife was primary carer of the children after separation and had a lower earning

Even drawing on the wisdom of family law practitioners only takes the project so far. An AI-created algorithm requires a strictly mathematical approach to every consideration. To what extent should pre-marriage assets affect the distribution? Suppose that the parties began living together in 2005 and at that time, the wife had equity in the home of \$320,000 based upon a reasonable assessment of the house value at that time. A mathematical formula might convert the 2005 dollars into 2020 dollars and then discount the value of the contribution by say 5% per year. That would be a mathematical approach which may or may not bear any relationship to what the courts will do. This approach assumes of course that the computer program knows the value of the home in 2005 dollars and the extent of the equity around the time that the couple began living together. In the absence of such information, (and Amica, as currently designed, would not have this) that mathematical approach is not possible. More simplistic approaches provide a rougher form of justice.

Similar problems arise in assessing future needs. How are the parenting arrangements to be factored in? One could have a formulaic approach of saying that for each child in the primary care of one parent she or he will receive a 5% adjustment; or, where the care is shared but not equal, some variation on the child support formula for adjusting percentages in accordance with the time spent in each home. Whatever mathematical formula is adopted, it cannot plausibly claim to be based upon the Family Law Act, or 'what the court will do'. It can at best be a general approximation of what family lawyers might think to be a fair outcome, based upon the information available to the computer program, and converted into a mathematical formula. That is essentially what Amica says it is doing.

There is limited information in the public domain about how the AI was developed for Amica. Portable has explained the methodology:³⁰

Instead of using published case data to power the machine learning algorithm, which we found contained biases due to the contentious nature of the parties' disputes, we chose to create a synthetic dataset that included the same variable we'd expect to see in our user base, including their respective incomes, number of children, marriage duration, super balances, and an overview of their respective financial contributions to the relationship. We did this by creating a way to crowdsource data from actual lawyers by developing a web interface that provided legal aid family lawyers with hypothetical scenarios that represented the kind of information we'd expect to see from people using the tool.

capacity than the husband. The mean percentages ranged from 59.4% to the wife in Adelaide to 75% in Dandenong, with all points in between in different registries.

³⁰ See <https://www.portable.com.au/work/amica>.

We asked lawyers to assess the hypothetical scenarios, enter a division of assets they'd consider fair, and then reset it and continue to fill in the data set using the web tool. By working with National Legal Aid and legal aid bodies in every state and territory, we were able to create a data set to inform our machine learning model.

Beyond this, of course, the algorithm is 'commercial in confidence', and further detail on the methodology is unlikely to be shared with family lawyers, the courts or the general public. The corollary of this, however, is that the public may not have reason for confidence in the AI. The suggested asset divisions generated by the program are being analysed by Legal Aid lawyers to see how the program compares with their own judgment. The degree of concordance is said to be very high.

However, there are two reasons why such reported high accuracy needs to be treated with caution. First, because the range of judicial discretion is quite broad, and equality has a strong gravitational pull on the assessment of contributions, it could be expected that the great majority of house and garden disputes with children in the primary care of one parent would be in the range of a 50%-65% division. In that sense it would be unsurprising if most AI-determined outcomes were seen as 'within the range'. If a target is the size of an apartment block, it should not be surprising that even the most inept shooters could manage to hit it.

Secondly, if the inputs are limited, so will be the reliability of the output. The lawyer analysing the proposed division has no way of knowing whether the users have provided all the information that they would need to have in order to assess the adequacy of the proposed outcome.

(c) Public confidence in a gov.au app

A publicly funded program of this kind, supported by National Legal Aid, is offering legal advice on a property division, by way of a suggested percentage split of the assets.³¹ It may be intended for users with very simple 'house and garden' property matters and low asset values, but once available to the general public, it cannot be confined to the users for whom it was intended.

Because Amica utilises a 'gov.au' address, has been developed by National Legal Aid, and claims that the suggested division reflects 'the law', its legal advice carries considerable

³¹ It should be noted that the Legal Services Commission of South Australia does not think it is giving legal advice, but rather, legal information.

authority. For this reason, there is a responsibility to ensure that the public can have some reason for confidence in the AI-generated advice.

That may require both some further work on the program, and an independent process of evaluation. The data out of any program is only as good as the data in. Even at the cost of some reduction in the simplicity of the program, it is essential that enough information is given to the program to replicate the sort of information a lawyer would consider necessary to have. Testing on the user experience cannot be confined to ease of use. There has to be a way of evaluating whether the user, aided only by such advice as is available from the website and in the program, is able to provide the same information on essential matters as a lawyer would gain from conducting an interview with the client. This is 'data in' reliability.

'Data out' reliability can only be achieved by comparing assessments that are uninfluenced by the AI with the assessment generated by the AI. One way of doing this would be to take say, 50 scenarios, and ask a range of experienced family lawyers and judges from around the country who regularly deal with family property cases, to advise on what division they would make on those facts if called upon to adjudicate or arbitrate. The scenarios would need to include the less common as well as the more commonly encountered factual matrices, and involve a range of different patterns of post-separation parenting arrangements. That could then be compared with the AI outcome.

The advantage of such a methodology is that the decision-maker would not be influenced by the AI outcome in reaching their own determination. Such a 'blind' test, conducted independently of the developers, might offer a reliable test of the adequacy of the algorithm, and help drive improvements. Tolerances, in terms of the range, would need to be determined in advance to measure a 'success' score for the AI generated result.

Amica is a first generation AI tool which shows some promise, but like so many minimum viable products in the technology space, the first iteration is quite basic. This kind of program will develop a greater degree of sophistication over time if investment is maintained in improving it. For now, it should at the very least contain warnings that it is not to be used as the basis for settlements without obtaining independent legal advice. The courts will have to decide also, what scrutiny to give to Amica-generated applications for consent orders without legal advice in order to ensure that it is just and equitable to make the orders sought.

(d) Towards smarter legislation

If the Government wants to encourage greater use of this kind of program, it needs to reform the law so that it is far less discretionary, and fair outcomes can more readily be achieved through application of an algorithm. CSIRO's Data 61 digital legislation project is exploring ways in which laws and regulations could be rewritten using computational logic to allow for technological solutions to the burden of compliance.³² This project may well see the emergence of smart legislation that can be expressed in code as well as language.

A complex formula was developed for child support obligations to provide fairness without the exercise of judicial discretion in this area. Australia could follow the example of much of the rest of the world in having a far more structured approach to the division of assets on separation to allow for greater predictability and therefore computer-aided advice.

Conclusion

Lawyers will need to look afresh at how they charge for advice and support in 'house and garden' cases so that they represent a value proposition compared with alternatives, including services which rely on mediation to develop an agreement without the need for lawyers. Family property work is likely to experience the same competitive and cost pressures as conveyancing and other such areas of legal practice have in the past. Technology offers solutions to reduce the time-consuming nature of current practices. New charging models will need to be developed to allow a return to the law firm from the utilisation of cost-saving measures.

The hourly rate rewards inefficiency. The successful family lawyers of the future will be those who invest the time to work out innovative and more efficient ways of delivering high quality services to clients, and new charging models that reward the firm, as well as the client, for those efficiencies.

³² <https://data61.csiro.au/en/Our-Research/Our-Work/Future-Cities/Optimising-service-delivery/RaaP>; Interview with Guido Governatori, Digital Legislation (2019) at <https://www.youtube.com/watch?v=XTatbOhP-gg>.