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# The Spread of Legal Tech Solutionism and the Need for Legal Design

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## Abstract

This paper introduces the notion of legal tech solutionism and argues for how in an age where the development of legal tech is seen as a panacea for all ills it is important to evaluate the use and lifecycle of the technology before introducing it as a solution to the complex and structural problems that plague legal systems. It explores the framework of legal design and argues that legal design provides for a grounded and contextual approach to the development of legal products, content and services. To do this, the paper develops an approach that operates at three levels, including the value of building for usability, the importance of collaboration and community and the value of designing for many worlds to ensure an engagement with a plurality of contexts in the development of legal tech through evolving a grounded approach.

**Keywords:** collaboration and plurality; design justice; legal design; legal tech solutionism; usability

## I. Introduction

The legal industry has been going through a series of transformations. This includes in terms of clients expecting “more for less”, a liberalization of the market where there are new kinds of service providers beyond lawyers and areas where technology is changing the kinds of work that people do.<sup>1</sup> There has been an increase in the commoditisation of legal services into varied tasks requiring lawyers to train as legal project managers or legal risk managers rather than having a general specialist who can perform all kinds of functions.<sup>2</sup> The growth of legal tech services in order to automate contracts, the use of predictive analytics for court processes, the use of technology for document review or case preparation and the existence of legal marketplaces have become increasingly prevalent.<sup>3</sup> These technologies are seen as ways to streamline different legal processes,

<sup>1</sup> R Susskind, “Three Drivers of Change” in *Tomorrow’s Lawyers: An Introduction to Your Future* (Oxford, Oxford University Press 2013).

<sup>2</sup> See generally R Susskind, *Tomorrow’s Lawyers: An Introduction to Your Future* (Oxford, Oxford University Press 2013).

<sup>3</sup> artificiallawyer, “How Do You Define ‘Legal Tech?’” (*Artificial Lawyer*, 20 October 2021) <<https://www.artificiallawyer.com/2021/10/20/how-do-you-define-legal-tech/>> (last accessed 21 March 2022); see also M Ebers, “Legal Tech and EU Consumer Law” in A Janssen et al (eds), *The Cambridge Handbook of Lawyering in the Digital Age* (Cambridge, Cambridge University Press 2021).

provide support in terms of research for professionals and, in some cases, provide services directly to users.<sup>4</sup> The narrative around legal tech includes that it could be an enabler for legal professionals, that it could disrupt the nature of the profession itself or that it could even cause the death of the profession by making lawyers redundant.<sup>5</sup> Narratives around legal tech also focus on the number of deals that technology could bring about, the scale of investment in such technology and its potential for innovation to processes that are seen as repetitive or mundane.<sup>6</sup>

The COVID-19 pandemic has led to a further increase in demand for legal tech in the legal industry.<sup>7</sup> With offices working remotely, courts moving to virtual settings and an increased expectancy for more nimble and responsive legal services, technology interventions are being seen as ways to address structural challenges to legal issues across the world.<sup>8</sup> Arguments for the use of technology in this arena include that such technology reduce the costs of resolving disputes, increase transparency and accuracy in adjudication and provide ways in which to enhance operational aspects by automating work streams from legal drafting to e-signatures, e-meetings and document automation.<sup>9</sup> This analysis of the disruption of the legal industry due to technology follows a familiar narrative of a focus on increasing productivity, improving efficacy, increasing efficiency and creating more lean and agile ways of working.

In this debate on legal tech, questions of equity and justice in finding ways to tackle and address systemic aspects that affect how people interact with and use legal systems across the world and what barriers they face are often seen as peripheral.<sup>10</sup> These include questions of why certain people are excluded by technology,<sup>11</sup> what are the ways in which discrimination against communities is exacerbated through data<sup>12</sup> and how commoditising of legal services affects the legitimacy and accountability of ensuring that justice is not just done, but also seen to be done.<sup>13</sup>

In this paper, I argue that with the rise of legal tech we are seeing a rise of legal tech solutionism, where technology is used to offer generic and often *ad hoc* solutions to fundamental barriers to access to justice. I will argue how through solutionism we are creating

<sup>4</sup> J Webb, "Legal Technology: The Great Disruption?" (Social Science Research Network 2020) SSRN Scholarly Paper ID 3664476 <<https://papers.ssrn.com/abstract=3664476>> (last accessed 21 March 2022).

<sup>5</sup> L Webley et al, "The Profession(s)' Engagements with LawTech: Narratives and Archetypes of Future Law" (2019) 1 Law, Technology and Humans 6. Webley et al argue that these narratives are being prophesied but often take on a one-size-fits-all approach that disregards context,

<sup>6</sup> C Metinko, "Legal Tech Makes Its Case with Venture Capitalists, Tops \$1B in Funding This Year" (*Crunchbase News*, 23 September 2021) <<https://news.crunchbase.com/news/legal-tech-venture-investment/>> (last accessed 23 November 2021).

<sup>7</sup> MA Cohen, "COVID-19 Will Turbocharge Legal Industry Transformation" (*Forbes*, 2020) <<https://www.forbes.com/sites/markcohen1/2020/03/24/covid-19-will-turbocharge-legal-industry-transformation/>> (last accessed 16 June 2020).

<sup>8</sup> MA Cohen, "Covid-19 Is Transforming the Legal Industry: Macro and Micro Evidence" (*Forbes*, 2020) <<https://www.forbes.com/sites/markcohen1/2020/09/15/covid-19-is-transforming-the-legal-industry-macro-and-micro-evidence/>> (last accessed 21 March 2022).

<sup>9</sup> Wolters Kluwer, "The COVID Crisis Catalyses Legal Tech Adoption among Law Firms" (*Wolters Kluwer*, 2020) <<https://www.wolterskluwer.com/en-gb/expert-insights/the-covid-crisis-catalyses-legal-tech-adoption-among-law-firms>> (last accessed 21 March 2022).

<sup>10</sup> SP de Souza and M Spohr, *Technology, Innovation and Access to Justice: Dialogues on the Future of Law* (Edinburgh, Edinburgh University Press 2020).

<sup>11</sup> S McDonald, "Designing Digital Services for Equitable Access" (*Brookings*, 2021) <<https://www.brookings.edu/techstream/designing-digital-services-for-equitable-access/>> (last accessed 25 August 2021).

<sup>12</sup> L Taylor et al (eds), *Data Justice and COVID-19: Global Perspectives* (London, Meatspace Press 2020).

<sup>13</sup> MK Land and JD Aronson, "Human Rights and Technology: New Challenges for Justice and Accountability" (2020) 16 Annual Review of Law and Social Science 223.

situations that could potentially exacerbate existing divides in the delivery of legal services. Through highlighting the implications for legitimacy, accountability and dependency created through such solutionist approaches, I will then discuss legal design as a framework to build products and services that are less piecemeal and *ad hoc* and more focused on systemic outcomes. In doing so, this paper aims to contribute to thinking about the potential of legal design as an integrated approach to identifying, recognising and addressing barriers and gaps that impact how legal tech can respond to legal problems.

The next section will discuss the challenges that legal tech solutionism brings and why it is imperative to move towards a more slow and purposeful approach of legal design. I will introduce the approach of legal design and some of its key concepts, in particular the focus on making the law work for people based on their needs and contexts, using examples from legal information design, legal tech, law firm practice and legal education. Thereafter, I will reflect on what lessons can be learnt by legal tech in terms of design by examining three different aspects: firstly, building legal products that reflect a focus on usability; secondly, building more collaborative approaches to product development; and finally, building for many worlds that reflect the ways in which the people must be represented in the design of legal products and services. In the final section, I will conclude with the lessons that these design departures can hold for combating a culture of legal tech solutionism.

## II. Legal tech from solutionism to user understandings

### I. Productivity- and efficiency-centred approaches

A dominant narrative within legal tech is its association with productivity, market-making and finding more efficient and scalable outcomes.<sup>14</sup> In India, for instance, there was a discussion in 2021 about whether justice is in fact a service that should not remain a sovereign function, because if one disaggregates legal services into smaller constituent parts it can increase efficiency and reduce costs of services.<sup>15</sup> This push is designed to bring in private players to create a competitive market for legal services, but what remains under-discussed are the implications that such a move could have for ensuring that justice delivery remains a public function that has public values attributed to it.<sup>16</sup> With the COVID-19 pandemic, there has been increased digitalisation around the world, oftentimes without consideration of the implications that this increased digitalisation has for people in terms of their access to digital infrastructure, knowledge about digital technologies and capacities to participate.<sup>17</sup> Besides the challenge faced by the justice user, what also need to be discussed are the implications that such technologies have at an institutional level, where,

<sup>14</sup> JC Jiang, LA DiMatteo and RE Thomas, “Disruptive Effects of Legal Tech” in A Janssen et al (eds), *The Cambridge Handbook of Lawyering in the Digital Age* (Cambridge, Cambridge University Press 2021).

<sup>15</sup> “Draft Vision Document for E-Courts Project Phase III | Official Website of e-Committee, Supreme Court of India | India” <<https://ecommitteesci.gov.in/document/draft-vision-document-for-e-courts-project-phase-iii/>> (last accessed 21 March 2022); A Kant and DG Sekhri, “E-Courts: Supreme Court’s Digitalisation Vision Will Ease Access to Justice” (*The Financial Express*, 2021) <<https://www.financialexpress.com/opinion/e-courts-supreme-courts-digitalisation-vision-will-ease-access-to-justice/2258945/>> (last accessed 27 May 2021).

<sup>16</sup> See generally L Taylor, “Public Actors without Public Values: Legitimacy, Domination and the Regulation of the Technology Sector” (2021) 34 *Philosophy & Technology* 897.

<sup>17</sup> SP de Souza, V Aithala and S John, “The Supreme Court of India’s Vision for e-Courts: The Need to Retain Justice as a Public Service” (*The Hindu Centre for Politics and Public Policy*, 2021) <<https://www.thehinducentre.com/publications/policy-watch/article34779031.ece>> (last accessed 13 August 2021).

with the advent of new legal tech products and services that provide digital infrastructure for courts or automate other administrative functions, the dependency of the judiciary on private actors to deliver services has increased.<sup>18</sup> Drawing from Morozov in the context of law, we are seeing a legal tech solutionism in which “neatly defined problems with definite, computable solutions or as transparent and self-evident processes ... can be easily optimized – if only the right algorithms are in place!”<sup>19</sup>

The problem with this kind of technology-first approach is that it often places precedence on issues of efficiency and costs determined by the market, and as a result questions of equity and justice become subsumed under this. This can be seen in the widespread use of technology in different aspects of legal service delivery, with dire consequences. Take, for example, the study in 2016 by Lum and Isaac, who tested police data on drug crime in the USA in a predictive policing algorithm that analysed data at three levels: the type of crime, where the crime took place and when the crime occurred, without using any personal information.<sup>20</sup> It was found that the algorithm ended up reinforcing biases in the historical police data such that the algorithm sent police to black neighbourhoods more often than to white neighbourhoods. The authors argued that this resulted in over-policing, which “imposes real costs on these communities. Increased police scrutiny and surveillance have been linked to worsening mental and physical health; and, in the extreme, additional police contact will create additional opportunities for police violence in over-policed areas”.<sup>21</sup>

Marda and Narayan, in a study of the predictive policing app used by the Delhi police in India, found that it contained inbuilt biases, which included historical biases based on how data were used in categorisations of colonial registers, representation bias (which showed how communities were represented on the basis of their locality) and measurement bias (which did not take into account how the aspect of space played a role in the way people were being policed).<sup>22</sup> Algorithms have also been used in the legal system to test recidivism in order to determine the quantum of sentencing in the USA. This algorithm was used to forecast whether people would reoffend again. It was found to misclassify black and white defendants such that black people, regardless of their previous antecedents, were found to be at a higher chance of committing a crime again. In this instance again the algorithm did not account for the biases in the historical data and the biases in how police reported cases.<sup>23</sup> With these biases that exist in the minds of developers, the inequalities and power structures in society are embedded in the design of algorithms.<sup>24</sup>

<sup>18</sup> For how the private sector is engaging in power grabs during the pandemic, see generally T Sharon, “Blind-Sided by Privacy? Digital Contact Tracing, the Apple/Google API and Big Tech’s Newfound Role as Global Health Policy Makers” (2021) 23 *Ethics and Information Technology* 45; Global Data Justice, “Sphere Transgressions and Transgressions in the EU during the COVID Pandemic” (*Global Data Justice*, 2021) <<http://globaldatajustice.org/2021-03-18-sphere-transgressions-meeting/>> (last accessed 23 November 2021).

<sup>19</sup> ND Schull, “The Folly of Technological Solutionism: An Interview with Evgeny Morozov” (*Public Books*, 2013) <<https://www.publicbooks.org/the-folly-of-technological-solutionism-an-interview-with-evgeny-morozov/>> (last accessed 2 June 2021).

<sup>20</sup> K Lum and W Isaac, “To Predict and Serve?” (2016) 13 *Significance* 14.

<sup>21</sup> *ibid.*

<sup>22</sup> V Marda and S Narayan, “Data in New Delhi’s Predictive Policing System” in *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency (FAT\* ’20)* (New York, Association for Computing Machinery) pp 317–24.

<sup>23</sup> J Angwin et al, “Machine Bias” (*ProPublica*, 2016) <<https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>> (last accessed 16 February 2018).

<sup>24</sup> See generally SU Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism* (New York, NYU Press 2018).

In each of these cases, the introduction of the technology was designed to address aspects of productivity, efficiency or accuracy of justice delivery, and the technology seen to offer a kind of magical response to procedural, institutional and substantive problems.<sup>25</sup> In addressing questions that had contextual and systemic underpinnings with technical solutions, a disjuncture emerges where technology existed in abstraction rather than in relation to the social inequalities that exist.<sup>26</sup> This was because, for example, rather than addressing complex concerns of why crimes are committed and the spatial impacts of crime, a technological solution is offered that in theory is meant to improve functional aspects of justice delivery.<sup>27</sup> In the aforementioned cases, these technologies became substitutes for meaningful engagement and debate,<sup>28</sup> representing a kind of technology theatre, which “refers to the use of technology interventions that make people feel as if a government – and, more often, a specific group of political leaders – is solving a problem, without it doing anything to actually solve that problem”.<sup>29</sup>

With technology increasingly being used to determine the lives people live, the kinds of access to opportunities, liberties and welfare that they can benefit from and the security that they have, these recurrent instances of bias, discrimination and design flaws point to critical blind spots and invisibilities that these technologies continue to perpetuate due to them not being grounded in sociopolitical and legal realities.<sup>30</sup> In these different instances, the capacity of the end user to interact with such technology and to understand the nature of how it functions is limited. Tactical Tech, a Germany-based civic tech organisation, recognises this in their work on building a public understanding of technology. Through their projects, they examine how to mitigate the effects of technology by meeting users where they are and helping them understand the implications of their actions within known environments.<sup>31</sup>

In a race to provide legal tech solutions for important challenges facing the legal system, such as the training of judges, addressing administrative bottlenecks in judicial institutions, challenges of accountability or transparency or procedural gaps, we are in a situation where importance is given to the theatre around legal technology, with its focus on solutions rather than an engagement with what implications the use of such technologies will have regarding the lived realities of the justice user.

To be able to have more meaningful engagement with the design and deployment of technology, it is important to build more deliberative and reflexive processes into the development of legal products and services.<sup>32</sup> This will involve exploring how the law

<sup>25</sup> A Campolo and K Crawford, “Enchanted Determinism: Power without Responsibility in Artificial Intelligence” (2020) 6 *Engaging Science, Technology, and Society* 1.

<sup>26</sup> SP Gangadharan and J Niklas, “Decentering Technology in Discourse on Discrimination” (2019) 22 *Information, Communication & Society* 882.

<sup>27</sup> See generally A Balayn and S Gürses, “Beyond Debiasing: Regulating AI and Its Inequalities” (EDRI, 2021) <<https://edri.org/our-work/if-ai-is-the-problem-is-debiasing-the-solution/>> (last accessed 21 March 2022).

<sup>28</sup> KB Sandvik, “Is Legal Technology a New ‘Moment’ in the Law and Development Trajectory?” (*Antipode Online*, 2019) <<https://antipodeonline.org/2019/12/04/legal-technology-law-and-development/>> (last accessed 21 March 2022).

<sup>29</sup> S McDonald, “Technology Theatre” (*Centre for International Governance Innovation*, 2020) <<https://www.cigionline.org/articles/technology-theatre/>> (last accessed 2 June 2021).

<sup>30</sup> See generally R Benjamin, *Race After Technology: Abolitionist Tools for the New Jim Code* (Hoboken, NJ, John Wiley & Sons 2019).

<sup>31</sup> M Tuszynski, “‘Technology Is Stupid’: How to Choose Tech for Remote Working” (*Tactical Tech*) <<https://tacticaltech.org/news/technology-is-stupid/>> (last accessed 13 August 2021).

<sup>32</sup> See generally T Walker and P Verhaert, “Technology and Legal Empowerment around the World” (*The Engine Room*, 2019) <<https://www.theengineroom.org/tech-and-legal-empowerment-around-the-world/>> (last accessed 31 July 2019).

is conceptualised, produced and consumed by examining the material ways in which the law and its associated technologies impact our everyday lives.

## 2. Legal design: finding ways to make the legal system work for its users

Legal design takes some of the broad principles of design thinking and applies it to the specificities of law. It is an approach that examines how to make the legal system work for people by centring their needs and experiences and developing participatory processes, evidence-based engagements and more reflective and iterative solutions.<sup>33</sup> As Passera describes, “Legal design borrows design thinking – and doing. It requires user research, lateral and visual thinking, ideation, prototyping, and testing. It draws heavily on information, service-, and interaction-design skills to rethink the complexity of legal processes, services, and documents”.<sup>34</sup>

Legal design is the process through which legal information, legal systems, technologies, products and services can be developed in a manner that places emphasis on the end user and their needs and contexts. Legal design engages with different design disciplines. As Sivanathan and Hertzberg advance, legal design draws from design research that involves understanding the insights from products or processes, from service design to create better user experiences, from product design to determine the form of a solution, from graphic design to think through aspects of communication and from web design to make platforms more navigable.<sup>35</sup>

With legal design, the impetus is less on a particular solution (eg building an app for a virtual court) and more on focusing on the people that one is designing for and what problems they face and what opportunities they have.<sup>36</sup> Hagan advances that legal design works at the intersection of asking lawyerly questions (eg about rights, rules, risks and constraints) and a design focus that is aimed at the lived experience, and about how things look and feel.<sup>37</sup> As an approach, legal design aims to design the “front end” of legal systems, which involves the ways in which people navigate and interface with the system, as well as the “back end”, which relates to the systems’ rules and procedures.<sup>38</sup> Perry-Kessaris describes legal design as the process of engaging with legal products and systems through reimagining communication as a method and mission, through experimentation and through making things tangible and visible.<sup>39</sup> In this way, legal design involves working with users in an inclusive way in order to design and test products.

<sup>33</sup> M Doherty et al, “A New Attitude to Law’s Empire: The Potentialities of Legal Design” in MC Compagnucci et al (eds), *Legal Design: Integrating Business, Design and Legal Thinking with Technology* (Cheltenham, Edward Elgar Publishing 2021).

<sup>34</sup> Legal Geek, “Legal Design WTF?” (*Legal Geek*, 2018) <<https://www.legalgeek.co/learn/legal-design-wtf/>> (last accessed 13 August 2021).

<sup>35</sup> Dot, “Breaking It Down: How Legal Design Uses Various Design Disciplines” (*Legal Design*, 2018) <<https://medium.com/legal-design/breaking-it-down-how-legal-design-uses-various-design-disciplines-193750ab96b9>> (last accessed 13 August 2021).

<sup>36</sup> M Hagan, “Design Comes to the Law School” in C Denvir (ed.), *Modernising Legal Education* (Cambridge, Cambridge University Press 2020); N Al Haider, “The Reddit Divorce Bot” (*Medium*, 2019) <<https://medium.com/@ahnora/the-reddit-divorce-bot-85cf1acdcae8>> (last accessed 23 November 2021).

<sup>37</sup> M Hagan, “Legal Design as a Thing: A Theory of Change and a Set of Methods to Craft a Human-Centered Legal System” (2020) 36 *Design Issues* 3.

<sup>38</sup> M Hagan, “Legal Design” (*Law by Design*) <<https://www.lawbydesign.co/legal-design/>> (last accessed 13 January 2021).

<sup>39</sup> A Perry-Kessaris, “Legal Design for Practice, Activism, Policy, and Research” (2019) 46 *Journal of Law and Society* 185.

Legal design aims to look at the law beyond a positivist approach and instead focuses on the empirical reality of law and takes a proactive and preventive approach where design enables the development of interventions that can build systemic changes that are useful, usable and accessible for users.<sup>40</sup> Take, for example, the case of contracts and the ways in which they are designed. Much of the discussion around contracts in legal tech relates to how these contracts can be automated to reduce work that is mundane and repetitive for lawyers. The principle in these discussions is how we can make legal systems more efficient. Less often discussed is the kinds of contracts we are writing, why they are framed in the way they are and what benefit they serve.<sup>41</sup> This is a conversation that should also be central to legal tech if it is to achieve equity.<sup>42</sup> The lack of engagement with the end user is also why solutionism raises concerns about who is being excluded by technology when we consider automation without problematising the functionality of such automation.

In 2017, an Australian consumer rights group called Choice conducted an experiment that assessed how long it would take to read the terms and conditions for Amazon's Kindle. They hired an actor who read the 73,198-word-long document in several stages and found that it took nine hours to read. Whereas a tech solution can look at how to ensure that users can be nudged towards accepting such terms to increase ease of business or improve compliance, the legal design questions that this experiment raises are: for whom were such terms designed? What were the design choices that were made in developing such a document? Why were such choices made? And what are the benefits of such a document?

Through this experiment, Choice demonstrated how the design of these terms and conditions was imagined in such a way that consumers were compelled to agree but not engage in any meaningful way with what the document really outlined. In fact, this is a widespread industry issue.<sup>43</sup> In an experiment conducted in London, a company discussing the dangers of insecure public Wi-Fi, included a "Herod Clause", where people in exchange for the use of the Wi-Fi services agreed to give up their first-born child for "the duration of eternity", and six users still signed up.<sup>44</sup>

In these situations, the density of legal information as a design choice protects one party but clearly demonstrates the power asymmetries in the development and flow of legal information. These gaps exist, and through using design they can be made visible. Design through methods such as storytelling can enable us to identify deficits, examine power imbalances in narratives and highlight counter-narratives to demonstrate the complex ways in which technologies affect people's lives.<sup>45</sup>

<sup>40</sup> "Legal Design Alliance" <<https://www.legaldesignalliance.org/>> (last accessed 1 February 2021).

<sup>41</sup> G Berger-Walliser, TD Barton and H Haapio, "From Visualization to Legal Design: A Collaborative and Creative Process" (Social Science Research Network 2016) SSRN Scholarly Paper ID 2841030 <<https://papers.ssrn.com/abstract=2841030>> (last accessed 22 November 2020).

<sup>42</sup> SP de Souza, "Communicating the Law: Thinking through Design, Visuals and Presentation of Legal Content" in SP de Souza and M Spohr (eds), *Technology, Innovation and Access to Justice: Dialogues on the Future of Law* (Edinburgh, Edinburgh University Press 2021).

<sup>43</sup> A website called "Terms of Service: Didn't Read", a user rights website, analyses the terms and services offered by companies in terms of how users are tracked, what kind of information they share and the possibilities to take legal recourse against the service: <<https://tosdr.org/>> (last accessed 10 February 2021).

<sup>44</sup> T Fox-Brewster, "Londoners Give Up Eldest Children in Public Wi-Fi Security Horror Show" (*The Guardian*, 2014) <<http://www.theguardian.com/technology/2014/sep/29/londoners-wi-fi-security-herod-clause>> (last accessed 10 February 2021).

<sup>45</sup> R Abebe et al, "Narratives and Counternarratives on Data Sharing in Africa" (2021) Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency 329.

So what does legal design as an approach or methodology include? There are variations to its approach, but in essence it involves the following steps: the first is the *immersion phase*, during which it is important to understand the context and the problems that one is seeking to intervene in through empathy with end users. In this phase, a legal design approach places emphasis on building a grounded and empirical understanding of the needs of the end users. The second step is the *framing phase*, during which focus is placed on reflecting on user needs, problems and wants and determining different ways to identify the problem. This phase provides the basis for determining how to build a particular solution. The third step is the *ideation phase*, which focuses on coming up with a variety of approaches to meet the needs of the end user. In this phase, focus is placed on looking at many ideas without being fixated on a particular choice. The final step is the *iteration phase*, which involves being able to revisit and experiment with the nature of the product based on feedback provided.<sup>46</sup> It therefore includes a process that involves empathising with and understanding the landscape of problems and needs of the user, distilling that information and preparing a roadmap for action, exploring what approaches will work, testing those approaches and then iterating and evolving solutions based on feedback.<sup>47</sup> As Jackson et al advance, “Design and law both concern how to improve people’s experience of systems. Law forms the ideas or constructs by which people are organized to live and work together, and so can design”.<sup>48</sup>

Legal design can also be used in larger systemic efforts by, for example, using participatory design to design new services for organisations, prototyping legal policies or reforming and reimagining how rules and institutions can function.<sup>49</sup> Legal design as an approach offers a way to understand and address some of the systemic asymmetries in the production and distribution of legal products and services. Why this is relevant to the case of legal tech is that, through a design approach, a conscious attempt is made to examine how the designers of technologies are also responsible for certain aftereffects of their technologies. These can be in the form of exclusions (eg when people may not have access to digital technologies); these can create questions of accountability in which the public understanding of the code may not be clear and apparent, or it could also be through dependencies that technology can create, such as in the case of predictive policing, in which technologies become a substitute for the independent interrogation of the reasons for crime in different places.<sup>50</sup>

In the next section of this paper, by looking at examples from the field I will develop three elements that arise from thinking about the intersection of law and design for legal tech. These examples reflect on the challenges of solutionism, of theatre, of exclusions and of discrimination that I have mentioned above, and they provide a basis and a framework for how to reimagine the development of legal products and services that are deliberative and contextual. The first is the question of usability and relates to keeping in

<sup>46</sup> SP de Souza, “Beyond Best Practices: How to Use Design Thinking in Rule of Law Promotion” (*Peace Lab Blog*, 2019) <<https://peacelab.blog/2019/03/beyond-best-practices-how-to-use-design-thinking/>> (last accessed 28 August 2019); see also M Klemola and A Kohlmeier, *The Legal Design Book: Doing Law in the 21st Century* (Meera Klemola and Astrid Kohlmeier 2021).

<sup>47</sup> S Ursel, “Building Better Law: How Design Thinking Can Help Us Be Better Lawyers, Meet New Challenges, and Create the Future of Law” (2017) 34 Windsor Yearbook of Access to Justice 28; L Sossin, “Designing Administrative Justice” (2017) 34 Windsor Yearbook of Access to Justice 87; N Aylwin, “Human-Centered Design and the Justice System: Lessons from the Field” (*Slaw*, 2016) <<http://www.slaw.ca/2016/06/06/human-centered-design-and-the-justice-system-lessons-from-the-field/>> (last accessed 13 February 2021).

<sup>48</sup> D Jackson, M Kim and JR Sievert, “The Rapid Embrace of Legal Design and the Use of Co-Design to Avoid Enshrining Systemic Bias” (2020) 36 Design Issues 16.

<sup>49</sup> M Hagan and K Źożenć, “Guest Editor’s Introduction” (2020) 36 Design Issues 2.

<sup>50</sup> U Ramanathan, “The Myth of the Technology Fix” (*Seminar Magazine*, 2011) <[https://www.india-seminar.com/2011/617/617\\_usha\\_ramanathan.htm](https://www.india-seminar.com/2011/617/617_usha_ramanathan.htm)> (last accessed 1 September 2021).



mind how the product or service will be engaged with in a particular scenario. The second is the aspect of how design involves a mind-set of collaboration and community and why this is important if we are to build inclusively. The third is about thinking epistemologically and designing for many different contexts to allow for difference and variety, particularly as we need to consider intersectional experiences when designing legal services. Each of these three points is to be understood in the context of moving away from a productivity, efficiency and scale theatre to one in which the users' experiences, memories and knowledge are part of the development process. I will focus on cases of legal design that are applied in legal education, contract design, law firm practice and legal technology to demonstrate how such an approach can have value in building more grounded legal tech offerings.

### III. The role of design in building legal products and services

#### I. Building for usability

Donald A. Norman argues how design exists and informs different products and services that we interact with and appears in everyday objects. He illustrates the purpose of design using an example of doors, saying, "I push doors that are meant to be pulled, pull doors that should be pushed, and walk into doors that neither pull nor push, but slide".<sup>51</sup> Throughout his book, he examines how design can be a medium through which we are able to communicate between an object and a user, and if done in a good way it allows for the design itself to be invisible because it accounts for the needs of the user. If it did not consider the user then it would immediately raise questions of the inadequacies of the design itself.

Norman argues that there are two key elements that are part of design: the first is that there must be discoverability, which is where it is possible to know what actions must be taken and how to go about taking them; and the second is understanding, which is how to make use of the product or service.<sup>52</sup> He also advances that there are seven fundamental principles of interaction; *discoverability*, which, as we discussed, includes what actions are possible; *affordance*, which is the relationship between the designed object and the user who needs to use it; *signifiers*, which suggest where the communication takes place in the design; *constraints*, which are the social, cultural or physical aspects that would determine how the product is used; *mapping*, which represents the relationship between how different elements intersect; *feedback*, which is how responses to actions are mapped; and finally a *conceptual model*, which is a basic explanation of how things work.<sup>53</sup> These aspects are useful as a checklist when evaluating how users interact with legal products and services.

A good example of focusing on usability is from the Contract Design Pattern Library, which was initiated to encourage contract drafters to think about their users and find ways to communicate effectively by recognising problems caused by design and complex information and finding ways to solve them.<sup>54</sup> The Contract Design Pattern Library adopts a design pattern approach that uses flowcharts, timelines, term sheets and companion icons

<sup>51</sup> DA Norman, "The Psychopathology of Everyday Things" in *The Design of Everyday Things* (New York, Doubleday 1990).

<sup>52</sup> *ibid.*

<sup>53</sup> *ibid.*

<sup>54</sup> "A Design Pattern Approach" (WorldCC Contract Design Pattern Library) <<http://contract-design.worldcc.com/design-patterns>> (last accessed 7 February 2021); "Contract Design Pattern Library" (WorldCC Contract Design Pattern Library) <<http://contract-design.worldcc.com>> (last accessed 7 February 2021).



Figure 1. Example of swimlanes from the Contract Design Pattern Library.<sup>55</sup>

as means to make clear and understandable the meanings and functions of specific forms of information. For instance, the Library introduced “swimlanes” as a design idea, which is where rights, responsibilities, tasks and remedies between parties are represented by columns, whereas shared responsibilities are placed in-between both lanes (Figure 1).<sup>56</sup>

Passera has shown how the use of diagrams as compared to prose enhances user comprehension with regards to the contents of a contract, as well as their capacity to engage with it.<sup>57</sup> This is because visualisation not only makes contracts and other legal documents look fun or creative, but also increases the value of these documents for people so that they can meaningfully engage with the material.<sup>58</sup> Passera and Haapio argue that if contract design is combined with a focus on how people interact with contracts there is the potential to transform these documents from being largely about legal rules to also being about communication.<sup>59</sup> In doing so, this approach becomes outcome-orientated because it is built on shared values and seeks not to be reactive in that it focuses on dispute resolution rather than dispute pre-emption.<sup>60</sup>

The use of design in this instance is not just about the designing of information in accessible and engaging formats, but is also about finding ways to make the process of development collaborative and co-creative while at the same time building processes that are not blind to matters of representation by placing the needs of the user first.<sup>61</sup>

<sup>55</sup> “Swimlanes” (*WorldCC Contract Design Pattern Library*) <<http://contract-design.worldcc.com/swimlanes>> (last accessed 7 February 2021).

<sup>56</sup> *ibid.*

<sup>57</sup> S Passera, “Flowcharts, Swimlanes, and Timelines: Alternatives to Prose in Communicating Legal-Bureaucratic Instructions to Civil Servants” (2018) 32 *Journal of Business and Technical Communication* 229.

<sup>58</sup> SP de Souza, “Vernacularizing the Law: Can It Be Made More Accessible?” (*Justice Innovation Blog*, 2018) <<https://winklerinstitute.ca/vernacularizing-the-law-can-it-be-made-more-accessible/>> (last accessed 28 August 2019).

<sup>59</sup> S Passera and H Haapio, “Transforming Contracts from Legal Rules to User-Centered Communication Tools: A Human-Information Interaction Challenge” (2013) 1 *Communication Design Quarterly* 38.

<sup>60</sup> G Berger-Walliser, “The Past and Future of Proactive Law: An Overview of the Proactive Law Movement” in G Berger-Walliser and K Ostergaard (eds), *Proactive Law in a Business Environment* (Copenhagen, Djøf Publishing 2012).

<sup>61</sup> E Allbon, “Beyond Text: Exploiting the Visual in Law” (2018) 26 *Australian Law Librarian* 54.

Focusing on processes that represent people's experiences is at the core of building a design approach. IDEO, a design-thinking firm, was hired by Hogan Lovells, a law firm, to redesign their annual reviews. IDEO found that these annual reviews were formal and rigid, and often the feedback was either cursory or out of date for the associate.<sup>62</sup> A challenge that emerged in this instance was that communication in a hierarchical organisation became counterproductive and there was a need to have more open conversations. To remedy this, IDEO introduced a solution called Pathways, which involved a quarterly review with peers, assistants and partners in the form of short, ten-minute conversations, which the associate was asked to actively request. Thereafter, the associate was asked to discuss the findings with a peer and determine how to implement them.<sup>63</sup> The Pathways solution was not technological but rather focused on responding to a clearly identified need – that of open and regular communication in the feedback process. The solution enabled new ways of obtaining structured feedback while at the same time diversifying communication across various hierarchies at more regular intervals. In this sense, it enabled feedback to become more personal, open and usable by finding ways to make it meaningful for users.

This Pathways example and the example of contract design above are different in terms of their intervention, with one focusing on language and the other focusing on procedural and cultural aspects within a legal institution. However, they both connect to the essentials of a design mind-set that places people first and relies not just on technical understandings of problems, but also on empathetic ways of building up interdisciplinary conversations.<sup>64</sup>

## 2. Collaboration and community

The second aspect of a design approach to building legal tech products and services is to build with community, where the context and experiences of the user are incorporated into the design of the product and where the users become part of the design process through collaboration.<sup>65</sup> To build legal tech that can truly be meaningful for end users, the legal tech must account for the distinctions between how law exists in books and how it is practiced, and in doing so capture the plurality that exists in different social and cultural contexts and the lived realities of justice users.<sup>66</sup>

In one of the projects undertaken by the Stanford Legal Design Lab called Learned Hands (Figure 2), an attempt was made to use games to train an algorithm to be able to spot people's legal issues. The game involves users being asked to read certain stories (which are taken from online portals such as Reddit where people have

<sup>62</sup> K Schwab, "Ideo Redesigns the Dreaded Annual Review" (*Fast Company*, 2018) <<https://www.fastcompany.com/90173554/ideo-redesigns-the-dreaded-annual-review>> (last accessed 14 February 2021).

<sup>63</sup> *ibid.*

<sup>64</sup> Brown advances design thinking as "a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity": T Brown, "Design Thinking" (*Harvard Business Review*, 2008) <<https://hbr.org/2008/06/design-thinking>> (last accessed 16 August 2018).

<sup>65</sup> See also PR Murray et al, "Design Beku: Toward Decolonizing Design and Technology through Collaborative and Situated Care-in-Practices" (2021) 2 *Global Perspectives* <<https://online.ucpress.edu/gp/article/2/1/26132/118346/Design-Beku-Toward-Decolonizing-Design-and>> (last accessed 20 March 2022).

<sup>66</sup> In their work on feminist technologies, Arora and Chowdhury argue for how in order to build inclusive futures it is important to focus on materiality (embodiments), mobility (social movements) and modality (codes and modes of design): P Arora and R Chowdhury, "Cross-Cultural Feminist Technologies" (2021) 2 *Global Perspectives* <<https://online.ucpress.edu/gp/article/2/1/25207/117801/Cross-Cultural-Feminist-Technologies>> (last accessed 21 March 2022); "User-Centred Law: What Law, Which Rights Do People in Fragile Contexts Need?" (*RSF Hub*, 2018) Impulse Paper No. 2 <[https://www.fu-berlin.de/sites/rsf-hub/\\_medien/RSF\\_Hub\\_IP02.pdf](https://www.fu-berlin.de/sites/rsf-hub/_medien/RSF_Hub_IP02.pdf)> (last accessed 6 April 2022).

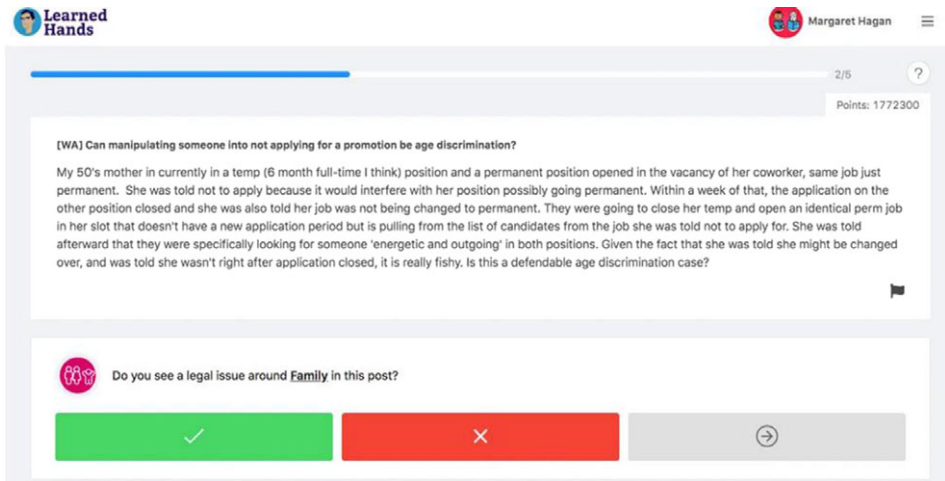


Figure 2. A Learned Hands project story and question for users from Stanford Legal Design Lab.<sup>67</sup>

described their problems), and then users are asked whether these stories contain legal problems such as family law problems, consumer law problems or housing law problems.<sup>68</sup>

The game aims to label data in such a manner that people's issues and their needs are connected and integrated more closely within the algorithm.<sup>69</sup> Therefore, each time a person plays, the model will develop so as to help it become more adaptive in its understanding of how people spot and recognise different legal issues.<sup>70</sup> Hagan describes how legal taxonomies have traditionally been developed by lawyers or those who are involved in the law, but this project represents an attempt to break from this and also make legal issue taxonomies "fit the mental models, issues, and phrases that regular people use".<sup>71</sup>

In this way, this project attempts to shift the ways in which tech is developed from residing purely in the worldviews of developers to representing an open process that engages with the wider community.

The Learned Hands project represents an important intervention in how design thinking is applied to legal tech development because it is designed *with* users by examining the taxonomies and mind-sets of people engaging with the legal system. It helps ask questions such as "what are people's key legal needs, how are they clustered or patterned together, and how are they expressed?"<sup>72</sup>

In building a model that allows people to determine and spot legal issues, the contexts and particularities of a user will also be able to influence the making of the algorithm, and in doing so a plurality of voices will feed into what categories and concepts people place importance on. This is where design becomes important as it leads to the co-creation of the development of the technology with the user and accounts for the various pluralities that the users represent.

Through the development of the Learned Hands project what becomes clear is that there is an emphasis on who the end user and consumer of legal material is and how they

<sup>67</sup> M Hagan, "Learned Hands" (*A Better Legal Internet*, 2019) <<https://betterinternet.law.stanford.edu/about-the-project/learned-hands/>> (last accessed 15 February 2021).

<sup>68</sup> *ibid.*

<sup>69</sup> "Learned Hands" <<https://learnedhands.law.stanford.edu/>> (last accessed 14 February 2021).

<sup>70</sup> *ibid.*

<sup>71</sup> M Hagan, "A Human-Centered Taxonomy of Legal Problems" (*Medium*, 2018) <<https://medium.com/legal-design-and-innovation/a-human-centered-taxonomy-of-legal-problems-fab415ebfe88>> (last accessed 14 February 2021).

<sup>72</sup> Hagan, *supra*, note 67.

interact and engage with such material. Importance is also placed on developing material not from the top down and instead actually understanding how such material can speak to people and how they use it in their everyday lives.<sup>73</sup> In her work at t|dr, a visual gallery of legal material, Allbon has also demonstrated how by employing visual methods, for instance, the reader gains the capacity to become involved in the story, to find ways to empathise with the situation and to connect with their own context. This creates cognitive change whereby people feel more confident to act on legal information.<sup>74</sup>

With the emphasis being on how people find value in legal products, it is no longer possible for lawyers to speak in echo chambers. Instructive in this thinking is the work of the Design Justice Network. This group came together to evolve a set of principles that suggests the ways in which we can centre people and include them in design processes.<sup>75</sup> These principles include how to design to empower communities from oppressive systems, how to centre the voices of those impacted by the design process and how to place emphasis on the role of the community over that of designers, with the aim of finding ways to make change collaborative and making lived experiences central to the design process, such that the designer is a facilitator and not an expert.<sup>76</sup> These principles are important in demonstrating how design can be used as a medium to build more iterative and community-focused processes when thinking about centring justice in our work. In the development of legal tech, this is hugely important because law needs to be written and designed with its users in mind and not just to govern its users or engineer compliance.

### 3. Designing for many worlds

The third and final aspect of the framework is to consider the varieties of ways in which people around the world interact with legal systems. In their work on design justice, Sasha Constanza-Chock powerfully articulates how, by virtue of being trans, they are subjected to humiliating checks by Transportation Security Administration agents at the airport because airport scanners treat gender as a binary. They articulate:

I raise my arms and place my hands in a triangle shape, palms facing forward, above my head. The scanner spins around my body, and then the agent signals for me to step forward out of the machine and wait with my feet on the pad just past the scanner exit. I glance to the left, where a screen displays an abstracted outline of a human body. As I expected, bright fluorescent yellow blocks on the diagram highlight my chest and groin areas . . .

If the agent selects “male”, my breasts are large enough, statistically speaking, in comparison to the normative “male” body-shape construct in the database, to trigger an anomalous warning and a highlight around my chest area. If they select “female”, my groin area deviates enough from the statistical “female” norm to trigger the risk alert, and bright yellow pixels highlight my groin, as visible on the flat panel display.<sup>77</sup>

<sup>73</sup> S de Souza, “Making the Law Speak: Empowering Workers through Legal Engagement” (*FemLab. Co*, 2020) <<https://femlab.co/2020/07/03/making-the-law-speak-empowering-workers-through-legal-engagement/>> (last accessed 6 July 2020); S de Souza, “Proactive Contracting for Platform Work: Making the Design of Terms and Conditions More Participatory” (*FemLab. Co*, 2020) <<https://femlab.co/2020/10/23/proactive-contracting-for-platform-work-making-the-design-of-terms-and-conditions-more-participatory/>> (last accessed 14 January 2021).

<sup>74</sup> E Allbon, “Changing Mindsets: Encouraging Law Teachers to Think beyond Text” (2019) 7 *Journal of Open Access to Law*.

<sup>75</sup> “Design Justice Network Principles” (*Design Justice Network*, 2018) <<https://designjustice.org/read-the-principles>> (last accessed 4 May 2020).

<sup>76</sup> *ibid.*

<sup>77</sup> S Constanza-Chock, “Design Justice, A.I., and Escape from the Matrix of Domination” (2018) *Journal of Design and Science* <<https://jods.mitpress.mit.edu/pub/costanza-chock/release/4>> (last accessed 7 January 2021).

In this narration, we are introduced to a situation where there is systemic technology blindness and where there is no vocabulary, category or conceptualisation to be able to deal with different contexts and experiences. Buolamwini describes a coded gaze that is shaped and designed by the worldviews of those who design them.<sup>78</sup> These are issues that need a more holistic approach to developing solutions and not fixes, which account for gaps and silences in a piecemeal fashion. There is therefore a need to build tech that considers the lived realities of users and recognises the agency of people in understanding, determining, controlling and interacting with algorithms.<sup>79</sup>

In his book *Designs for the Pluriverse*, Escobar argues that design can be used as a technique to be able to build a world where many worlds fit.<sup>80</sup> This is a powerful idea to take further regarding the expectations that we must have in terms of legal tech. Not only should such products ask who the tech is being written and designed for, but it should also look at fundamental ways to include people because there is an expectation that people consume legal tech in different and diverse ways, and embracing this plurality will ensure, as Bardzell argues, that the voices on the margins are counted.<sup>81</sup>

Like legal knowledge, which is determined by a particular set of categories and concepts and then assumed to be replicable across different geographies and contexts, we must be cautious about universalising legal tech solutions.<sup>82</sup> In acknowledging the changing the ways in which law and legal products are consumed, there is a possibility to push for different kinds of approaches regarding how legal knowledge is developed and the rules and principles that govern their flow and production.<sup>83</sup> These factors of understanding the politics and political economy of legal knowledge as they dominate different markets are also necessary in order to recognise that legal tech solutions might not be meaningful and useful everywhere.<sup>84</sup>

For instance, in South Africa, Comic Contracts was started to be able to give people who were not able to otherwise read a contract the opportunity to meaningfully engage with it by using illustrations that break down legal concepts such as considerations in a contract. de Rooy, who founded Comic Contracts, stated that he took this approach because he wanted to “enable people to be able to independently understand the contracts they are expected to sign” and thereby empower them.<sup>85</sup> In these contracts, which include

<sup>78</sup> J Buolamwini, “When the Robot Doesn’t See Dark Skin” (*The New York Times*, 2018) <<https://www.nytimes.com/2018/06/21/opinion/facial-analysis-technology-bias.html>> (last accessed 14 February 2021).

<sup>79</sup> In their mission statement, the Algorithmic Justice League, a digital advocacy organisation, speaks of the need to have four core principles: affirmative consent, meaningful transparency, continuous oversight and accountability and actionable critique. These principles are meant to enhance the real choices people have in their interactions with technology and also to ensure that there is equality that does not get side-tracked by machine neutrality. “Mission, Team and Story – The Algorithmic Justice League” <<https://www.ajl.org/about>> (last accessed 20 July 2021).

<sup>80</sup> A Escobar, *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds* (Durham, NC, Duke University Press 2018).

<sup>81</sup> As Bardzell has argued, pluralising design will result in an acknowledgment of alternative sensibilities and will bring to the fore views that foreground people at the margins. S Bardzell, “Feminist HCI: Taking Stock and Outlining an Agenda for Design” in *CHI ’10 Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (New York, Association for Computing Machinery 2010) pp 1301–10.

<sup>82</sup> See generally E Darian-Smith, “Producing Legal Knowledge” in *Laws and Societies in Global Contexts: Contemporary Approaches* (Cambridge, Cambridge University Press 2013).

<sup>83</sup> For discussions on the politics of legal knowledge, see generally DB Maldonado, “The Political Economy of Legal Knowledge” in DB Maldonado and C Crawford (eds), *Constitutionalism in the Americas* (Cheltenham, Edward Elgar Publishing 2018).

<sup>84</sup> For the importance of context in thinking about the flow of legal concepts, see generally W Twining, “Have Concepts, Will Travel: Analytical Jurisprudence in a Global Context” (2005) 1 *International Journal of Law in Context* 5.

<sup>85</sup> K Vitasek, “Comic Contracts: A Novel Approach to Contract Clarity and Accessibility” (*Forbes*, 2017) <<https://www.forbes.com/sites/katevitasek/2017/02/14/comic-contracts-a-novel-approach-to-contract-clarity-and-accessibility/>> (last accessed 6 August 2019).

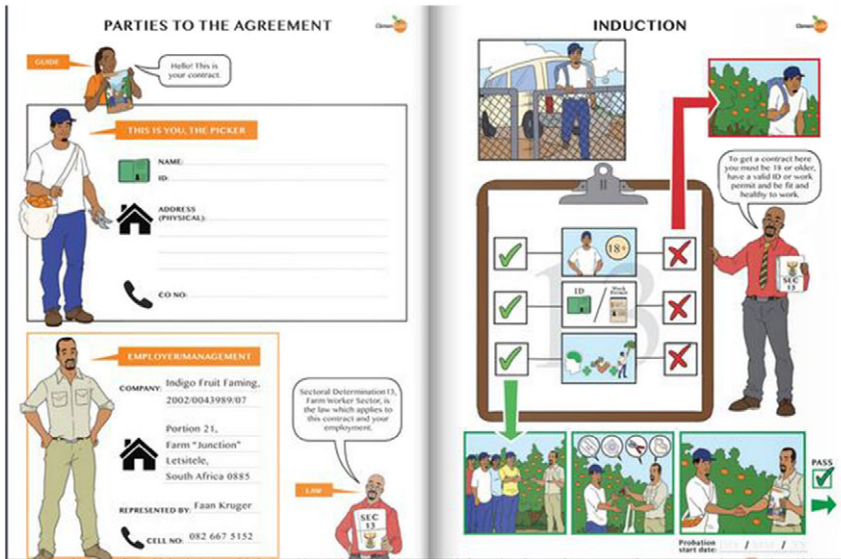


Figure 3. The Clemengold Comic Contract.<sup>86</sup>

contracts for fruit pickers and farm workers (Figure 3), the entire contracting process is illustrated, and the elements of the contract, including aspects of type of work, hours of work, payment for work, options for dispute resolution and duration of the contract, are all included in the form of comics, which are then signed and are legally binding.<sup>87</sup>

A key mission of this work is legal empowerment, and the focus is not just on providing simplified legal information, but also on information that can provide parties who are otherwise not literate enough to use legal documents with the opportunity to independently assess and verify the nature of the material. Here is an intervention that identifies the challenges of contracts, but their design enables its end users to be reflective and critical. In this project, what is clear is that it is important not just to think through how language could help people, but also how visuals could be aids. In the process of using both plain language and illustrations, there is an additional responsibility of being sensitive to the possibility that either image or text could trigger a user in adverse ways. In this process of making law more visible and tangible through design and through being open to different realities, there is also a need for lawyers to be more flexible and willing to prototype their work.<sup>88</sup> Changing the medium through which law is consumed or thought about in this case allows one to see the silences and gaps that emerge in the development of legal knowledge. In this way, rather than building an interface using a technical solution that would make the contracting process more efficient, an attempt was made to find ways to make the contracting process more meaningful by design and by catering to the lifeworlds of the end users.

#### IV. Conclusions: legal tech solutionism to legal tech by design

This paper has sought to argue for a new approach to developing legal products and services that is embedded in the sociopolitical contexts in which they are employed, that

<sup>87</sup> "Clemengold Comic Contract" (*Creative Contracts*) <<https://creative-contracts.com/clemengold/>> (last accessed 3 February 2021).

<sup>86</sup> *ibid.*

<sup>88</sup> A Perry-Kessarais, *Doing Sociolegal Research in Design Mode* (London, Routledge 2021).

considers the impacts of the use of such legal products and services and that is willing to reflect and be critical of the categories that such legal products and services use and the people they impact.

Through a variety of cases from legal tech and design, this paper has sought to demonstrate how, without careful and deliberative design, legal tech can raise questions of the exclusion and alienation that people face when they are receivers of legal products that make use of unfamiliar language, technologies and contexts. By building a more grounded approach through design, I have argued that: we have the capacity to build for usability, which, as discussed, looks at how the user will interact with such products; we are able to build with the community, which entails looking at who is marginal in the design process; and finally we are able to design for many worlds, which looks at exploring the pluralities of the people that we work and live with. I believe that these lessons can be useful when we look at legal tech solutionism. This is because legal tech will necessarily need to account for who its users are, who will be affected by such technologies and what their contexts and experiences are. It will also have to explore how to design products that keep in mind the community and the many worlds in which we live.

This paper has aimed to demonstrate how, in an age of technology, where the development of legal tech is seen as a panacea for all ills, it is important to evaluate the use and lifecycle of such technology before introducing it as a solution to complex problems. Legal design offers an important methodology to unpack how these technologies can be developed. It raises questions of user-centeredness and of the importance of collaboration and participation in the design of technologies. In adopting a more design-centred approach we have the possibility to ask: what is the purpose of the legal tech product? How does it manifest? Why does it manifest? And what lacunae does it address in the legal system and how can these lacunae be overcome through user-centred design?

If we do this, we will be able to bring the users in when we develop legal tech solutions. We will also be able to build trust between the user and the developer because the user would be part of the design process and not merely a receiver. Finally, this process would create a system in which plurality is at the core of imagining how technology, while systematising the world, needs to account for diverse lifeworlds.

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