

6-1-2017

Mobile and Web-based Legal Apps: Opportunities, Risks and Information Gaps

Jena McGill

Suzanne Bouclin

Amy Salyzyn

Follow this and additional works at: <https://digitalcommons.schulichlaw.dal.ca/cjlt>

Recommended Citation

Jena McGill, Suzanne Bouclin, and Amy Salyzyn, "Mobile and Web-based Legal Apps: Opportunities, Risks and Information Gaps" (2017) 15: 2 CJLT

This Article is brought to you for free and open access by the Journals at Schulich Law Scholars. It has been accepted for inclusion in Canadian Journal of Law and Technology by an authorized editor of Schulich Law Scholars. For more information, please contact hannah.steeves@dal.ca.

Mobile and Web-based Legal Apps: Opportunities, Risks and Information Gaps

Jena McGill, Suzanne Bouclin and Amy Salyzyn*

INTRODUCTION

There is a widely-acknowledged access to justice crisis in Canada.¹ While strategies to address access to justice issues have historically focused on refining established court processes and increasing access to legal representation, scholars and policy-makers have recently recognized that meaningful access to justice requires more than simply access to courts and lawyers.² For example, technology is now a broadly acknowledged means of creating new pathways to justice.³ Indeed, in 2015, Chief Justice Beverley McLachlin implored the legal profession to “accept the idea of change”, including the reality that some tasks that have been traditionally performed by lawyers can now be more effectively executed through technological means.⁴ Similarly, the Canadian Bar

* The authors are grateful to the Social Sciences and Humanities Research Council for its financial support of this project. The research and analysis presented in this paper are drawn largely from an unpublished report by the authors entitled *Emerging Technological Solutions to Access to Justice Problems: Opportunities and Risks of Mobile and Web-based Apps*, which was submitted to the Social Sciences and Humanities Research Council in October 2016 in fulfillment of the requirements of the Knowledge Synthesis granting program. Valuable research assistance was provided by Karin Galldin, Natalya Odorico, Kory Smith, Zaynab Al-Waadh, Tara Hristov and Leah Bowes.

¹ See e.g., Canada, Canadian Bar Association Access to Justice Committee, *Reaching Equal Justice: An Invitation to Envision and Act* (Ottawa: Canadian Bar Association, 2013) [*CBA Equal Justice*]; Roderick Macdonald, “Access to Justice in Canada Today: Scope, Scale and Ambitions” in Julia Bass, W.A. Bogart & Frederick H. Zemans, eds., *Access to Justice for a New Century: The Way Forward* (Toronto: Law Society of Upper Canada, 2005); Jane Bailey, Jacquelyn Burkell & Graham Reynolds, “Access to Justice for All: Towards an ‘Expansive Vision’ of Justice and Technology” (2013) 31 *Windsor YB Access Just* 181 [Bailey *et al.*]; Michael Trebilcock, Anthony Duggan & Lorne Sossin, eds., *Middle Income Access to Justice* (Toronto: University of Toronto Press, 2012).

² For further discussion see, Trevor C.W. Farrow, “What is Access to Justice?” (2014) 51:3 *Osgoode Hall LJ* 957 [Farrow]; Kent Roach & Lorne Sossin, “Access to Justice and Beyond” (2010) 60:2 *UTLJ* 373.

³ See e.g., *CBA Equal Justice*, *supra* note 1.

⁴ Chief Justice Beverley McLachlin, “The Legal Profession in the 21st Century”, Remarks, (2015 Canadian Bar Association Plenary in Calgary, Alberta, 14 August 2015), online: <https://malcolmmercer.files.wordpress.com/2015/08/cj-mclachlin-remarks-august-14-2015-2015-cba-legal-conference.pdf>. There is also significant interest internationally in using technological means to facilitate access to justice. For example, included among the recommendations in the American Bar Association’s 2016 *Report on the Future of Legal Services in the United States* (American Bar Association, 2016) at 41 is a recommendation that state bar organizations “explore how legal services are delivered

Association's *Legal Futures Initiative* report acknowledged that "technology is . . . replacing the traditional lawyer in some areas where routine or predictable matters can be resolved without recourse to a lawyer."⁵

Mobile and web-based applications ("apps") are one technology with the potential to improve access to justice, either by helping lawyers increase the efficiency of service delivery or by reducing the need for recourse to lawyers altogether for meeting basic legal needs.⁶ Notwithstanding growing excitement about the potential presented by legal apps,⁷ there has been no comprehensive study regarding the range of such apps currently available to Canadians, nor has there been a concrete exploration of what these apps purport to do and whether they have the capacity to actually improve access to justice.

In this paper, we offer a preliminary taxonomy of the legal apps available in Canada, of which we have identified approximately 60.⁸ We have found that these legal apps perform a variety of functions, including: providing legal information and advice, creating documents, and collecting evidence. In this article we contribute to future policy discussions about legal apps through an analysis of the potential benefits and risks of using this technology in the pursuit of access to justice. In light of the dearth of literature on legal apps in Canada, we draw in part on the American experience and American scholarship, which is instructive and provides a useful comparative perspective. We also consider health-related apps — including general health and wellness apps and evidence-based apps for use by medical professionals⁹ — because they share key features

by entities that employ new technologies and internet-based platforms and then assess the benefits and risks to the public associated with those services."

⁵ Canadian Bar Association, *Futures: Transforming the Delivery of Legal Services in Canada* (Ottawa: Canadian Bar Association, 2014) at 19 [*CBA Futures*].

⁶ See e.g., Alex Robinson, "Canadian A2J Apps at the Starting Line" *Law Times* (22 August 2016), online: <http://www.lawtimesnews.com/201608225592/headline-news/legal-tech-now-part-3-canadian-a2j-apps-at-the-starting-line>; and Lyndsey Gilpin, "8 apps that improve access to legal justice" *TechRepublic* (9 September 2014), online: <http://www.techrepublic.com/article/8-apps-that-improve-access-to-legal-justice/>.

⁷ We use the term legal apps to encompass both mobile and web-based resources that purport to assist individuals with a specific legal task or set of tasks, or facilitate access to legal actors, processes and information. For a discussion of task-centricity as a core defining feature of a web-based app, see, e.g. Ciprian Borodescu, "Web Sites vs. Web Apps: What the experts think", online: <https://www.visionmobile.com/blog/2013/07/web-sites-vs-web-apps-what-the-experts-think>.

⁸ See Appendix A.

⁹ Health apps are booming: in 2016, there were 170,000 health apps available for download on the Apple and Android app stores, and there is significant growth in wearable technologies tracking personal health-related data. See Stephen Armstrong, "What Happens to Data Gathered by Health and Wellness Apps?" (2016) *Brit Med J* 2016;353:i3406 <www.bmj.com/>. Health apps include, for example, those that offer self-monitoring for diabetes and psychiatric diagnoses, exergaming, smoking cessation and alcohol addiction (including relapse prevention), daily living for patients with dementia, and basic triage by non-medical professionals for relatively minor ailments

with legal apps such as the involvement of experts in the delivery of specialized services in a self-regulated context as well as corresponding privacy and security concerns related to sensitive patient/client information.

This paper proceeds in three parts. In the first, we outline the key dimensions of the well-documented access to justice crisis in Canada, specifically, the financial, psychological, informational and physical barriers that impede access to justice. In the second part, we begin to fill the gap in research on legal apps in Canada by consolidating publicly-available data to identify developers, targeted users and the functions that legal apps are designed to perform. In part three, we weigh some possible risks and opportunities inherent in the use of apps in the legal context. We conclude with a call for dedicated empirical data and research on legal apps in Canada and for increased policy attention to leveraging the opportunities and mitigating the risks presented by legal apps.

PART I: THE ACCESS TO JUSTICE CRISIS IN CANADA

Access to justice is reflected in “a truly equal justice system, one that provides meaningful and effective access to all, taking into account the diverse lives that people live.”¹⁰ A 2015 comparative study found that Canada lags behind similarly situated “developed” nations in ensuring that all citizens can effectively access our justice system.¹¹ Other studies have concluded that Canadians are losing confidence in the justice system.¹² This reality is in no small part a result of the myriad financial, psychological, informational and physical barriers faced by Canadians in accessing lawyers, legal processes and legal information.¹³

Financial restrictions remain one of the most important access to justice barriers in Canada. The average adult Canadian with a legal issue will spend approximately \$6,100 to have it resolved.¹⁴ This is particularly troublesome given that almost half of Canadians will experience a legal problem in a three-year period.¹⁵ Moreover, individuals experiencing certain life events, like divorce, may

like concussions. See Maged N. Kamel Boulos *et al.*, “Mobile Medical and Health Apps: State of the Art, Concerns, Regulatory Control and Certification” (2014) 5:3 *Online Journal of Public Health Informatics* e229 at 4-5, online: < <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3959919/pdf/ojphi-05-e229.pdf> > [Boulos *et al.*].

¹⁰ *CBA Equal Justice*, *supra* note 1 at 6.

¹¹ World Justice Project, *Rule of Law Index 2015*, (2015) online: < <https://worldjusticeproject.org/our-work/publications/rule-law-index-reports/wjp-rule-law-index-2015-report> > .

¹² *CBA Equal Justice*, *supra* note 2 at 16. This lack of confidence may be one reason only 7% of respondents in a national survey reported appearing before courts or tribunals to resolve a legal matter and only 19% consulted a lawyer. See Trevor C.W. Farrow *et al.*, *Everyday Legal Problems and the Cost of Justice in Canada: Overview Report* (Toronto: Canadian Forum on Civil Justice, 2016) at 9 [Farrow *et al.*, *Everyday Legal Problems*].

¹³ Farrow *et al.*, *Everyday Legal Problems*, *supra* at 3-6.

¹⁴ *Ibid.*, at 13.

find that retaining a lawyer is beyond their financial means.¹⁶ It is unsurprising then that an “extraordinary” number of individuals are now self-represented in Canadian courts.¹⁷ Although legal aid programs exist throughout the country, the financial support they offer does not meet the needs of many Canadians. Not only does legal aid funding vary by jurisdiction, but even when such funding is available, it is often limited to serious criminal law issues.¹⁸

Canadian studies also report that people experience multiple psychological and informational barriers to accessing justice, including: a lack of knowledge about the legal system and the resources available to assist members of the public in accessing the legal system; fear, embarrassment and stress in relation to pursuing or defending legal rights; and concerns about jeopardizing privacy.¹⁹

Physical barriers also impact access to justice. Participants in one Ontario study “identified distance as the number one barrier to obtaining legal information and services in rural or remote areas of the province.”²⁰ The study further reported that financial, informational and psychological barriers to accessing justice may be pronounced in rural settings due to disproportionately high rates of poverty, higher cost services due to reduced economies of scale, possible “‘cultural barrier[s]’ between people in rural communities and service providers located in cities”, and a lack of public awareness of available services.²¹ Supply gaps in rural and remote areas have also been identified.²²

¹⁵ Justice Canada, *The Legal Problems of Everyday Life: The Nature, Extent and Consequences of Justiciable Problems Experienced by Canadians*, by Ab Currie (Ottawa: Department of Justice Canada, 2008)[Currie], found that 44.6% of all respondents to the study experienced one or more justiciable problems over three years; Farrow *et al.*, *supra* note 13 at 2, stating “[a]most half (48.4%) of Canadians over 18 will experience at least one civil or family justice problem over any given three-year period.”

¹⁶ A 2015 survey of Canadian lawyers found that their fees in a contested divorce could range from \$6,145 to \$87,974. See Michael McKiernan, “The Going Rate”, *Canadian Lawyer Magazine* (June 2015), online: < http://www.canadianlawyermag.com/images/stories/pdfs/Surveys/2015/CL_June_15_GoingRate.pdf > [McKiernan].

¹⁷ Julie Macfarlane, “The National Self-Represented Litigants Project: Identifying and Meeting the Needs of Self-Represented Litigants”, *The Law Society of Upper Canada* (May 2013), online: < http://www.lsuc.on.ca/uploadedFiles/For_the_Public/About_the_Law_Society/Convocation_Decisions/2014/Self-represented_project.pdf > at 32.

¹⁸ *CBA Equal Justice*, *supra* note 1 at 37-39.

¹⁹ See, e.g., *ibid.*, at 34.

²⁰ Law Foundation of Ontario, “Connecting Across Language and Distance: Linguistic and Rural Access to Legal Information and Services”, by Karen Cohl & George Thomson (Toronto: Law Foundation of Ontario, 2008) at 32 [Cohl & Thomson]. In this study, “[l]egal service providers spoke about their rural clients walking an hour or more, or hitchhiking, to keep appointments with legal clinics or to attend administrative or court proceedings.”

²¹ *Ibid.*

²² For instance, a 2015 report concluded that individuals navigating family law issues in rural and remote contexts are under-served due to a lack of lawyers, and a belief that problems should be dealt with inside the family structure. See Canadian Forum on Civil

All of these barriers are acutely experienced by members of marginalized and equality-seeking communities. The cost of accessing justice is uniquely burdensome for persons of Aboriginal ancestry, members of visible minority groups, persons with disabilities and persons who receive social assistance, who are all more likely to face multiple legal problems at once.²³ It is well documented that homeless individuals — a heterogeneous mix of people who are otherwise marginalized in the legal system for reasons of race, social class, disability, and sexual orientation/gender identity — experience “a gamut of unresolved legal issues.”²⁴ As summarized in the Canadian Bar Association’s *Reaching Equal Justice Report*, “legal problems tend to ‘cluster’, multiply, and have an additive effect and this pattern of cascading problems disproportionately impacts people living in marginalized conditions.”²⁵

Marginalized and equality-seeking groups may face particularly exacerbated access to justice barriers in rural and remote contexts. Persons of Aboriginal ancestry in remote regions face difficulties in accessing culturally appropriate legal services in part due to generalized ignorance about the history and position of their unique communities and disproportionately high rates of poverty.²⁶ The lack of legal services in rural communities may also have a detrimental effect on the legal needs of youth, the elderly, and people with disabilities.²⁷ Rural women experiencing intimate partner violence face particular challenges in navigating conflicts and maintaining confidentiality in close-knit communities because the number of available lawyers may be small.²⁸ Moreover, in some cases, these women may not have access to adequate transportation to travel outside their communities to visit a lawyer’s office.²⁹

The Canadian legal community is actively strategizing ways to address this crisis in access to justice. However, much of the existing work focuses on improving access to legal representation and refining court processes.³⁰ There has been rather less consideration of the possibilities that legal technologies, including legal apps, might offer in mitigating access to justice barriers.³¹ In

Justice, “Rural & Remote Access to Justice: A Literature Review”, by Nicole Aylwin & Lisa Moore (Toronto: Canadian Forum on Civil Justice, 2015) at 21 [Aylwin & Moore].

²³ For further discussion, see Currie, *supra* note 15.

²⁴ Suzanne Bouclin, “Regulated Out of Existence: A Case Study of Ottawa’s Ticket Defence Program” (2014) 11 JL & Equality 35 at 48.

²⁵ *CBA Equal Justice*, *supra* note 1 at 32, citing Ab Currie, “A National Survey of the Civil Justice Problems of Low and Moderate Income Canadians: Incidence and Patterns” (2006) 13:3 Intl J Leg Profession 217.

²⁶ Aylwin & Moore, *supra* note 22 at 17-18.

²⁷ *Ibid*, at 18-21.

²⁸ Cohl and Thomson, *supra* note 20 at 33.

²⁹ *Ibid*. See also Canadian Agricultural Safety Association, *Rural Child Care Report* (October 2001), online: <<http://casa-acsa.ca/content/rural-child-care-report>> .

³⁰ For further discussion see e.g., Farrow, *supra* note 2.

the next section we canvass the emergence of legal apps that have potential in this regard.

PART II: DEVELOPERS, TARGET USERS AND FUNCTIONS OF LEGAL APPS

To assess the potential of legal apps for improving access to justice in Canada, it is necessary to better understand the nature of legal apps themselves. In this section, we provide a summary of currently available legal apps in Canada and consider three issues that should be considered in future research on legal apps: (1) who develops legal apps, (2) who are the target users of legal apps, and (3) what functions do legal apps purport to perform? To provide context and a more complete picture of the legal app environment in North America, we have also considered examples of apps developed in the United States.³²

a) Legal app developers

Private developers are responsible for most legal apps.³³ Although detailed information about the backgrounds of these developers is not widely available, our research suggests that private developers in Canada generally consist of individuals working alone or in small teams.³⁴ This contrasts somewhat with the American legal app environment which includes several large developers with significant financial and human resource capacity, like LegalZoom, which has systematically entered the legal services delivery field on a large-scale basis and offers multiple apps to the public.³⁵

³¹ That said, the role of technology in access to justice initiatives in Canada has received some meaningful attention. See e.g. Bailey *et al.*, *supra* note 1; Karim Benyekhlef *et al.*, eds., *eAccess to Justice* (Ottawa: University of Ottawa Press, 2016).

³² This data was sourced from publicly available information about legal apps, gathered primarily through searches of mobile app stores and targeted web searches. The full taxonomy of Canadian legal apps is attached at Appendix A.

³³ This is consistent with general trends in app development. The Information and Communications Technology Council, *The Appification of Everything: Canada's Apps Economy Value Chain* (2014), online: < <https://www.ictc-ctic.ca/wp-content/uploads/2014/02/AppificationFeb2014.pdf> > at v reports that 51% of Canada's apps enterprises rely on personal/family funding to get started, 26% rely on funding from other business streams, 6% rely on venture capital, and 4% rely on public funding.

³⁴ More than half of the Canadian legal apps included in our taxonomy at Appendix A were developed by private individuals or teams.

³⁵ LegalZoom, which launched 10 web-based products in 2001 focused on estate planning, business formation, and intellectual property protection, has now grown to offer a plethora of online services, including narrowly tailored services like specialized estate planning to ensure that one's pets "are provided for when you're no longer able to care for them on your own." The significant reach of LegalZoom is evident in the fact that it has now served over 3.6 million customers. See LegalZoom, "About Us", online: < <https://www.legalzoom.com/about-us> >; and LegalZoom, "Pet Protection Agreement" < <https://www.legalzoom.com/personal/estate-planning/pet-protection-agree-ment> >

Public developers have also entered the world of legal apps, although, again, this phenomenon is more apparent in the United States than in Canada. For instance, the American Legal Services Corporation (“LSC”), established in 1974 as “an independent nonprofit” providing “financial support for civil legal aid to low-income Americans”, has recently required that its grant recipients leverage resources through technology.³⁶ Following a national technology summit in 2012, the LSC also recommended that legal aid service providers use mobile technologies as an outreach tool.³⁷ Furthermore, multiple American civil liberties organizations have developed specific apps, including the American Civil Liberties Union’s (ACLU) *Mobile Justice* app that allows “users to record law enforcement, to alert other *Mobile Justice* ... app users to nearby law enforcement encounters and to submit videos and incident reports automatically to the ACLU.”³⁸ Finally, a number of American courts have developed apps that provide information about court proceedings to the public and lawyers.³⁹

ment-overview.html > . For further background on LegalZoom, see e.g., Benjamin H. Barton, *Glass Half Full: The Decline and Rebirth of the Legal Profession* (New York: Oxford University Press, 2015) at 88-97.

³⁶ See generally, Legal Services Corporation [LSC], online: < <http://www.lsc.gov/> > and, on the LSC’s increasing interest in technology, see Ronald S. Flagg, “Access to Justice: Keeping America’s Promise” (2015) 24 Kan JL & Pub Pol’y at 572-581 [Flagg].

³⁷ The LSC’s 2012 national technology summit included 75 representatives from legal aid programs, courts, bar associations, government and business as well as technology experts, academics, and private practitioners. The summit’s mandate was to explore “the potential of technology to move the US towards some form of effective assistance to 100 percent of persons otherwise unable to afford an attorney for dealing with essential civil legal needs.” The Summit’s five resultant technological strategies included “taking advantage of mobile technologies to reach persons more effectively.” See Flagg, *supra* at 572-581.

³⁸ This description is taken from the webpage that describes the California American Civil Liberties Union [ACLU] app: online, < <https://www.mobilejusticeca.org/faq/> > . For a list of states in which the app is available, see American Civil Liberties Union, “ACLU Apps to Record Police Conduct”, online: < <https://www.aclu.org/feature/aclu-apps-record-police-conduct> > .

³⁹ See e.g., (1) Court Clerk Mobile Connect app, developed by the Clerk of Circuit Cook County, which makes court-related information accessible for users in Cook County. Users can search the court’s electronic docket for civil and traffic cases, search the court call roster, get updated fee schedules and locate and contact Cook County court facilities; for further details, see, online: < <https://itunes.apple.com/us/app/court-clerk-mobile-connect/id595694855?mt=8> > ; (2) Ohio Sixth District Court of Appeals app, which allows users to follow court decisions and view the court’s oral argument calendar, and receive notifications when new decisions are released or the calendar is updated. All cases posted on the court website are searchable in the app; for further details, see, online: < <https://itunes.apple.com/us/app/ohio-sixth-district-court/id1001442174?mt=8> > ; and (3) Supreme Court of Nevada Mobile App, which provides users with access to the latest case information, decisions and news from the Supreme Court of Nevada; users can also access past oral argument recordings and watch live streaming of oral arguments

In Canada, public entities and government actors are increasingly embracing legal apps. Legal Aid Ontario has developed an app that allows individuals to assess their financial eligibility for partially subsidized legal representation.⁴⁰ Similarly, the Halton (Ontario) Community Legal Services' app provides a "[legal health] check-up to help people who are living in poverty so they can identify legal problems and get help."⁴¹ In 2016, the Ontario Ministry of the Attorney General partnered with the Legal Innovation Zone at Ryerson University to present the *Ontario Access to Justice Challenge*, intended to "foster the growth and success of startups that are developing products, technologies, processes, and solutions that have a direct positive impact on access to justice in Ontario."⁴² In 2017, the Winkler Institute and the Cyberjustice Laboratory at the Université de Montréal organized *HackJustice*, in which "students, legal professionals, computer scientists, software developers, members of the public and professionals of various disciplines came together for a hackathon designed to create technology applications to improve access to justice."⁴³

Law schools in both the United States and Canada are also playing a role in the development of legal apps. Canadian law professors and students are leading innovation through courses that serve as think-tanks on how to use technology to address access to justice issues. At Osgoode Hall, Nicole Aylwin and Monica Goyal teach a course called *Legal Information Technology* and it is in that context that students developed the idea for *JusticeTrans*, which provides legal information on human rights related to gender identity to the transgender community.⁴⁴ Similarly, students enrolled in Thompson Rivers University's

from the courtroom; for more details, see, online: <http://nvcourts.gov/Supreme/Court_Information/Supreme_Court_of_Nevada_Mobile_App/> .

⁴⁰ Legal Aid Ontario Mobile App, online: <<http://www.legalaid.on.ca/en/getting/legalaidapp.asp>> [Legal Aid Ontario App].

⁴¹ Legal Health Check-Up, online: <<https://www.legalhealthcheckup.ca/en/>> . As described by PLE Learning Exchange Ontario, legal health checks "are tools intended to help people identify and address legal problems. . . [and] have three main purposes: (1) to help people become aware that a problem has a legal aspect; (2) to encourage people with legal problems to get help from a legal professional, their local legal clinic, or trusted members of their community; and (3) to help community workers, other community intermediaries, lawyers or other legal professionals start conversations with clients about the law": see PLE Learning Exchange, online: <<http://www.plelearningexchange.ca/resources/legal-health-checks/>> .

⁴² Ryerson University, Legal Innovation Zone, "A Call for Startups with Innovative Solutions that Improve Access to Justice (A2J) in Ontario", online: <<http://www.legalinnovationzone.ca/initiative/a2j-challenge>> .

⁴³ Winkler Institute for Dispute Resolution, "HackJustice: An Access to Justice Hackathon", online: <<https://winklerinstitute.ca/projects/hackjustice-an-access-to-justice-hackathon/>> .

⁴⁴ Legal Information Technology Course Description, online: <<http://www.osgoode.yorku.ca/courses-and-seminars/legal-information-technology/>> ; Benjamin Vandorpe,

Lawyering in the 21st Century, taught by Professor Katie Sykes, designed *SUMMONS*, an app currently in demo mode that “allows court administrators to provide live updates of court schedules and when litigants or their lawyers are to appear to help cut down on these expenses.”⁴⁵ In 2017, Professor Sykes taught a course called *Designing Legal Expert Systems: Apps for Access to Justice* dedicated to legal app development which culminated in a “Battle of the Apps”.⁴⁶ Next year, Professor Marina Pavlovi at the University of Ottawa will offer a new course called *Legal Knowledge Engineering*, wherein “students will conduct research, create resources, and deliver expert legal information and tools to non-expert users via technology.”⁴⁷

Parallel trends are evident in the United States. Georgetown Law hosts an annual *Iron Tech Lawyer* competition, where students test apps created in the *Technology Innovation and Law Practice* practicum, headed by Professors Tanina Rostain and Roger Skalbeck.⁴⁸ Some of the development work in the educational sector is happening in collaboration with industry partners, including Neota Logic, which produces “an advanced and innovative AI [artificial intelligence] platform” to be used by non-programmers to develop apps.⁴⁹

b) Legal app target users and legal app functions

Legal apps in Canada target two primary users: 1) lawyers; and 2) the general public.

“JusticeTrans: Addressing Access to Justice Issues Through Technology” (21 January 2016), Winkler Institute for Dispute Resolution Justice Innovation Blog (blog), online: < <http://winklerinstitute.ca/justicetrans-addressing-access-to-justice-issues-through-technology/> > [Vandorpe].

⁴⁵ Liam Britten, “Costly, Frustrating Court Delays Tackled with Law Students’ app”, *CBC News* (12 May 2016), online: < <http://www.cbc.ca/news/canada/british-columbia/court-delay-app-1.3580285> > .

⁴⁶ “Innovative Law Course Unique in Canada”, *InsideTRU* (17 November 2016), online: < <http://inside.tru.ca/2016/11/17/innovative-law-course-unique-in-canada/> > ; “Law Students Compete in the Battle of the Apps”, *InsideTRU* (20 April 2017), online: < <http://inside.tru.ca/2017/04/20/law-students-compete-in-battle-of-the-apps/> > .

⁴⁷ “New and Innovative Law and Technology courses offered at uOttawa”, *Centre for Law, Technology and Society* (22 March 2017), online: < <https://techlaw.uottawa.ca/news/new-law-and-tech-courses-2017> > .

⁴⁸ Georgetown Law, “Technology, Innovation, and Law Practice: An Experiential Seminar”, online: < http://apps.law.georgetown.edu/curriculum/tab_courses.cfm?Status=Course&Detail=2090 > .

⁴⁹ For more information, see “Neota Logic — Neota’s Story”, online: < <https://www.neotalogic.com/neotas-story/> > ; and “Neota Logic — Pro Bono”, online: < <https://www.neotalogic.com/pro-bono/> > . For example, Neota provides support to the Thompson River’s Apps for Access for Justice course and Georgetown Law Iron Tech competition as well as a similar competition at Melbourne University Law School.

i) Lawyer users

Legal apps targeting lawyers generally promote more efficient legal service delivery. *EasyBOA*, for instance, is a web application that allows litigation lawyers to “automatically create” a Book of Authorities.⁵⁰ The case and practice management software company *CLIO* also has a mobile app which allows lawyers to track their time, view their calendars and organize tasks.⁵¹ Other apps help streamline legal research, such as *Rangeindr*, which was designed to help Canadian lawyers and judges quickly determine appropriate sentencing ranges in criminal matters.⁵²

An emerging area for lawyer-use legal apps is the development of legal analytics tools that “analyze past legal reference data to provide insights into future outcomes.”⁵³ For example, Loom Analytics “use[s] a combination of machine learning and legal analysis to classify case law along multiple vectors allowing for statistical analysis . . . [to allow users to] see how a particular judge has ruled on specific motions or claims at trial, what kinds of cases make it to court most frequently, the average decision turnaround time, and the average cost and damage awards broken down by case type.”⁵⁴ Similarly, in the United States, Lex Machina offers a number of legal analytics apps, including *Courts & Judges Comparator*, which “enables attorneys to compare up to four federal districts and judges, to gain critical insights regarding caseloads, timing to key milestones, case resolutions, specific findings, and damages”, and *Motion Kickstarter*, which “makes it easy to draft winning motions by helping attorneys compare the arguments and motion styles that have been successful before a specific judge.”⁵⁵

A related trend in lawyer-facing apps is the use of machine learning to provide answers to legal questions or allow lawyers to more efficiently analyze legal documents. *Blue J Legal* “analyzes fact situations using deep learning” to provide “authoritative answers” relating to a number of specific legal subjects such as determining if an individual is a resident of Canada or of another country for tax purposes.⁵⁶ Similarly, *Beagle*, uses artificial intelligence to read contracts, highlight the important information, and facilitate lawyer review.⁵⁷

⁵⁰ EasyBOA, online: <<http://www.boa.legal/> - about > .

⁵¹ Clio App, online: <<https://www.clio.com/features/mobile-apps/>> .

⁵² Rangeindr, online: <<http://www.rangeindr.ca/>> .

⁵³ Ed Sohn, “alt.legal: The Forecast for Legal Analytics is Mostly Sunny”, *Above the Law* (18 May 2016), online: <<http://abovethelaw.com/2016/05/alt-legal-the-forecast-for-legal-analytics-is-mostly-sunny/>> .

⁵⁴ Loom Analytics, online: <<http://www.loomanalytics.com/>> .

⁵⁵ Lex Machina, “Legal Analytics Apps”, online: <<https://lexmachina.com/legal-analytics-apps/>> .

⁵⁶ Blue J Legal, online: <<http://www.bluejlegal.com/>> . At the time of writing, the developers indicated that this app was “in private beta (by invitation only) with major organizations, including government bodies, global accounting firms and leading law firms.”

ii) *General public users*

We found three broad categories of legal apps intended for use by the general public. First, there are several apps designed to increase efficiency by making existing legal services easier to access. They may, for example, connect individuals with legal issues to lawyers in legal aid and *pro bono* systems,⁵⁸ as well as those in private practice.⁵⁹ Other apps invite users to access conventional legal services in innovative ways. The American app *Notarize* allows users to notarize documents online with e-signatures; users upload their documents, and a notary public who has a video profile with the app notarizes the document.⁶⁰

A second set of apps seeks to materially change the way that individuals interact with the legal system. Many of these apps allow users to engage in self-help either by bypassing the need to retain a lawyer, or by minimizing the amount of time a lawyer needs to spend on the legal issue at hand. There are at least four sub-categories of public-oriented legal apps of this sort: (1) apps that offer general legal information on a specific subject, like *JusticeTrans*, which provides information about transgender rights in Canada;⁶¹ (2) apps that allow users to create legal documents like *LegalZoom*, above, and *Ontario Small Claims Wizard*, currently in development, which will guide people through the small claims process by advising users on which documents they need to file and facilitating on-line completion of those forms;⁶² (3) apps that streamline conventional legal processes, like *Thistoo*, a “personal divorce assistant” which walks users through the necessary steps of an uncontested divorce in Ontario;⁶³ and (4) apps that help individuals who are not legally trained with legal research, like the American app *PlainSite*, which provides “non-lawyers easy to navigate

⁵⁷ Beagle, online: < www.beagle.ai > .

⁵⁸ See e.g., *Legal Aid Ontario App*, *supra* note 40. In the American context, the app *Due Processr*, online: < <http://dueprocessr.org/courtcal/> > , allows users to determine their eligibility for indigent legal services in Massachusetts, and assists criminal defendants in calculating their state prison sentences.

⁵⁹ See, e.g., American apps like *Law Kick*, online: < <https://lawkick.com/> > , which connects individuals with lawyers based on the legal problem or question the individual has and the price they are willing to pay; and *Fixed*, online: < <https://www.fixedlaw.com/> > which allows individuals to use the app to upload a photograph of a traffic ticket for review by an attorney which will then generate a flat fee quote for legal services to defend against the ticket.

⁶⁰ *Notarize*, online: < <https://itunes.apple.com/us/app/notarize/id1022005141?ls=1&mt=8> > .

⁶¹ See Vandorpe, *supra* note 44. Similarly, in the United States, several apps assist individuals with expungement (i.e. a court order that removes an entry from a criminal record), see e.g. *ExpungeMaryland.org*, online: < <http://www.expungemaryland.org/about> > , a web app created for people with criminal records in Maryland that aims to clarify criminal expungement by allowing users to fill a simple questionnaire to determine whether their case is eligible for expungement.

⁶² *Small Claims Wizard*, online: < www.smallclaimswizard.com > .

⁶³ *Thistoo*, online: < <https://thistoo.co/> > [Thistoo].

access to the entire American legal system with access to public records from agencies, patent applications, corporate profiles and public federal and state case dockets.”⁶⁴

Finally, a third set of apps seeks to provide legal self-help tools and assistance to the general public that may not typically be offered by a lawyer or paralegal. Some are directed at providing real time support to citizens who are stopped by police, like *LegalSwipe*, which aims to inform Canadians about their rights during a police stop and can also “send emergency contacts a personalized message with ongoing updates of [one’s] geographic location” and “record audio and video to be e-mailed to emergency contacts and uploaded to synchronized Dropbox accounts.”⁶⁵ In the United States, *HeatSeek* provides an integrated system where tenants have a specially designed temperature sensor installed in their apartments at no cost, and the app analyzes the temperature data from the sensor to determine heating code violations.⁶⁶ The data obtained through the *HeatSeek* app can be used to provide “objective evidence” about heating code violations in housing court.⁶⁷

PART III: RISKS AND OPPORTUNITIES OF LEGAL APPS

Legal apps like those canvassed above present a range of opportunities for addressing access to justice issues in Canada, but also carry risks specific to the deployment of app technology in the legal domain.⁶⁸ Here, we consider five opportunities and five risks worthy of consideration when assessing the potential of apps to contribute to addressing access to justice challenges in Canada.

a) Opportunities

i) Mitigating financial barriers

We have not located any comprehensive information about whether apps targeting lawyer end-users in fact make legal services less expensive and, if so, whether the cost savings are transferred to clients. It seems unlikely that many lawyer-oriented apps, like those targeting practice management issues, will result in any meaningful savings to individual clients. For example, in “personal plight” areas of legal service where access gaps are profound and costs tend to run high

⁶⁴ See e.g. the American app PlainSite, online: <<http://www.plainsite.org>>, which provides “non-lawyers easy to navigate access to the entire American legal system with access to public records from agencies, patent applications, corporate profiles and public federal and state case dockets. Non-public analytic data is also available.”

⁶⁵ LegalSwipe, online: <<http://www.legalswipe.com>> .

⁶⁶ HeatSeek, online: <<http://heatseek.org/how-it-works/>> .

⁶⁷ *Ibid.*

⁶⁸ In light of the diversity of legal apps and the lack of reliable empirical information about who uses legal apps and to what ends, it is impossible to draw any definitive conclusions about whether and how these opportunities and risks are in fact borne out in practice.

— like family law and criminal defense — it is unlikely that an app yielding even relatively substantial cost savings would materially impact the overall access to justice issues that exist.⁶⁹ Even if a legal app generated a significant cost savings — perhaps a 20% reduction in fees — that may not, for many individuals, make the difference between being able to afford a lawyer or not. In any event, since financial barriers are compounded by psychological, informational and physical barriers, particularly for marginalized and equality-seeking communities, the fact that legal services might be made slightly cheaper because of an app will do little to overcome the non-financial barriers that may prevent individuals from contacting a lawyer in the first place.

Apps designed for the general public, rather than lawyers, seem to hold more promise for improving access to justice. In particular, apps that allow individuals to generate legal documents, like contracts or wills, without retaining a lawyer or with reduced assistance from a lawyer, have the potential to increase public access to certain legal services at significantly lower costs. For example, LegalZoom charges \$79 to prepare an online will which is reviewed by a lawyer, in contrast to the several hundred to several thousands of dollars it might cost to retain a lawyer to perform the same task.⁷⁰ The divorce app *Thistoo* unbundles its services so users can pay for only the specific items relevant to their situation, at a cost of \$9.99-\$199.00, or they can pay a \$34.99/month subscription fee for longer-term access to *Thistoo* support.⁷¹ For some users, *Thistoo* could offer assistance with an entire divorce for less than a lawyer's hourly fee.⁷²

ii) Mitigating psychological and informational barriers

The idea that technological interventions can provide opportunities to “demystify” legal institutions has been canvassed by a number of commentators.⁷³ There are compelling arguments that legal apps may effectively fulfill this function, mitigating some of the psychological and informational obstacles to accessing justice. For example, one significant barrier faced by individuals attempting to resolve a civil justice problem is “lack of knowledge about the legal system and resources available to support individuals, especially knowledge regarding how to access legal aid or affordable

⁶⁹ The origins of the term “personal plight” in relation to legal services is traced to a 1978 article: John P. Heinz & Edward O. Laumann, “The Legal Profession: Client Interests, Professional Roles, and Social Hierarchies” (1978) *Mich L Rev* 1111. For further discussion, see also Noel Semple, “Personal Plight Legal Practice and Tomorrow’s Lawyers” (2014) 39 *J Leg Prof* 25.

⁷⁰ LegalZoom, “Last Will and Testament Pricing,” online: < <https://www.legalzoom.com/personal/estate-planning/last-will-and-testament-pricing.html> > .

⁷¹ *Thistoo*, *supra* note 63.

⁷² McKiernan, *supra* note 17 finds that in 2015, a lawyer’s hourly fee in Canada ranged from \$186/hour - \$481/hour depending on the size of the firm and its location in Canada, as well as the lawyer’s level of seniority.

⁷³ Bailey *et al*, *supra* note 1 at 195.

legal services and information.”⁷⁴ Public legal information apps like *LegalAve*, created by the Alberta Legal Information Society as a starting point to assist Albertans in addressing their family law issues,⁷⁵ and the *Legal Aid Ontario App*, which allows “potential legal aid clients to self-assess for financial eligibility for legal aid certificates,” have clear potential to improve the accessibility of legal information for the general public.⁷⁶

Legal apps can also help overcome psychological and informational barriers by providing more holistic or client-centered assistance to the public than that generally offered by lawyers giving solely legal advice. For example, *CitizenshipWorks*, an American app that walks citizenship applicants through various calculations, study aids, and document checklists, presents itself as a problem-solving assistant, enabling it to be more helpful to its user than a lawyer offering strictly legal information, who may not be able to offer advice on other aspects of the citizenship process.⁷⁷ As noted above, apps like *HeatSeek* and *LegalSwipe* provide self-help tools and assistance beyond that which is typically offered by lawyers. These apps appear to be filling a set of law-related needs not currently provided by the conventional legal services market.

In light of these opportunities, legal apps hold promise for contributing to an increase in client empowerment.⁷⁸ In the health care context, the adoption of technological innovations, including the use of apps, has facilitated a cultural shift from a passive patient culture to consumer empowerment and patient-centered care.⁷⁹ As a result, there is growing recognition in the health care context of the “e-patient” who is empowered and informed by virtue of the

⁷⁴ CBA Equal Justice, *supra* note 1 at 34.

⁷⁵ LegalAve, online: <<http://www.legalave.ca/>> .

⁷⁶ Legal Aid Ontario App, *supra* note 40.

⁷⁷ In the United States, *CitizenshipWorks*, online: <<https://www.citizenshipworks.org>> guides users through the steps of a citizenship application and connects them with free legal help. The app also “includes useful and unique features, including tools to help people prepare for citizenship tests (like reading and writing quizzes and touch flashcards), calculators to track savings, multimedia functionality (using audio to dictate phrases to be written in English), [and] legal assistance located near the user”. See also Richard Zorza, “Multi-Faceted Mobile App for Citizenship” (22 January 2013), Richard Zorza’s Access to Justice Blog (blog), online: <<https://accesstojustice.net/2013/01/22/multi-faceted-mobile-app-for-citizenship/>> .

⁷⁸ The impact of legal apps in addressing informational or psychological barriers may depend on the target user and whether mobile or web-based apps are used. For example, in explaining the motivations behind a number of legal apps, American legal aid lawyers have suggested that immigrant communities tend to be more accustomed to handheld technology than to computers: Joe Dysart, “Justice in Your Palm” (2015) 101:4 ABA J 101 at 57.

⁷⁹ William B Lober & Janine L Flowers, “Consumer Empowerment in Health Care Amid the Internet and Social Media” (2011) 27:3 Seminars in Oncology Nursing 162 at 172. The cultural shift is so great that Lober and Flowers note at 176 that patients have now moved, beyond searching for information, to sharing information about their health journeys on social media and on peer-to-peer platforms

availability of health information through various online tools and apps.⁸⁰ Similarly, legal apps may contribute to the evolution of an “e-client” in the legal realm by increasing the availability and accessibility of legal information.

iii) Mitigating physical barriers

Apps can be accessed on an anytime, anywhere basis, assuming one has access to the internet or wireless services, as well as a device with which the app is compatible.⁸¹ Such flexibility may be especially relevant for remote users who may have difficulties obtaining appropriate in-person legal information and services. In the American context, the Legal Services Corporation has endorsed the use of mobile technologies as part of a cohesive strategy to triage the legal needs of remote users into a harmonized system.⁸²

iv) Big data and insight development

Big data, understood as the “large-scale aggregation of information from public and private sources”, has the potential to enhance “our ability to discover meaning by connecting points of information electronically, across numerous, vast, and often unrelated stores of data.”⁸³ There is little information about what data is currently being collected by legal apps or how such data is being used. There are some indications, however, that aggregated information collected by legal apps could help assist in more effectively addressing legal issues. For example, at the American Bar Association’s 2016 *Equal Justice Summit*, there was a brief but important discussion about using data collected by legal service providers to gain insight into connections between legal issues.⁸⁴ New Mexico Legal Aid, which employs an online triage tool for new service users, found a correlation between automobile repossessions and home evictions within a three-month period.⁸⁵ New Mexico Legal Aid does not typically assist with automobile repossessions; however, they are now considering whether they should provide advice on repossessions, knowing that it could help clients avoid bigger legal issues like evictions down the road.⁸⁶ Another interesting example of using data

⁸⁰ Gul Seckin *et al.*, “Being an Informed Consumer of Health Information and Assessment of Electronic Health Literacy in a National Sample of Internet Users: Validity and Reliability of the e-HLS Instrument” (2016) 18:7 *J of Medical Internet Research* 2.

⁸¹ The issue of differential access is essential to consider and is addressed more fully in the Risks section, below.

⁸² See Flagg, *supra* note 36.

⁸³ Georgetown Law, “Big Data and Big Challenges for Law and Legal Information” (30 January, 2013), online: < <http://www.law.georgetown.edu/library/about/125/symposium/> > .

⁸⁴ David Pantzer & Teri Ross, “Analyze This! A Deeper Understanding of Diversity and Data Can Improve User Outcomes” (Remarks delivered at the ABA Equal Justice Conference, Chicago, Illinois, 13 May 2016) [unpublished] [Pantzer & Ross].

⁸⁵ *Ibid.*

⁸⁶ *Ibid.*

generated by an existing legal app is *HeatSeek*, which uses temperature data from individual apartments to “track patterns of abuse.”⁸⁷

v) *Modernization of public legal education*

New technologies like legal apps present important pedagogical opportunities for law students. Professor Tanina Rostain, one of the instructors of the *Technology, Innovation, and Law Practice* course at Georgetown Law, finds that students’ roles in building legal expert systems enable them to gain a better understanding of user needs.⁸⁸ Similarly, Professors Ronald Staudt and Andrew Medeiros explain how the *Justice & Technology Practicum* at Chicago-Kent College of Law enhances traditional lawyering competencies like empathy and client-centered professionalism, while also stimulating new competencies such as project management, collaboration, and transactional problem-solving.⁸⁹ These pedagogical experiences help students think broadly about the role of lawyers in a modernized and technological world.

b) Risks

i) *Privacy and security issues*

There is little analysis of the privacy and security issues inherent in the use of legal apps. There is, however, significant discussion of these risks in relation to apps generally, and in relation to health apps, specifically, that provides useful insight for thinking about some of the privacy and security concerns relevant to legal apps.

The fact that apps collect data gives rise to a significant set of privacy and security risks. The most obvious, and perhaps most significant, issue is that data collected by apps could be vulnerable to collection and misuse by unauthorized third parties (i.e. hackers). This risk is real. For example, even sophisticated app providers, like the ride-share service *Uber*, have experienced security breaches resulting in the misuse of users’ personal information.⁹⁰

A related concern is that users may not understand what happens to the data they are sharing. In the health care context, for example, many of the companies that produce wearable fitness products designed to track health statistics (e.g., steps taken, calories burned, and hours slept) reserve rights to the data they collect.⁹¹ As a result of reserving these rights, such companies may then, for

⁸⁷ *HeatSeek*, *supra* note 66.

⁸⁸ Tanina Rostain, Roger Skalbeck & Kevin G. Mulcahy, “Thinking Like a Lawyer, Designing Like an Architect: Preparing Students for the 21st Century Practice” (2013) 88 *Chicago-Kent L Rev* 743 at 754-755 [Rostain *et al.*].

⁸⁹ Ronald W. Staudt & Andrew P. Medeiros, “Access to Justice and Technology Clinics: A 4% Solution” (2013) 88 *Chicago-Kent L Rev* 695.

⁹⁰ For further details on this security breach, see e.g. Charlie Osborne, “Uber fined \$20K in data breach, ‘god view’ probe”, *Cnet* (7 January 2016), online: < <http://www.cnet.com/news/uber-fined-20k-in-surveillance-data-breach-probe> > .

example, share this information for profit.⁹² Concerns relating to the misuse or selling of data are particularly acute in relation to legal apps given that they may be used to collect sensitive personal information, including financial details. Data storage is another issue. Where third party “cloud computing” providers are used to store data online, for example, privacy concerns arise if that provider is located in a different jurisdiction with different regulatory instruments.⁹³

One method of ensuring that users understand how their information will be used and stored is to employ detailed terms and conditions. However, research on fitness wearables suggests that the terms and conditions of apps may not be clear or fully forthcoming, and app users may not carefully read the terms and conditions or have the capacity to understand their content.⁹⁴ Open Effect, “a Canadian not-for-profit that conducts research and advocacy focused on ensuring people’s personal data is treated securely and accountably”, found that some fitness wearables’ terms of service have variable policies relating to access to, collection of, or deletion of the data collected. Furthermore, they do not disclose the duration of data retention, fail to disclose with whom data is shared, and often require consumers to agree to a dispute resolution process outside of domestic courts.⁹⁵ More dramatically, recent research conducted by a York University professor found that 98% of study participants agreed to sign fictional terms and conditions to access a fictional website notwithstanding the inclusion of a clause requiring users to give up their first born child as a form of payment.⁹⁶

Complicating matters further, app users could be at risk of identity theft or data breaches if they access legal apps in public spaces or through public computers.⁹⁷ Low-income and/or homeless people without ready access to a personal computer or reliable internet connection may be particularly at risk. It has been reported that, “although low-income people are targeted less often [for identity theft] than those with higher incomes, they can suffer greater financial

⁹¹ Andrew Hilts, Christopher Parsons & Jeffrey Knockel, “Every Step You Fake: A Comparative Analysis of Fitness Tracker Privacy and Security” *Open Effect Report* (2016) at 45-47, online: <https://openeffect.ca/reports/Every_Step_You_Fake.pdf> [-Hilts *et al.*].

⁹² *Ibid.*, at 10.

⁹³ Office of the Privacy Commissioner of Canada, “Reaching for the Cloud(s): Privacy Issues related to Cloud Computing” (Ottawa: OPCC, March 2010), online: <https://www.priv.gc.ca/en/opc-actions-and-decisions/research/explore-privacy-research/2010/cc_201003> .

⁹⁴ Hilts *et al.*, *supra* note 91.

⁹⁵ *Ibid.*; Open Effect, “About”, online: <<https://openeffect.ca/about/>> .

⁹⁶ “You Read Terms Of Service Contracts? Not Many Do, Research Shows”, *NPR.org* (23 August 2016), online: <<http://www.npr.org/2016/08/23/491024846/do-you-read-terms-of-service-contracts-not-many-do-research-shows>> .

⁹⁷ James E. Cabral *et al.*, “Using Technology to Enhance Access to Justice” (2012) 26:1 *Harv JL & Tech* 241 at 265 [Cabral *et al.*]; Bailey *et al.*, *supra* note 1 at 197.

harm.”⁹⁸ Furthermore, people who have particular concerns about the protection of their sensitive information — such as those living with mental health issues or survivors of intimate partner violence for instance — may be disinclined to use internet-based technologies to address legal issues.⁹⁹

Finally, the matter of confidentiality has an additional regulatory dimension in cases where an app delivers legal services and thus creates a lawyer-client relationship. Subject to narrow exceptions, lawyers are under a mandatory obligation to “hold in strict confidence all information concerning the business and affairs of a client acquired in the course of the professional relationship.”¹⁰⁰ The Law Society of Upper Canada has confirmed that “[l]awyers using electronic means of communications shall ensure that they comply with the legal requirements of confidentiality or privilege.”¹⁰¹ In cases where a lawyer-client relationship is not created — for example, where an app offers only legal information as opposed to advice — there is a risk that members of the public relying on the information provided by the app may not understand that the confidentiality protections inherent in the lawyer-client relationship do not apply in the legal app context.

ii) Uneven or unequal access to justice

Meaningful implementation of the use of legal apps requires consideration of socio-economic, geographic and other barriers to technology access in Canada.¹⁰² Otherwise, as with other forms of technology used in access to justice initiatives, there is always the risk of “a digital divide that [further] institutionalizes a two-tiered system incapable of delivering appropriate justice to low-income persons.”¹⁰³

An obvious issue is the affordability of legal apps and associated technologies (e.g., a computer, smartphone or tablet). Most Canadian legal apps targeting the public are free. However, those aimed at lawyers or law firms, and those that connect a user and a lawyer for a legal consultation or advice are more likely to cost money.¹⁰⁴ Nevertheless, even free apps may have hidden costs

⁹⁸ Cabral, *supra* at 265.

⁹⁹ Bailey *et al.*, *supra* note 1 at 197. See also Richard Zorza, “Some Reflections on Long-Term Lessons and Implications of the Access to Justice Technology Bill of Rights” (2004) 79 Wash L Rev 389 at 394.

¹⁰⁰ See e.g. Federation of Law Societies, *Model Code of Professional Conduct*, Ottawa: FLSC, 2016, s. 3.3-1.

¹⁰¹ Law Society of Upper Canada, *Technology Practice Management Guidelines*, online: < <http://www.lsuc.on.ca/with.aspx?id=2147491197> > .

¹⁰² Patricia Hughes, “Advancing Access to Justice Through Generic Solutions: The Risk of Perpetuating Exclusion” (2013) 31:1 Windsor YB Access Just 1 [Hughes].

¹⁰³ Cabral *et al.*, *supra* note 97.

¹⁰⁴ See e.g. Canadian apps *Jailbird iOS*, online: < <https://itunes.apple.com/ca/app/jailbird-ios/id1033763662?mt=8> > , which assists criminal lawyers in comparing proposed sentences and is listed at \$3.99 at the iTunes Store; and *Rangerfindr*, online: < <https://>

associated with upgrades or advanced features that can impact their accessibility and potential reach. For example, in the health care context, a survey found that over half of mobile phone users in the United States had downloaded a health-related mobile app, but that half of these users stopped using apps due to high data entry burdens and hidden costs (like, for example, required in-app payments).¹⁰⁵

While there is no reliable data about who is using legal apps in Canada or the groups of people who might benefit most from such apps but experience barriers to access, it is apparent that one significant set of access challenges relate to digital literacy. Professor Patricia Hughes explains:

Individuals using information, however acquired, must be able to read it, understand it and apply it to their own situation. Each of these tasks requires an increasing level of literacy. Yet a significant minority of people lack the required literacy even to understand the information, particularly since it is often difficult to avoid legal terminology and the information can quickly become complex.¹⁰⁶

A 2008 report prepared for the Law Foundation of Ontario found that “[i]nternet and other text-based solutions are of limited use to people who do not have the literacy skills to use them or to use them effectively,” cautioning that “vulnerable people, because they face language barriers, isolation, poverty, or a cluster of other difficulties that often accompany a legal problem, [ideally] need to receive direct services rather than to rely on self-help [through either digital or paper-based resources].”¹⁰⁷ Notwithstanding this caution, the authors conclude that “technology seems to be on the cusp of becoming a realistic, affordable means of supporting wider access to expert legal advice and services.”¹⁰⁸

In the specific case of technological tools aimed at enhancing access to justice, the existing literature emphasizes the importance of “tailoring design to ensure that these technologies do not in fact exacerbate the access to justice gap for . . . intended beneficiaries.”¹⁰⁹ Such design strategies may include “the use of plain language, availability of content in multiple language formats, design to accommodate visual and other physical impairments . . . provision of human assistance to augment technological assistance, as well as special precautions to

app.rangefindr.ca/signup > another criminal sentencing tool for lawyers and judges that costs \$79/month.

¹⁰⁵ Paul Krebs & Dustin Duncan, “Health App Use Among US Mobile Phone Owners: A National Survey,” (2015) 3:4 J of Medical Internet Research at 8.

¹⁰⁶ Hughes, *supra* note 102 at 13.

¹⁰⁷ Cohl & Thomson, *supra* note 20 at 35 and 52.

¹⁰⁸ *Ibid*, at 53, concluding that “self-help is often a necessary or reasonable choice, even for vulnerable persons, and it is simply unrealistic to suggest that the desired level of legal support can always be available.”

¹⁰⁹ Bailey *et al.*, *supra* note 1 at 198, summarizing the existing literature on ensuring access to technologies for diverse populations.

enhance privacy at public internet access points, and linking marginalized community members with trusted intermediaries.”¹¹⁰ Specific considerations relevant to the barriers to technology faced by particular communities must also be addressed. For example, individuals living in institutions —for example, correctional or psychiatric facilities or nursing homes — may have little access to the necessary technologies to access legal apps.¹¹¹ For these individuals, it may be that apps designed for use by non-lawyer service providers, like social workers or community support workers, offer the most promise for improving access to justice outcomes.

A further concern relates to access to and use of internet and wireless services, which varies between urban and rural or remote regions in Canada. Rural and remote communities have fewer local consumer options available and, consequently, often pay more for internet and wireless services than their urban counterparts.¹¹² The affordability of wireless and internet services poses the general risk that those who could benefit from legal apps will not be able to access them due to financial constraints. In 2015, the Public Interest Advocacy Centre conducted research on the affordability of communications services in Canada and found that, for low-income households, “[c]ommunications service expenditures tend to make up the fourth largest household expenditure, coming out ahead of other household expenses such as clothing, medical expenses, and childcare” and that many such households carry significant debts in relation to communications expenses.¹¹³

iii) Unauthorized practice of law and other regulatory impediments

In Canada, only lawyers and, in some cases, paralegals, can deliver legal services.¹¹⁴ The delivery of legal services by non-lawyers — known as the unauthorized practice of law (UPL) — is illegal and those who engage in it can be

¹¹⁰ *Ibid.*

¹¹¹ See Hughes, *supra* note 102 at 4, citing research from New South Wales on barriers to access to justice and concluding that individuals living in supervised institutions, such as juvenile corrective facilities, psychiatric institutions, immigration detention centers, and nursing homes, face particular barriers to access to justice.

¹¹² Canadian Radio-television and Telecommunications Commission, *Communications Monitoring Report* (Ottawa: CRTC, 2016), online: < <http://www.crtc.gc.ca/eng/publications/reports/PolicyMonitoring/2016/cmri.htm> > . This trend is particularly acute in Northern regions such as the Yukon and Northwest Territories, which continue to have generally poor broadband connectivity. Further details regarding connectivity in these regions can be found at: Government of Canada, “Connectivity for Aboriginal and Northern Communities in Canada” online: < http://www.aadnc-aandc.gc.ca/eng/1352214337612/1353504776242?utm_source=connectivity&utm_medium=url > .

¹¹³ John Lawford & Alysia Lau, *No Consumer Left Behind: A Canadian Affordability Framework for Communications Services in a Digital Age*, (Ottawa: Public Interest Advocacy Centre, 2015) at 72 and 75, concluding the average communications-related debt to be \$1,520.28.

¹¹⁴ See e.g. Law Society of Upper Canada, “Taking Action against Illegal Practitioners”, online: < <http://www.lsuc.on.ca/with.aspx?id=2147486087> > .

subject to prosecution by provincial and territorial law societies.¹¹⁵ The regulation of UPL by law societies is justified as necessary to protect the public from negligent or fraudulent delivery of legal services, although there are compelling critiques that the manner in which the legal profession has historically engaged in UPL prosecutions is also motivated by commercial interests.¹¹⁶

Although non-lawyers cannot deliver legal services, they can provide legal information. Yet the line between legal information and legal services is notoriously murky. As Professor Jennifer Bond and her colleagues point out, there is a lack of jurisprudence on UPL, an absence of regulatory guidelines, and no regulation of legal information in Canada.¹¹⁷ They further observe that proactively seeking a legal opinion on whether particular services amount to UPL can be expensive, raising access to justice questions about who can afford to experiment with legal information innovations.¹¹⁸ The fact that there is little to no guidance for developers of legal apps in Canada on how to navigate the boundaries between legal information and legal services in order to avoid engaging in UPL may be a barrier to innovation.¹¹⁹

In the United States, regulatory responses to technological innovations in the delivery of legal services initially sought to defend the status quo. For example, several American bar associations proactively issued opinions or letters stating that LegalZoom's online document preparation services amounted to UPL.¹²⁰ More recently, however, there has been evidence of increased willingness by regulators to accommodate new approaches. For example, as part of a consent agreement resolving an anti-trust lawsuit initiated by LegalZoom, the North Carolina State Bar agreed to support legislation, passed in 2016, which amended the state's definition of law practice to include websites that offer interactive legal documents.¹²¹ The American legal community has also considered whether the delivery of legal services and information via new technologies should be specifically regulated, subject to regulatory exceptions, or left to evolve with minimal or no regulatory oversight.¹²² The American Bar Association has called

¹¹⁵ *Ibid.*

¹¹⁶ For further discussion see e.g. Noel Semple, *Legal Services Regulation at the Crossroads: Justitia's Legions* (Cheltenham: Edward Elgar Publishing, 2015) at 119.

¹¹⁷ Jennifer Bond, David Wiseman & Emily Bates, "The Cost of Uncertainty: Navigating the Boundary Between Legal Information and Legal Services in the Access to Justice Sector" (2016) 25 *JL & Soc Pol'y* 1 [Bond *et al.*].

¹¹⁸ *Ibid.*, at 23.

¹¹⁹ *Ibid.*, at 14-15.

¹²⁰ Sarah Knapp, "Can LegalZoom Be the Answer to the Justice Gap?" (2013) 26 *Geo J Leg Ethics* 821 at 828.

¹²¹ Debra Cassens Weiss, "Online interactive legal documents would be legal in North Carolina under bill passed by legislature" *ABA Journal* (22 June 2016), online: < http://www.abajournal.com/news/article/online_interactive_legal_documents_would_be_legal_in_north_carolina_under_b > .

for further study of entities engaging in innovative models of legal services delivery, the collection of data on the extent to which such entities are benefiting or harming the public, and a determination of whether there are already adequate safeguards against potential harms.¹²³ No similar consideration of the appropriate regulation of legal apps has yet been undertaken in Canada.

iv) Uncertain reliability of information provided by legal apps

To be reliable, a legal app must provide up-to-date, accurate information.¹²⁴ Once again, there is no comprehensive data regarding the accuracy or currency of the information and advice offered by legal apps. In the health care context, where the majority of apps are created for commercial purposes, the marked lack of involvement of medical professionals in the design of apps has prompted debate about how to safeguard patients' interests in the face of apps that may provide inaccurate or outdated health information.¹²⁵ Questions arise as to whether a licensed lawyer should be involved in the creation and/or maintenance of legal apps to ensure the ongoing reliability of any legal information provided.

While consumers may believe they are making educated choices about the reliability of the information apps provide, available research suggests that this is not always the case. A 2016 study of health care app users found that in assessing the trustworthiness of an app, most users are more influenced by the design and appeal of a website than the currency and accuracy of its information.¹²⁶ Users generally felt confident about their abilities to discern the quality of the information they found online, but the same participants reported low rates of behaviours that actually served to verify the credibility and quality of online

¹²² American Bar Association, Commission on the Future of Legal Services, *Report on the Future of Legal Services in the United States* (ABA, 2016) at 41 suggests that unnecessary regulation of entities that use new technologies and internet-based platforms to provide legal services directly to the public "could chill additional innovation," but that "narrowly tailored regulation may be necessary in some instances to protect the public" and that further regulation may assist innovators by giving them "express authority to operate and a clear roadmap for compliance" in relation to UPL provisions.

¹²³ *Ibid.*

¹²⁴ Rostain *et al.*, *supra* note 89 at 746.

¹²⁵ Boulos *et al.*, *supra* note 9 at 9. See also Tara Donker *et al.*, "Smartphones for Smarter Delivery of Mental Health Programs: A Systematic Review," (2013) 15:11 J of Medical Internet Research 1 at 9, finding as of 2013, more than 3,000 free, commercially-available mental health apps available, compared to 8 evidence-based apps.

¹²⁶ Gul Seckin *et al.*, "Being an Informed Consumer of Health Information and Assessment of Electronic Health Literacy in a National Sample of Internet Users: Validity and Reliability of the e-HLS Instrument" (2016) 18:7 J of Medical Internet Research at 2 and 4. In this survey, investigators sought to find out whether information seekers undertake to: read disclosure statements; check the credentials and institutional affiliations of those who provide information on websites; check the ownership and/or sponsorship of websites; check for financial ties between website information and the website's sponsors; check for stated goals and objectives; and check whether the online information is current and updated and/or the last time the information was updated.

information.¹²⁷ As in the health care context, the consequences of relying on legal information that is low-quality, incomplete, out-dated or simply wrong can have serious legal, financial and personal consequences for individuals.

v) *Skewing the access to justice debate*

Finally, the flourishing of legal apps has the potential to significantly change access to justice debates in North America. Many lawyers and commentators in Canada and the United States wonder whether the proliferation of legal apps, marketed as cheaper, seemingly easier substitutes for full-service legal representation, reduces the general sense of urgency about the access to justice crisis,¹²⁸ and distracts from the ongoing need to improve the affordability and accessibility of real-time legal and court services.¹²⁹

CONCLUSION

Legal apps present a number of exciting opportunities for addressing access to justice issues in Canada, and also carry some risks. In this paper we have started to lay the groundwork for future analyses of the social, political and legal implications of legal apps by canvassing available information about Canadian legal app developers, users and functions, and identifying some of the key opportunities and risks inherent in the use of these technologies. Two key conclusions arise from our research.

The first and most urgent conclusion is the pressing need for more Canada-specific research on legal apps. Without any comprehensive statistics or scholarly research on these technologies, it is impossible to assess whether the opportunities presented by legal apps in fact contribute to improving access to justice outcomes for Canadians. To gain a more complete picture of the state of these technologies and their potential, several questions remain. What is the disciplinary expertise of app developers and what are their motivations? Who is currently using legal apps? Can apps actually facilitate or improve access to justice? If so, are there differentials in these users' improved access to justice and whose legal needs remain unmet by these apps? What are some of the risks associated with legal apps, particularly in relation to privacy issues and the reliability of legal information provided? Should legal apps be regulated and, if so, how? How will legal apps transform legal practice and the lawyer-client relationship?

Second, it seems clear that with or without data or analysis, legal apps are likely to continue to populate the Canadian legal environment. Lawyers,

¹²⁷ *Ibid*, at 14.

¹²⁸ Raymond H Brescia et al, "Embracing Disruption: How Technological Change in the Delivery of Legal Services can Improve Access to Justice" (2014) 78:2 Albany LR 553.

¹²⁹ Selena Lucien, "How do we measure technology's impact on access to justice?", *National Magazine* (3 February 2016), online: < <http://www.nationalmagazine.ca/Blog/February-2016/How-do-we-measure-whether-technology-can-improve-a.aspx> > .

regulators and policy makers must address the potential risks to the public and the profession presented by these apps, some of which we identified above, in a robust and timely fashion. A meaningful starting point would be the promulgation of best practice guidance tailored to legal apps. Legal app best practices could draw from general guidance on best practices in app development;¹³⁰ comparable American guidelines on legal apps;¹³¹ and Canadian guidelines on health care apps,¹³² which, given similarities in context, could form a useful starting point for the promulgation of comparable standards in the legal context.

¹³⁰ See e.g. Office of the Privacy Commissioner of Canada, Office of the Information and Privacy Commissioner of Alberta & Office of the Information and Privacy Commissioner for British Columbia, “Seizing Opportunity: GoodPrivacy Practices for Developing Mobile Apps”, (Ottawa: OPCC, October 2012), online <https://www.priv.gc.ca/media/1979/gd_app_201210_e.pdf> ; and the World Wide Web Consortium standard on accessibility for persons with disabilities “Mobile Web Best Practices 1.0”, *W3C Recommendation* (2008), online: <<http://www.w3.org/TR/mobile-bp/>> .

¹³¹ See e.g. Federal Trade Commission, *Mobile App Developers: Start with Security*, online: <ftc.gov/tips-advice/business-center/guidance/mobile-app-developers-start-security> .

¹³² Canadian Medical Association, *Guiding Principles for Physicians Recommending Mobile Health Applications to Patients* (Ottawa: CMA, 2015), online: <https://www.cma.ca/Assets/assets-library/document/en/advocacy/cma_policy_guiding_principles_for_physicians_recommending_mobile_health_applications_to_patients_pd1-e.pdf> .

Appendix A: Legal Apps in Canada

Reasonable efforts were made to ensure the information listed in this appendix is accurate. Some limitations should be noted, however. First, this information was collected between May 2016 and April 2017 and some of the information may have changed in the ensuing months. Second, information on the six features listed above was obtained from public resources located by our research team. It is possible that there may be additional information contained in private sources or other public sources that is not included here. Third, we did not independently verify information about an app provided by its developer(s). For example, if an app developer indicated that the app performed a certain function, we included this function in our taxonomy and did not use the app to confirm that the app in fact performed the stated function.

CODES FOR “FUNCTION” COLUMN

- (1) legal information
- (2) administrative information (for example, court information or lawyer contact information)
- (3) document or form creation
- (4) evidence collection
- (5) legal advice
- (6) self-help
- (7) other

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
AdviceScene http://www.advice-scene.com	Private	Members of the public	All	This web tool provides free answers from real lawyers and other legal professionals as well as a large legal directory. Anyone may ask a question anonymously, but the answers are posted publicly.	√	1, 2, 5
Ask by LegalShield https://play.google.com/store/apps/details?id=com.asklegalshield.android	Private	Members of the public	All	This mobile app provides access to commonly asked legal questions and answers, and allows anyone to ask their own question.	√	1, 5
Attorned http://www.attorned.com/	Private	People looking for legal advice and lawyers needing legal support. This app connects clients and lawyers through a bidding system.	All	This app services both clients and lawyers. Clients can post their issues online in search of legal representation and lawyers can post work that can be bid on by other lawyers.	Free for clients Lawyer subscription: \$30/month; \$300/year; option to choose between three "Bid Packages" between 30 — 75 dollars	2
Bardal Factors http://www.bardal-factors.ca	Private	For the public and lawyers	Employment	This app "show[s] you the results of cases where Canadian courts apply the Bardal Factors." [The Bardal factors are relevant in determining how much notice or pay in lieu of notice an employer must give to an employee]	√	1, 6
BC Laws API http://www.bclaws.ca/civix/template/complete/api/index.html	Public	People conducting legal research	All	This web app is an electronic library providing free and public access to the laws of BC. Users experience direct and integrated access to all of the provincial laws and regulations in a highly structured data format all under an open government license.	√	1
Beagle www.beagle.ai	Private	Contracting parties	Contract	This is a contract review app. Using artificial intelligence, Beagle reads a contract, highlights the important information, and makes it easy for teams to review their contractual documents.	Prices on request, 7-day free trial	6, 7

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Blue J Legal — Tax Foresight www.bluejlegal.com	Private	Legal and tax profes- sionals	Tax - planning expansion to other areas of law in the future	This web software analyzes fact situations using deep-learning and provides answers supported by relevant case law and materials. The system also generates detailed explanations and suggestions.	Annual sub- scription	1, 5, 6
Canada Legal Help http://canadalegal-help.com/	Private	Members of the pub- lic, busi- nesses	Multiple	This web tool provides links to legal information and resources for all Canadians, as well as personalized help based on legal needs	√	1, 2, 5
Canadian Law Apps http://www.canadianlawsite.ca/ Law-Apps.htm	Private	People conducting legal re- search	All	This app offers access to mobile versions of Canadian legisla- tion, including versions of the Canadian Charter and Bill of Rights and Federal Acts (e.g. the Divorce Act and PIPEDA).	From free - \$9.99/ Act	1
CanLII www.canlii.org/en	Public	Legal re- searchers	All	This app allows users to search and find Canadian case law and jurisprudence for free.	√	1
Child Support https://itunes.ap- ple.com/ca/app/ cstl/ id862107967?m- t=8	Private	General public pay- ing child support	Family Law	Automates the calculation of Canadian Federal Child Sup- port Guidelines	√	1, 6
Child Support Cal- culator Canada https://itunes.ap- ple.com/ca/app/ child-support-cal- culator-canada/ id740319157?m- t=8	Private	Members of the pub- lic making child sup- port pay- ments	Family Law	Uses Canadian Federal Child Support Guidelines (2011) to enable users to quickly calculate monthly child support pay- ments, using income, number of children and provincial resi- dence	√	6, 7
Clausehound Inc. http://clause- hound.com/	Private	Entrepre- neurs, small busi- nesses	Contract, IP	This app provides access to databases of legal agreements and commentary on clause ex- planations; drafting software, resources and tutorials; and educational blog content.	From free - \$10/month; “Pro” Plan at \$50/month	1, 3, 6
Clicklaw http://www.click- law.bc.ca/	Public	Members of the pub- lic	All	This web tool provides British Columbians with legal infor- mation, educational resources and services in multiple lan- guages, including a HelpMap feature which enables people to find local help with their legal problems.	√	1, 2, 6

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
CLIO App https://itunes.apple.com/ca/app/clioid686777370?mt=8	Private	Lawyers	All	This app provides cloud-based practice management software to assist lawyers with tasks like time-tracking and account management.	√	7
Codify Legal Publishing http://www.codify-legalpublishing.com/	Private	Legal researchers, lawyers, businesses	Multiple	Codify produces multiple apps designed to make legal tasks more efficient, including an automated legal database, contract system and legislative update system.	N/A	1, 3
Cop Watch https://itunes.apple.com/ca/app/cop-watch-toronto/id757572626?mt=8	Private	People who have been stopped by the police	Criminal	This app allows users to video record police interactions and will automatically upload the videos to YouTube. The app also provides reference material concerning a user's right to obtain video footage.	√	1, 4
CourtsideEDX www.edxontario.com	Private	Lawyers and self-represented individuals in discovery	Litigation	This app allows for the electronic service of documents in civil litigation.	From free - \$15 /month	7
Drone Zone Canada https://itunes.apple.com/ca/app/drone-zone-canada-restricted-air-space-finder/id1231448891?mt=8	Private	Members of the public flying personal drones	Federal regulations; zoning	Alerts users to zones where personal drones cannot be flown, according to Federal Regulations	\$5.49	1
EasyBOA http://www.boa.legal	Private	Law Firms	All	This app helps law firms save time and money by producing automated Books of Authorities (BOA).	Price not listed	3
Educaloi https://www.educaloi.qc.ca/en	Public	Members of the public, educators, organizations	All	This web tool informs Quebecers about their legal rights and responsibilities through plain-language legal information guides and educational tools	√	1, 6
eRADA http://erada.cyberjustice.ca/eRada_en.html	Public	Members of the public, city officials	Municipal By-law infractions	eRADA allows citizens and city officials to connect through electronic online devices for the purposes of resolving municipal tickets. Specific tasks offered through eRADA include uploading evidence, requesting disclosure of evidence, requesting a trial date, and reaching a settlement	√	2, 3, 6

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Evichat http://www.evichat.com/	Private	Lawyers	Litigation	This app is a cloud-based eDiscovery platform used by legal professionals to retrieve and review social media and SMS data to be used as evidence.	N/A	4
Free Law Lexicon https://itunes.apple.com/ca/app/free-law-lexicon-free-blacks-legal-dictionary/id979464349?mt=8	Private	All	Legal education/ reference	Provides access to the Second Addition of Black's Law Dictionary	√	1
GetQuorum https://getquorum.com/	Private	Condo corporations, property management companies and condo owners	Real-estate	This app helps condos reach meeting quorum, pass critical bylaws, and save money on notice package distribution costs.	\$400 - \$2000/ meetings (dependent on size of condo)	6, 7
iLex https://itunes.apple.com/ca/app/iLex/id1179201457?mt=8	Private	Lawyers and potential clients	All	Establishes communication between user and a legal professional	√	2, 7 (**)
Jailbird iOS https://itunes.apple.com/ca/app/jailbird-ios/id1033763662?mt=8	Private	Criminal lawyers	Criminal	This app helps Canadian criminal lawyers compare total proposed sentences in both adult and youth matters.	\$3.99	1, 7
Kabuk Law www.kabuklaw.com/en-CA/	Private	People looking for legal representation	All	This app connects users with local legal practitioners. Users can find representation based on their location, review the lawyer's profile and request a free consultation in-app.	√	2
Knomos http://knomos.law/	Private	Members of the public, law students, lawyers	All	This app is a data visualization system that represents the law in intuitive formats in order to facilitate navigation and pattern identification.	√	1, 6
LawyerLinx https://www.lawyerlinx.com	Private	People looking for legal representation	All	Described as "a legal marketplace connecting individuals and businesses with quality, vetted lawyers and streamlining on demand legal services"	√	2

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
LawyerLocate Mobile App https://itunes.apple.com/ca/app/lawyerlocate-mobile-app/id465936835?mt=8	Private	People looking for legal representation	All	This app is a directory of lawyers searchable by practice area and location.	√	2
LegalAve http://www.legalave.ca/about-legalave	Public	Members of the public and service providers	Multiple	This app provides legal information to people in the province of Alberta. It also includes “guided pathways” which are described as “a step-by-step approach that points users to relevant legal information that applies to them based on their answers to a series of questions.”	√	1,6
LegalCafé http://www.legalinnovationzone.ca/startup/legalcafe/	Private	Lawyers	All	This web platform seeks to connect lawyers for the purposes of reducing legal research time and creating an online community/support network for lawyers.	N/A Prospective users must request an invite to access the service at this time	7(*)
Legal Aid App http://www.legalaid.on.ca/en/getting/legalaidapp.asp	Public	Low income persons seeking legal representation	Litigation	This app allows for people with legal issues to assess their financial eligibility for Legal Aid (partially subsidized legal representation) in Ontario.	√	2
Legally Inc. http://www.legalinnovationzone.ca/startup/legally-inc/	Private	Self-represented litigants in Traffic Court	Highway Traffic Act Offences	Take Charge is a messaging bot that seeks to aid self-represented litigants develop a defence to offences under the Highway Traffic Act	N/A	6
Legal Line http://www.legal-line.ca/	Public	Members of the public	All	This web tool provides legal information in a Q&A format, detailed legal guides, as well as links to valuable resources.	√	1, 2, 5
Legal Swipe www.legalswipe.com	Private	Members of public who have been stopped by the police	Human rights, constitutional, criminal, civil liberty	This app informs people of their rights during interactions with the police.	√	1, 4

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Loom Analytics http://www.loomanalytics.com/	Private	Litigators	Litigation	This app "use[s] a combination of machine learning and legal analysis to classify case law along multiple vectors allowing for statistical analysis. . . [to allow users to] see how a particular judge has ruled on specific motions or claims at trial, what kinds of cases make it to court most frequently, the average decision turnaround time, and the average cost and damage awards broken down by case type."	\$49/month, 30-day free trial	7
LSUC Ontario Reports App https://play.google.com/store/apps/details?id=com.texterity.android.OntarioReports&hl=en	Private/ Public	Lawyers, legal academics and law students looking for legal news	Ontario case law	This online app is a legal magazine that hosts leading Ontario case law. The magazine issues can be accessed offline and report from all Ontario court levels.	√	1
Map your property www.mapyourproperty.com	Private	Property owners, real estate lawyers	Property	This web solution performs mapping and analytics for the land development and real estate industry. The online tool streamlines the due diligence process for any properties with development potential. It also alerts users of any regulations or restrictions associated with a property and compiles them into a full report.	\$495 - \$2095 /month, 7-day free trial; \$100 for extra users, \$100 for extra reports	1, 7
McKellar Slide Rule https://itunes.apple.com/ca/app/mckellar-slide-rule/id436864802?mt=8	Private	Lawyers	Personal Injury Law	This app calculates life expectancy, immediate present value and deferred present value for the purposes of developing a structured settlement in personal injury cases.	√	1, 5, 6, 7
Moody's Gartner Tax Law https://itunes.apple.com/ca/app/moodys-gartner-tax-law-app/id948547963?mt=8	Private	Canadian citizens who live in the US during winter months ('Snowbirds')	Tax Law	Allows users to receive updates and access changes in US and Canadian Tax law. It also offers access to Tax Tables.	√	1, 6

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
MyLawAgent https://itunes.apple.com/ca/app/mylawagent/id1006569815?mt=8	Private	Lawyers	Agents in law	Designed by lawyers, this app provides a secure and efficient mechanism for finding and instructing an agent.	App is free; Subscription to service is free for lawyers	2, 6, 7
MyLawBC www.mylawbc.com	Public	Low-income individuals in British Columbia	Family law	This app provides “guided pathways” to help individuals resolve family law matters; information is also provided regarding available resources for legal advice.	√	1, 2, 6
Nimonik www.nimonik.com	Private	Employers, in-house lawyers, auditors	Employment/labour, tort, contract, regulatory	This solution offers web and mobile apps for environmental health, safety, and quality managers. The apps host guides with updates to regulatory requirements, industry best practices and international standards along with software to monitor and report on compliance performance (all available in-app).	Regulatory Content - \$1 500 per jurisdiction/per category: environment, health, and safety, legal aspects of audits between \$9.00/month and \$1000/month dependent on number of users and audits (determined through algorithm); 20 day free trial	1, 4, 6
Nolo’s Plain English Law Dictionary https://itunes.apple.com/ca/app/nolos-plain-english-law-dictionary/id319070903?mt=8	Private	Members of the public, law professionals	All	This mobile app provides a complete and up-to-date dictionary of legal terms defined in everyday, understandable language, edited by a team of lawyers (no internet connection required).	√	1
Notice Connect https://www.noticeconnect.com/	Private	Lawyers, estate trustees	Real-estate	This website allows individuals and business to publish legal notices online where they are indexed to Google, republished on social media platforms, and directly sent to subscribers.	\$112+ tax to publish, \$34.99+ tax for a notarized affidavit of publication	7

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Not Your Baby https://play.google.com/store/apps/details?id=com.metrac.noyourbaby	Public	Women, victims of harassment/ assault	Criminal	This app is an interactive grid that guides users to select perpetrators of harassment and details of when and how the harassment occurs. The app then recommends a response to the situation based on submissions from other users. It also includes facts and personal stories of harassment as well as resources for those seeking help.	√	6, 7
Ontario Small Claims Wizard www.smallclaims-wizard.com <i>(currently in beta)</i>	Private	Self-represented litigants	Tort, Civil disputes, Commercial, Contract	This app guides individuals step by step through small claims processes for Ontario courts. It advises users on which documents they need to file for their legal issue, and allows them to complete forms for court processes online.	N/A	1, 3, 6
ParDONE http://www.legalinnovationzone.ca/startup/pardone/ <i>(in development)</i>	Private	People with criminal records	Criminal	This app is an online platform which automates the record suspension application process for people with criminal records.	\$299 for record suspension, \$349 for US entry Waiver	3, 6
PARLe Pateforme d'Aide au Règlement des Litiges en ligne http://www.cyberjustice.ca/en/logiciels/parle-2-0/	Public	Parties with low intensity disputes	Dispute resolution	Online service that connects consumers and retailers to resolve low intensity disputes	√	6, 7
Pre-Resolve ** Winner of HackJustice https://winklerinstitute.ca/projects/hackjustice-an-access-to-justice-hackathon/	Private	Self-represented litigants	Family Law	App estimates the cost of different dispute resolution options for self-represented litigants and offers tailored resources by allowing them to input information pertaining to their particular situation.	N/A	3, 4, 6
Rangeindr http://www.rangeindr.ca	Private	Criminal lawyers	Criminal	This legal research tool parses through statute and case law quickly to provide criminal lawyers with sentencing ranges. Lawyers input their factual matrix and are provided with a sentencing range based on case law and statute.	\$79.00 + HST / month for single user; Group licenses available upon request	1
Scrive http://www.scrive.ca/ <i>(currently in public beta)</i>	Private	Clerks, lawyers, members of the public	Multiple	This app streamlines the Ontario court transcript ordering process by matching orders to available authorized court transcriptionists in real-time.	Available upon request	3, 7

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Shield Basic — Ontario https://itunes.apple.com/ca/app/shield-basic-ontario/id424603716?mt=8	Private	Intended for use by law enforcement. Also intended as a reference for the general public and legal researchers	Legislation	This phone app functions as a database for current legislation and information. The database updates automatically to respond to any changes in fines and legislation. Features include legal definitions, short forms, and fines for various offences under a variety of legislation.	Free to download app and two week free trial; \$9.99 for full access to database and automatic uploads	1, 6
Shield Basic — British Columbia https://itunes.apple.com/ca/app/shield-basic-british-columbia/id589457863?mt=8	Private	Intended for use by law enforcement. Also intended as a reference for the general public and legal researchers	Legislation	This phone app functions as a database for current legislation and information. The database updates automatically to respond to any changes in fines and legislation. Features include legal definitions, short forms and fines for various offences under a variety of legislation.	Free to download of app and two week free trial; \$9.99 for full access to database and automatic uploads	1, 6
Summons App http://inside.tru.ca/2016/05/12/law-app-could-revolutionize-court-scheduling/ <i>* currently in demo mode *</i>	Private (developed in law school course)	Lawyers and individuals who have on-going court proceedings	Litigation	This app acts as an interface between court registries, the public, and lawyers by allowing court administrators to provide live updates of court schedules.	√	2
Support Information Exchange (SIX) http://www.supportinformationexchange.com/home.html	Private	Family law lawyers and divorcees	Family	This app guides users in the exchange of financial records in divorce cases.	\$19.95 or \$39.95 per file/ year	1, 6, 7
TECHLINK http://www.legalinnovationzone.ca/startup/techlink/	Private	Small to medium enterprises	Intellectual Property Law	Seeks to connect small- and medium-sized enterprises with access to intellectual property and patents for the purposes of commercialization.	√	7

App	Developer/ Founder/ Seller	Intended User(s)	Type of Law	Description	Free	Function
Thistoo www.thistoo.co	Private	Self-represented parties involved in family law matters	Family law	This app is developed for self-represented parties in divorce cases. It provides online access to resources, tools, and document templates.	Free to begin process; Divorce application \$149.99; Monthly subscription \$98.99; Yearly subscription \$999.99	1, 3, 5, 6
WiseLii www.wiselaw.net/ wiselii.html	Private	Legal researchers	All	This app aids legal researchers. It hosts legal guides, case law and legislation.	√	1
Workplace BC OHS Regulation https://itunes.apple.com/ca/app/worksafebc-ohs-regulation/id447269458?mt=8	Public	Lawyers, Employees, Employers in British Columbia	Labour/employment, tort	This app allows users to search and browse OHS Regulation, Policies, Guidelines and WCB Standards. (Available for use offline).	√	1