ALL THE WILD POSSIBILITIES:
TECHNOLOGY THAT ATTACKS BARRIERS
TO ACCESS TO JUSTICE

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Predicting how technology will affect the future of the legal profession is difficult and unreliable work. Technological developments, including document assembly software, have improved the delivery of legal services. However, existing legal services cannot address the bulk of the legal problems faced by the poor. Legal aid agencies are able to handle only 20 percent of the legal needs of the poor. Recently, a modest software tool called “A2J Author” was created to reach a greater portion of the low-income population in need of legal services. A2J Author allows lawyers to build guided Internet interviews for prospective clients and self-represented litigants. This software tool has been adopted across the United States and in several foreign countries as an interface for public access to legal processes. A2J Author originated as a collaboration between courts, legal aid agencies, and funding sources to attack barriers to access to justice. Whether A2J Author can transform the delivery of legal aid and government services to low-income people remains to be seen. Yet A2J Author helps us imagine all the wild possibilities that technology can offer to solve the problem of access of justice.

PROLOGUE

Technology evangelists predict massive disruptions of the legal services market caused by the introduction of information

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technology. Prominent law firm consulting companies are sponsoring serious studies of the future of the profession, and these studies predict that in twenty years, radical restructuring of the profession is likely. A new law school center devoted to innovation has been established at the University of Southern California. In late 2008, the center organized its first conference, “Leading Legal Innovation,” “to generate an agenda for real change in the way legal services are developed, priced, and delivered to business clients in our increasingly competitive global environment.”

Richard Susskind, one of the most visible of the technology evangelists, has recently predicted the “End of Lawyers”—an emerging era when an entire profession may be driven into oblivion by the Internet and automation efficiencies. But predicting how

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4. Id.

5. RICHARD E. SUSSKIND, THE END OF LAWYERS?: RETHINKING THE NATURE OF LEGAL SERVICES (2008) [hereinafter SUSSKIND, THE END OF LAWYERS]. I exaggerate Susskind’s thesis, though he does too in the title of the book and at several key points: “To cap it all, a number of disruptive legal technologies are emerging . . . which will directly challenge and sometimes even replace the traditional work of lawyers. For many lawyers, therefore, it looks as if the party may soon be over.” Id. at 270.

This doomsday scenario is a variation of the reengineering business theory and the “Crossing the Chasm” approaches that were incubated at Harvard Business School in the late 1990s. For an enthusiastic version of this approach, see LARRY DOWNES & CHUNKA MUI, UNLEASHING THE KILLER APP: DIGITAL STRATEGIES FOR MARKET DOMINANCE (1998) (predicting that the Internet would wipe out both Westlaw and LexisNexis).

Richard Marcus has explored this issue in a recent piece that attempts to classify computer changes in the law profession as revolutionary or evolutionary:

Due to the computer, law office operations have changed remarkably and discovery seems significantly transformed. But many of the most significant possible effects on legal practice seem not to have occurred. Computers are not yet supplanting lawyers in the provision of legal advice to clients. Law schools have not gone online and abandoned their bricks and mortar operations. Trials have not gone online with jurors deliberating by chat room.
technology will affect the future of the legal profession is difficult and unreliable work. For example, in the ten years since Richard Susskind started to predict doom for lawyers, the legal industry in the United States has grown dramatically. By some estimates, the average profits per partner in the top 100 U.S. law firms grew to $1.3 million. During the same ten years, the total number of lawyers in the United States grew to more than 1,162,124.

Before this recent flurry of dire forecasts, I thought that the predictions of looming catastrophe for the legal profession at the hands of the Internet had reached their peak in early 2000 on the tenth floor of the Chicago-Kent College of Law. At the invitation of Bill Paul, the president of the American Bar Association, the top dot-


The Am Law 100—the top-grossing law firms in the United States—finished the best sustained growth spurt since The American Lawyer began tracking firm financials in 1984. For the first time, the firms showed five consecutive years of better-than-average growth in both revenue per lawyer, the key measure of law firm financial success, and profits per partner, the metric that has turned law firm managers into contortionists. How good was this run? Since 2003, average RPL has increased by $205,000. Before that, it took the firms ten years, from 1992 to 2002, to improve that much. The relative gain in profits was even more impressive. Since 2003, PPP has jumped by $438,000, to an average of $1.3 million. It took the Am Law 100 firms 15 years, from 1987 to 2002, to make a similar gain. This Law Firm Golden Age has been fueled by surging demand for high-end legal services and unrelenting annual rate hikes.

Id.

8. ABA LAWYER DEMOGRAPHICS, http://www.abanet.org/marketresearch/Lawyer_Demographics.pdf (2008). The global economic decline that started in 2008 will have a significant impact on the profits, revenues, and employment of lawyers in the United States, but there is no current suggestion by anyone that these declines are linked to new information technologies. There are suggestions that the economic crisis creates opportunities to make significant structural improvements across many domains. For example, the Wall Street Journal reported the following statement made by Rahm Emanuel:

“You never want a serious crisis to go to waste,” Rahm Emanuel, Mr. Obama’s new chief of staff, told a Wall Street Journal conference of top corporate chief executives this week. He elaborated: “Things that we had postponed for too long, that were long-term, are now immediate and must be dealt with. This crisis provides the opportunity for us to do things that you could not do before.”

com entrepreneurs in the legal market met in March 2000. After two
days of small group discussions, all attendees convened to map the
future of the online legal services market. The entrepreneurs were
aggressive and self-important. The executives of these companies
demanded that the organized bar bless the new business and
professional models they represented or be relegated to pre-Internet
dust bins along with expensive stock trades, travel agents, and
physical bookstores. This restructuring of the law firm market did
not happen as predicted by the conference dot-com entrepreneurs.
Many of these highly visible dot-com legal Web sites did not survive
the bursting Internet bubble in the early 2000s. For example,
Americounsel, LawStreet, and My Counsel, all of which sent
representatives to the March 2000 conference, no longer exist.

I have made my share of such predictions in the past thirty
years, including foretelling the death of the paper casebook in law
schools and vast improvements in law practice that would be
triggered by computers and document assembly software. Neither

9. See Henry H. Perritt, Jr. & Ronald W. Staudt, The Changing Culture: The 1% Solution:
    American Judges Must Enter the Internet Age, 2 J. APP. PRAC. & PROCESS 463, 471–72 (2000)
    (“At the direction of ABA President Bill Paul, the Technology 2000 Taskforce on Lawyers
    Serving Society Through Technology investigated the new forms of law practice made possible
    by the Internet. The Taskforce aimed to use these new tools to increase access of moderate-income
    clients to legal services. Its goal was to use technology to match underused lawyers with
    unmet legal needs.”).

10. Daniel J. Morrissey, After the Ball Is Over: Investor Remedies in the Wake of the Dot-
    Com Crash and Recent Corporate Scandals, 83 Neb. L. Rev. 732, 733 (2005) (“But beginning
    in April 2000, a swift downturn left investors reeling. The Dow would eventually lose almost one-
    third of its value, and the high-flying NASDAQ index would crash unbelievably worse, tumbling
    from over 5,000 to just about 1,100. It left shareholders in the tech companies traded there with,
    on average, only about twenty percent of the value they had had several years earlier.”).

11. These now inactive Web sites originally existed at http://www.americounsel.com,

12. See generally Ronald W. Staudt, Does the Grandmother Come with It? Teaching and
    technology will have on teaching and practicing law in the twenty-first century) [hereinafter
    Staudt, Does the Grandmother Come with It?]; see also David J. Maume, Jr. & Ronald W. Staudt,
    Computer Use and Success in the First Year of Law School, 37 J. L. & EDUC. 381, 398 (1987)
    (suggesting that experiments of computerized education in law schools allow “less talented
    students to ‘catch up’”); Ronald W. Staudt, An Essay on Electronic Casebooks: My Pursuit of the
    Paperless Chase, 68 Chi.-Kent L. Rev. 291 (1992); Ronald W. Staudt & James A. Sprowl,
    Automating Administrative Systems in a Law School Teaching Clinic: Designing a Computer
    Res. J. 1111 (1981) (finding improvement of services of law school clinics and recommending
    national research on computers in law school clinics); Ronald W. Staudt, Computers at the Core
    of Legal Education: Experiments at IIT Chicago-Kent College of Law, 35 J. L. & EDUC. 514
    (1985) (describing law school computer education experiments and educational possibilities);
of these two prophesies has yet been fulfilled. Yet a real success story has emerged based in part on a persistent optimism that technology can improve the delivery of legal services. A2J Author, a modest software tool that allows lawyers to build guided Internet interviews for prospective clients, has been adopted across the United States and in several foreign countries as an interface for public access to legal processes. This Article describes the origin of A2J Author as a collaboration by courts, legal aid agencies, and funding sources. The Article explores the combination of factors that produced this technology, which successfully attacks barriers to access to justice. Finally, the Article speculates on whether A2J Author can begin to transform the delivery of legal aid and government services to low-income people.

INTRODUCTION

At least since the birth of the personal computer, technology evangelists have predicted that the world will be a better place if


13. In 1990, I predicted that hypertext could revolutionize the teaching of law. Stimulated by Seymour Papert and Marvin Minsky’s work on the nature of human thought, I suggested that hypertext matches the mind and also matches the internal organization of the common law. As hypertext developed, I proposed that we would be able to model in computers the structure and organization of the mind, more particularly, the legal mind.

In 1992, we proposed the mother of all casebooks and an entirely electronic press for law school teaching materials. Computers were small enough and held enough information to contain all the books needed by law students for their courses. In addition, the hypertext tools, connections to LexisNexis and Westlaw, and the emerging network that would become the Internet added tools and information that made paper obsolete. We all know that this electronic press has not yet replaced paper books. The computer is valuable and a powerful information and communication tool, but law students’ backpacks have not become any lighter. All the books are still there and now everyone has a computer too. Andrea James, Law Professors Put Printed Textbooks on Trial, SEATTLEPI.COM, Sept. 28, 2008, http://www.seattlepi.com/business/380941_lawtexts29.html.

information technology is applied in the right way.\footnote{15}{See generally \textsc{Frederic Lucas-Conwell, Technology Evangelists: A Leadership Survey} (2006), http://www.growthresourcesinc.com/TechEvan.pdf.} Usually the predictions are not completely wrong but are almost always overblown or mistimed. Overheated expectations and early unbridled enthusiasm for breaking technologies have contributed to disappointment when projects in law and information technology produced only modest improvement or even resulted in failure.\footnote{16}{See, e.g., supra note 13 and accompanying text; infra notes 18–21 and accompanying text.} Only on rare occasions do predictions significantly undershoot the changes and rapid penetration of new technologies.\footnote{17}{For example, John Hagel III and Arthur G. Armstrong predicted that the Internet would grow rapidly from 30 million users in 1996 to more than 100 million users in 2000. \textsc{John Hagel III & Arthur G. Armstrong, Net Gain: Expanding Markets Through Virtual Communities} 4 (1997). In fact, by March 2000 the Internet had 304 million users and by December 2000 it had grown to 361 million users. Internet Growth Statistics: Today’s Road to eCommerce and Global Trade, http://www.internetworldstats.com/emarketing.htm (last visited Aug. 2, 2009.)} 

In 1978, as part of a project called the “Law Office of the Future,” funded by the Council on Legal Education for Professional Responsibility (“CLEPR”), and later in the mid-1980s, as part of an IBM joint study at Chicago-Kent College of Law, we predicted that the emerging technology called “document assembly” would transform the legal profession.\footnote{18}{James A. Sprowl, \textit{Developing Computerized Practice Aids for Tomorrow’s Law Practice}, 12 \textsc{Legal Econ.}, 37, 44 (1986) (“I now believe we are on the threshold of an era when lower costs and better technology will increase significantly the public’s access to legal service.”)} We believed that document assembly would make preparing repetitive documents like wills or standard complaints in divorce cases and landlord-tenant disputes extremely efficient. We envisioned that with emerging computer technology, we could deliver some of these documents from a machine. If one needed a will, one could go into a phonebooth-sized cubicle, type some answers to questions posed by the machine, put in some cash, and print out a will right there. These ideas were revolutionary science fiction in 1978.

We believed that document assembly technology would restructure the entire legal profession. Lawyers would not need to waste thousands of hours on complex but not analytically difficult jobs. Instead, lawyers would be free to concentrate on problems requiring their judgment, deep analysis, and careful planning. Fewer
lawyers would be needed, but the work would be immensely more satisfying, more intellectual, and less boring and repetitive.

While we achieved the narrow objectives of this project and built document assembly systems that delivered hundreds of wills to low-income senior citizens in Chicago, the long-term law practice revolution we envisioned did not follow from the short-term success. In fact, after several years, the clinical faculty abandoned the entire project because these faculty members were not interested in maintaining automated practice systems. The clinicians wanted to practice law, try cases, and teach students in a more traditional format. These educators were not interested in maintaining automated systems, however efficient, nor were they interested in using machines to practice law.

The document assembly technology did not produce a wide, disruptive transformation of the practice and structure of the legal profession in 1980. In the years since 1980, document assembly did in fact grab some of the work that lawyers had frequently handled in the first half of the twentieth century.19 For example, federal income tax preparation software eliminated much of the simple tax return business that sole practitioners and small law firms had provided to individuals in prior decades. At the high end of the practice of tax compliance, software systems like Abacus, developed by Arthur Anderson, “became an indispensable tool for tax professionals.”20 Yet, at the core of private law practice, document assembly has not yet proved to be transformative.21

The most gratifying story about the use of document assembly technologies to improve the delivery of legal services comes from the success of the Legal Services Corporation’s Technology Initiative Grants Program, started twenty years after the Law Office of the Future initiative ended. The Legal Services Corporation (“LSC”) was created by Congress to promote equal justice and to

19. See generally Marcus, supra note 5 (examining the range of impact of computer technology on the legal profession).
21. Marc Lauritsen, Document Assembly, (Aug. 16, 2006), http://www.lsntap.org/?q=node/316 (“Technologies for the automated production of legal documents have been in use for well over twenty-five years, and increasingly sophisticated applications can be found on law office desktops across the profession. Document assembly tools offer greatly improved productivity and quality in the delivery of legal services. But for various cultural, political, and economic reasons, actual use has remained limited to discrete islands of enthusiasts.”).
fund civil legal services for low-income people. LSC is the largest financial resource supporting legal aid to the poor in the United States. Congress annually appropriates $300–400 million that LSC distributes in grants to 137 private charities that deliver legal aid to low-income people. Each year, LSC provides funds for legal aid programs that handle one million cases for low-income people. Many of these cases deal with family-related problems such as divorce, child custody, or domestic violence. Many others are housing and consumer issues. Legal aid agencies funded by LSC are able to handle only 20 percent of the legal needs of the poor. Thus, legal services cannot meet the bulk of the legal problems faced by the poor. As a consequence, these problems are left unresolved, or the affected people try to solve the problems on their own.

In 2000, LSC launched a new effort to use technology to improve the efficiency and effectiveness of its grantees. This effort focused on expanding the delivery of free legal information and legal services to those forced to face the legal system on their own. Under the umbrella of an annual competition for supplementary grants called “Technology Initiative Grants” (“TIG”), hundreds of proposals to use technology to deliver legal aid were submitted to LSC. In the first two years, TIG awards funded a wide variety of

25. See LSC Fact Sheet, supra note 23.
26. Id.
27. BARNETT, DOCUMENTING THE JUSTICE GAP, supra note 24, at 13.
28. Id. at 13–14.
30. Id. (“The unprecedented powers of the personal computer and of the World Wide Web can broaden the reach of the valuable work conducted by legal services practitioners. Seeing this potential, Congress authorized funding for the Technology Initiative Grant (TIG) program beginning in 2000. TIG funding has provided LSC with a remarkable opportunity to explore new ways to serve eligible persons and to help build legal aid programs’ capacities. It has supported projects to develop, test and replicate technologies that improve client access to high quality legal information and pro se assistance.”).
31. Glenn Rawdon reports that 687 grant proposals were submitted in the first ten years of the program and more than 400 proposals will be funded by the end of the 2009 fiscal year. E-
technologies, including high-speed satellite connections and videoconferencing.32 Unfortunately, TIG funding declined from a high of $7 million in 2001 to a low of $1.2 million in 2006.33 However, in 2007 and 2008, TIG funding resurged slightly to more than $2 million during each of those years.34

Despite this fluctuating funding, TIG grants have proved to be remarkably successful.35 While some exotic projects involving satellite connections and videoconferencing as a substitute for remote offices are still evolving, three project clusters are consistent successes: statewide Web sites as Internet platforms for innovation, the national document assembly project, and the A2J Author initiative.36

Statewide Web Sites: Internet Platforms for Innovation

First, a talented program team administered the TIG program to help create a consistent and pervasive Internet platform for delivering information and electronic services to the public in every state.37 While this technology project sounds a bit prosaic, even boring, the creation of a single authentic LSC-backed legal aid Web site for each and every state had profound implications. By funding statewide Web sites, this TIG program ensured that in each state,
there was one location on the Internet where the public could find authentic legal information and ultimately legal services. This approach to administering the TIG program set in motion a process to identify one Web site for every state that is the authentic, statewide LSC-sponsored site. The program officers of LSC kept the costs of these statewide sites down, and established a floor of quality and service by insisting that most states use one of two templates for the statewide Web site. These templates were developed either through Pro Bono Net, Inc.’s LawHelp.org or an open source service provided by Kaivo. These statewide sites are now a fixture of the national legal aid infrastructure.

In addition to the public-facing sites, many states have also developed sites aimed at full-time legal aid advocates and often, a third statewide site targeting law firm volunteers. It is difficult to overestimate the importance of these statewide Web sites as foundational building blocks for transformational delivery changes. These sites provide the Internet framework on which to hang new services and new approaches to collaboration. Their authenticity and interface consistency make these sites viable platforms for information and service delivery innovation across the country.


39. Id.

40. Statewide Web Site Template, http://www.lscopp.com/Techsite/Linkpages/Probononet_template.htm (last visited Aug. 2, 2009) (“The FY 2001 LSC Technology Initiative Grants (TIG) RFP, issued in late February 2001 includes a category for Statewide Web Sites. These grants will be available for up to $50,000 per state. It appears that LSC is willing to fund a substantial number of states within this category. To be eligible for a grant under this category, the applicant must be making use of an already-funded template that includes support for advocate information, client information and pro bono support, and must also demonstrate capacity for long-term support of content.”).


42. Staudt, Technology for Justice Customers, supra note 35, at 89–90.

Second, in another tribute to the importance of standardization, the program team at LSC selected a single document assembly technology. Next, LSC provided grants to help each program hire staff to learn the software and write automated documents for that state. LSC also created an online server called “National Public Automated Documents Online” (“NPADO”) to deliver the automated document systems to any Internet-enabled computer. The central server also helps legal aid societies from across the country share expertise, good examples, and replicable document systems.

LSC accomplished this stunning achievement in a very deliberative way. A team of experts studied commercially available document assembly systems and invited the leading vendors to meet with a group of LSC experts and consultants. After the meeting, LSC chose HotDocs as the standard software for all of its grants for document assembly and form preparation. This choice was stimulated by LexisNexis’s offer to provide HotDocs to legal aid programs free of charge. Choosing HotDocs had some real advantages in addition to being free. HotDocs is the leading document assembly software within the law firm market, so there are lawyers and consultants with deep expertise in the use of HotDocs to automate law practices. HotDocs offered a software product called HotDocs Server enabling legal aid organizations to store HotDocs templates on an Internet server. Once templates are loaded there, users can access the templates from any Internet-connected computer in the world.

HotDocs offered a full commercial grade solution for lawyer automation, but the group evaluating LSC options decided that the interface that HotDocs presented to end users made it a difficult choice for document assembly aimed directly at legal aid clients. Even so, advocate automation was a huge opportunity, and if

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45. See Pro Bono Net, Our Mission and Programs, http://www.probono.net/about/item.Mission (last visited Aug. 2, 2009) (“Pro Bono Net leads a national, centralized effort to provide online legal document assembly for poverty law and court access to justice programs across the country. . . . The NPADO system . . . improves efficiency for legal aid, pro bono and courts-based access to justice programs.”).

achieved, it offered significant leverage of resources, expertise, and talent across statewide service areas, and the potential for sharing solutions between states as well. To establish a culture and an infrastructure of innovation, LSC provided grants to stimulate its agencies to adopt this software tool and train local staff to use the software. As a result, it freed up enough time for the staff to build relevant document assembly modules that would serve the needs of local low-income people. Initially, the LSC program team was skeptical about the ability of the corporation to support this kind of reengineering effort. LSC estimated that it would need $1–2 million a year for several years to hire and train HotDocs developers for every state. To its credit, LSC decided to move forward with this staff investment. The results to date are spectacular. They promise to be transformative.

A2J AUTHOR PROJECT

The third set of successful TIG initiatives are the grants associated with A2J Author. In this part of this Article, I provide a deeper look at the origin and current penetration of the A2J Author technology. A2J Author is a software solution to the interface problem identified by the task force that chose HotDocs as the standard software for legal aid document assembly. This task force, along with LSC experts and experts from the courts looking for electronic filing software for self-represented litigants, determined

47. Lauritsen, supra note 21.

48. Directors of legal aid programs are faced with overwhelming demand from low-income people for legal services and inadequate resources to meet those needs. As a result, these managers and their overworked lawyer professionals are very reluctant to experiment with grant funds that could be used to hire additional client-facing staff. The TIG program resolved this problem by isolating the technology funds from the LSC grants that supported core operations.

49. By the end of 2008, the National Public Document Project had served up 441,538 interviews resulting in 259,144 assembled document sets. See KATE BLADOW, 2008 Q4 NATIONAL USAGE REPORT, available at http://www.probono.net/dasupport/library/item.227332-2008_Q4_National_Usage_Report (requires login). These gross figures include testing and training uses of these automated document tools, but the numbers are very large and growing rapidly each year from 32,000 interviews in 2005, when the project launched, to more than 171,000 in 2008. Id.

50. See STAUDT, ELECTRONIC FILING, supra note 35. The conference participants reached the same conclusion about the available electronic filing software: Every participant in the January 16, 2003 meeting who represented low-income or self-represented litigants stated that their customers, low-income people, would need even more simplicity and assistance to interact with the courts electronically. This conclusion was based on the shared opinion that low-income self-represented litigants
that the interface of HotDocs (which end users of the templates see) is too complicated and business-oriented for legal aid clients. A2J Author solves this problem. In addition, as described further in this Article, A2J Author has proved to be a tool capable of attacking a wider range of access to justice barriers.

Origin of A2J Author

A2J Author grew out of research aimed at lowering barriers to access to justice faced by self-represented litigants.51 In 1999 and 2000, an interdisciplinary team of designers and design students, lawyers and law students, and statisticians studied self-represented litigants in five different court systems. Adopting the business argot of the dot-com era, we described self-represented litigants as customers of the court system. We studied these customers to discover what they wanted from courts and what they actually got from courts. We shadowed these customers from morning to night for weeks in the five state courts chosen for the study.52 We interviewed them before and after their court appearances, and while they waited in line at the clerks’ offices. We photographed them and the buildings they visited seeking justice. Lastly, we talked to judges, clerks, sheriffs, and court facilitators. The expectations we brought to the study were not small. We hoped to find a way to reengineer courts to meet the needs of self-represented litigants.

Our methodology is reported elsewhere in the law review literature and a book-length report on the study.53 A few salient findings bear repeating here as background for the story of A2J Author. Going into the study, we assumed correctly that complexity lack familiarity with computers and the Internet. User interfaces for this customer group will require ATM-like simplicity with one task at a time displayed in simple screens with clear and few options. The conclusion was disappointing for anyone who thought that low-income self-represented litigants could easily use the existing interfaces of commercial EFSPs.

Id. at 11–12 (citation omitted).


52. Our research teams visited courts in Cook and Lake Counties, Illinois; Boulder County, Colorado; Ventura County, California; and the Delaware Family Court. OWEN, STAUDT & PEDWELL, MEETING THE NEEDS, supra note 51, at i.

53. Id.; Staudt, Technology for Justice Customers, supra note 35.
was a major barrier for self-represented litigants in their pursuit of justice. Not surprisingly, these customers most frequently reported cost as the primary barrier to achieving their objectives in court. They could not afford a lawyer to help them navigate the courts, or the potential benefit to their case was not worth hiring a lawyer. For example, a lawyer’s fee might exceed the total value of a potential judgment. The powerful barrier to justice raised by the need for a lawyer to navigate the courts’ complexity has been well established.  

The level of legal aid provided by LSC, private charity, bar associations, trust fund contributions, and pro bono contributions by private lawyers leaves 80 percent of the legal needs of the poor unmet.  

The combination of complexity and cost can create insurmountable barriers to justice. When our design students observed the justice system in action in five different courts, they quickly decided that the complexity was so daunting that everyone in the system should have a lawyer. While this is a laudable goal, and the rekindling of a “civil Gideon” movement is a promising new development, the requirements of the project forced us to find ways to improve the operation of the existing court system. The design team formulated suggestions for products that could be built in a coordinated system to reduce complexity, products that could explain the complexity that was not eliminated, and products that could empower self-represented people to resolve disputes within the justice system.  

Following the completion of the research and design phases of this project, we built a prototype that combined several product suggestions into a single solution for simple divorces in Cook  

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55. See Staudt, Technology for Justice Customers, supra note 35, at 71 n.2.
57. See OWEN, STAUDT & PEDWELL, MEETING THE NEEDS, supra note 51, at 30-209 (describing in detail dozens of “system elements” proposed as solutions to the problems of complexity facing self-represented litigants).
County, Illinois. The prototype is a self-contained Web solution for litigants who may qualify for Illinois’s Joint Simplified Dissolution of Marriage (“JSDM”) procedure. The target customers are all self-represented, and by statutory definition, their cases cannot be complex. Yet, as is often the case with court simplification efforts, the requirements are technical and extensive. For example, the marriage cannot be more than eight years old, and the parties could own no real property, have no children, and are required to execute a property disposition agreement in advance to cover personal property valued at no more than $10,000. Our JSDM prototype solution contains an eligibility interview, customer education tools, and a document assembly connection so that when the customer finishes answering questions, all the court documents are printed. The entire prototype was crafted to present all this complexity to the customer in a very simple, attractive, one-step-at-a-time interface.

The centerpiece of the prototype is its user-friendly graphical interview. Hundreds of hours of design effort were devoted to making this online interview accessible to self-represented litigants. We used simple screens that presented users with a single step per screen. The metaphoric setting is a road to the courthouse. A sparsely detailed female guide stands on the road welcoming the user into the screen. The first question our guide asks is the name and sex of the user. The next screen shows a customer avatar in the scene—a graphical man or woman depending on the user’s response. The guide has turned to face the customer’s avatar, ready to walk with the customer past a series of signposts on the road to the courthouse. Signposts along the road show progress and help position the user within the inevitable complexity of the procedure by indicating the stage of the process where the user is located. In the prototype, a customer seeking a simple divorce in Illinois must pause at five different signposts on this road to the courthouse. At each signpost, the guide asks clusters of questions and offers related information screens. At the first signpost—titled “Do You Qualify?”—the guide asks the customer all the questions that will determine if JSDM is

59. 3 ILL. JUR. Family Law § 44.50 (2007).
60. See generally Staudt, Technology for Justice Customers, supra note 35, at 80.
appropriate for this person. At subsequent signposts, the guide asks questions about the petitioner ("Your Information?")*, the respondent ("Your Spouse’s Information?")*, and the place and date of the marriage ("Marital Information?").62

This prototype proved to be an unconditional success. Customers found it attractive and easy to use. Our prototype engaged self-represented litigants in a Web-mediated process to assess eligibility, gathered pertinent information to prepare a set of simple court forms, and then delivered those forms ready to be signed and filed.63 The prototype was richly equipped with just-in-time help tools, including the ability to speak each word of the interview to the user in English or Spanish. The user could be directed to any Web site to obtain explanations of technical terms. Wherever potential confusion loomed, we built in pop-up explanations, definitions, or instructions. Testing in usability labs, though not extensive, was uniformly positive.64

While this prototype was effective, it was very expensive. Hundreds of thousands of dollars funded designers, programmers, testers, and managers of this project. Our software team programmed each screen, action, and function. We faced a challenge to figure out how best to capitalize on the success of the prototype. What was needed was an inexpensive way to build thousands of these guided interviews. In 2004, we found a partner that could solve this problem:

Beginning in 2004, Chicago-Kent College of Law joined with the Center for Computer Assisted Legal Instruction (CALI) to build Access to Justice Author ("A2J Author"), which was designed as a “tool to build tools.” A2J Author is an “interview builder” designed to help authors simplify diagnostic interviews, document preparation and guided instructions delivered over the Web to self-represented litigants.65

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62. See, e.g., Staudt, Technology for Justice Customers, supra note 35, at 80 (giving a specific description of the JSDM prototype).
63. HotDocs Online is the software that actually assembles the documents. The HotDocs steps are handled in the background so that the user never sees a HotDocs screen.
64. SUSAN FEINBERG, REPORT ON THE USABILITY OF ILLINOISLAWHELP.ORG WEBSITE 3 (Ill. Inst. of Tech. 2003), http://www.illinoislegalaidonline.org/download.php?id=2425000,80,3.
65. Staudt, Technology for Justice Customers, supra note 35, at 84.
The programmers at CALI, primarily Sam Goshorn under the supervision of CALI Executive Director John Mayer, built A2J Author by adapting CALI Author, an authoring system they had built for CALI lessons.

Over a ten-year period, nontechnical law professors used CALI Author to build hundreds of CALI lessons to teach legal doctrine and legal skills to law students.\textsuperscript{66} Using this design experience, the CALI programmers constructed an authoring tool to build A2J Guided Interviews for self-represented litigants. CALI’s experience in building tools for law professors was critical. We had solid ethnographic research and a field-tested prototype that informed our product decisions about the look and feel needed to make A2J Guided Interviews effective. But the authoring tool faces authors, not end users. We needed CALI’s years of experience making tools for law professor authors to inform the process of building A2J Author for legal aid lawyers and court administrators.

John Mayer’s design principles that inspired the A2J Author software can be summarized as follows:

- Start simple but be sure there are enough capabilities to achieve the authors’ purposes.
- Constrain the authors’ choices on nonessential style issues.
- Use cutting-edge tools.
- Make interviews accessible on all browsers.
- Make the authoring process fun.
- Use graphics to show progress.
- Grow more complex capabilities over time.\textsuperscript{67}

A2J AUTHOR—A SURPRISING SUCCESS

By any conceivable measure, A2J Author has been an extraordinary success.\textsuperscript{68} The National Document Assembly Project

\textsuperscript{66} The CALI lessons are available to nearly every law student in the United States through subscriptions purchased by 170 member law schools. The Center for Computer-Assisted Legal Instruction, http://www2.cali.org (last visited Aug. 2, 2009).

\textsuperscript{67} E-mail from John Mayer, Executive Director, CALI, to Ronald Staudt, Professor of Law, Chicago-Kent College of Law (Apr. 7, 2009, 16:00 CST) (on file with author).

\textsuperscript{68} Bladow, supra note 49 (NPADO reported statistics for 2008 as follows: Total A2J Guided Interviews posted on the server was 1201; Total A2J Guided Interviews run by end users in 2008 was 75,906).
reported statistics indicating that 1,201 A2J Guided Interviews were active on that site at the end of 2008.69 These A2J Guided Interviews were used 75,906 times in 2008.70 Perhaps the most aggressive use of A2J Author for court forms during this period was in Idaho. Idaho developed a strong A2J Author partnership between the state supreme court and the statewide legal aid society, and launched its A2J Author project in 2005. In the three years between launch and October 2008, more than 72,000 A2J Guided Interviews were used by public customers of the Idaho legal aid Web site.71 Of these interviews, 35,800 resulted in the completion of customized forms for filing in the court system in Idaho.72 The success of these tools in Idaho points to the enormous potential of A2J Author. After all, Idaho has only 1.5 million people of the nearly 300 million in the United States.73 If the results in Idaho were uniformly achieved across the country, then more than 14 million A2J Guided Interviews would have been completed already.

Illinois offers another example of a coordinated statewide legal aid Web site functioning as a service platform to deliver A2J Guided Interviews and automated documents to low-income people. Illinois Legal Aid Online was built with the support of the Chicago Bar Foundation and the Lawyers Trust Fund of Illinois—Illinois’s Interest on Lawyers Trust Accounts ("IOLTA") program.74 In 2008, more than 850,000 individual Web services were delivered by Illinois Legal Aid Online.75 The Illinois statewide public Web site use has grown at 25 percent per year for eight years.76 Feedback mechanisms on the Illinois site consistently deliver dozens of

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69. Id.
70. Id.
72. IDAHO STATISTICS FROM THE NPADO SERVER, supra note 71 (on file with author).
74. In its early years, the precursor organization to Illinois Legal Aid Online was housed at Chicago-Kent College of Law, and significant financial support for the initial programming and launch of Illinois Legal Aid Online came from the Galvin and Pritzker Matching Fund at the Illinois Institute of Technology.
75. Telephone Interview with Lisa Colpoys, Executive Director, Illinois Legal Aid Online (Jan. 8, 2009).
76. Id.
anecdotal evaluations that the site is effective, easy to use, and enthusiastically embraced by the public.\textsuperscript{77}

On this base, Illinois Legal Aid Online hosts dozens of Guided Interviews created with A2J Author to help low-income Illinois customers prepare simple court forms, letters to creditors, notices to landlords, and other documents that trigger official action or protect legal rights.\textsuperscript{78} In 2008, customers of the Illinois Legal Aid Online public Web site completed more than 13,000 A2J Guided Interviews.\textsuperscript{79}

\textit{Online Legal Service Intake}

From its inception, A2J Author was designed to be open to a variety of potential uses. Its original purpose—replacing the formal HotDocs interviews with a user-friendly alternative—required that Guided Interviews built by A2J author produce output compatible with what HotDocs needed as input. HotDocs used a variation of XML as the format for the data file that triggered the assembly of documents. As a result, A2J Guided Interviews were designed from the start to produce an output file formatted in XML. The standards body that controls the World Wide Web recommends this format, and it is an open standard that does not require licensing or the payment of fees for its use.\textsuperscript{80}

Legal aid organizations use computerized case management systems to track existing clients and prospective clients, manage documents, organize information connected to their cases, and prepare annual reports to LSC on the work done with the federal grants.\textsuperscript{81} These case management systems were once manual, using


\textsuperscript{78} Id. (follow “Mission Statements/Goals” hyperlink).

\textsuperscript{79} Interview with Lisa Colpoys, supra note 75.

\textsuperscript{80} The World Wide Web Consortium (“W3C”) describes XML as follows: “Extensible Markup Language (XML) is a simple, very flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the Web and elsewhere.” World Wide Web Consortium, Extensible Markup Language (XML), Oct. 14, 2008, http://www.w3.org/XML/.

pressure-sensitive paper to produce multiple copies of intake sheets routed to central filing, the assigned attorney and LSC for required reports. In the 1980s, software was written for personal computers to help automate this work. Today, there are several case management systems that are Web-based, allowing legal aid programs with several offices to input new client forms from any computer connected to the Internet. As these case management systems have developed, LSC has used the TIG program to support efforts to make them friendlier, more efficient, and easier to use.

Several TIG grant projects set out to use XML standards to facilitate the movement of client data over the Web between case management systems and HotDocs document assembly templates. In this way, client information and case details could be entered into the case management system once and then be used to produce letters, pleadings, or other documents needed to complete the client’s case. These projects sought the efficiencies and error reduction possible from reuse of data. The vehicle for this data exchange was a special version of XML designed for legal aid programs.

The early projects exploring connections between HotDocs and case management systems were aimed at legal aid staff efficiencies. Both HotDocs and the most popular legal aid case management systems were professional tools. No one expected that the public—prospective clients, for example—would need to be able to operate these tools. In a paradigm Web move, Iowa Legal Aid decided to use A2J Guided Interviews to deliver access to its case management system over the Web directly to its potential customers. This is a standard reengineering technique to get closer to the client and at the same time offload to the client some of the work that staff would do in the traditional system using face-to-face intake interviews. Iowa plans to deliver, on its statewide information Web site, a link to an

82. See Lauritsen, supra note 1, at 72–73.
83. See, e.g., LEGAL SERVS. CORP., TECHNOLOGY INITIATIVE GRANTS 3 (2000), available at http://tig.lsc.gov/pdfs/2000TIGGrantDescriptions.pdf (stating that a Kentucky TIG grant will be used to integrate intake and case management in a 34 county service areas).
A2J Guided Interview that would allow any potential client to interview himself or herself, determine financial eligibility, provide preliminary information to locate his or her legal problem within the service coverage of the agency, and deliver it all at any time of the night or day to Iowa Legal Aid’s case management system.87

In Iowa, A2J Author has been modified for intake by adding a transform that converts the XML output, originally designed for HotDocs, into XML that can then be used directly by Iowa Legal Aid’s case management system. Processes are in place to gather these self-interview data files in a holding tank and to do the necessary checks for conflicts of interest before any sensitive data is accepted by the agency. All of this is possible because a prospective client is able to use the A2J Guided Interview directly, relying on its built-in just-in-time help tools, including its ability to speak each word of the interview to the user in English or Spanish and to jump to any Web site to deliver explanations of technical terms or pop-up definitions or instructions on the screen. In the version of A2J Author that was released in January 2010, video and graphics can be embedded in the interview to provide additional help and instruction.

Electronic Filing

The least automated part of the government in the United States is the court system.88 One exception to this assessment is the nearly complete electronic case management and electronic filing system (“CM/ECF”) implemented by the federal court system.89 State courts...
are not nearly as advanced in implementing electronic filing ("e-filing") systems, but there are many pilot e-filing systems in many state courts.90 Some of these systems are owned and operated by the courts themselves, like the CM/ECF filing system used by the federal courts.91 Other state courts use private companies like LexisNexis File and Serve to outsource the e-filing system.92 When private companies are used, the customers of the court pay fees for a variety of services including an e-filing surcharge when viewing and printing copies of documents filed in the court system.93

As a rule, none of these e-filing systems are built to serve the public.94 Lawyers are the intended users of the systems. In fact, CM/ECF is usually implemented in a district court under a local rule that makes it available only to lawyers.95 Self-represented litigants are usually relegated to paper filing onsite at the courthouse.96

A number of courts are offering A2J Guided Interviews as solutions to the efficiency problems facing self-represented litigants. Under a series of grants, the clerk’s office for the U.S. District Court for the Eastern District of Missouri has written A2J Guided Interviews for standard complaints frequently filed by pro se


94. See Staudt, Electronic Filing, supra note 35.

95. See, e.g., Administrative Procedures for Filing, Signing, and Verifying Documents by Electronics Means, U.S. DISTRICT COURT MIDDLE DISTRICT OF GEORGIA 3, available at http://www.gamd.uscourts.gov/cm-ecf/procedures-reference/civil_administrative.pdf (“[A]ll documents submitted for filing in civil cases in this district after October 6, 2004, . . . must be filed electronically or must be scanned and uploaded to the CM/ECF system . . . Parties proceeding pro se, however, are not authorized to file electronically at this time.”).

96. See id. at 17.
The court has installed the HotDocs Server and is preparing to explore the feasibility of direct connection between the A2J Guided Interviews and the CM/ECF infrastructure. In Vermont, the state supreme court sought bids from vendors to reengineer its entire statewide case management system. The court specified in its request for proposals that A2J Guided Interviews would be required elements of any proposal. A2J Guided Interviews will facilitate the public’s use of Web-enabled electronic filing applications for case types frequently filed by self-represented litigants. In Florida, Vista SG, a vendor of software and consulting services to state courts, has adapted A2J Author to deliver electronic filing solutions designed to facilitate use by self-represented litigants.

Thirty Years Matter

The changes in technology and the law profession over the past thirty years have been remarkable. When we launched our Law Office of the Future initiative in 1978, the Apple II personal computer was only a year old, and the IBM PC that would dominate the law and business market was not introduced until 1981. We used terminals that connected to university mainframe computers to assemble wills and divorce pleadings. There were no local area networks; there was no Internet; and word processing software was not available except in large back office installations. We wrote the document assembly programs for simple wills on terminals connected to mainframe computers via very slow modems. Looking back on these conditions, it amazes me that we were able to deliver 500 wills using the experimental software available then. Our prediction of transformative change across the legal profession based

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98. Id.
100. Id. at 50–51, 57.
on these modest successes now seems naïve, if not foolishly optimistic.

By contrast, the A2J Author initiative was launched after the dramatic growth of the Internet, and after twenty years of deep penetration of technology into the business world and the legal profession. Today, unlike in 1978, computers and digital communication are pervasive in both our homes and workplaces. A direct comparison of the 1978 predictions and the 2008 successes is unfair and perhaps inappropriate because of such differences in the available infrastructure and popular acceptance of technology. A possible explanation might be that the 1978 predictions were just too early. Yet, this does not explain the surprising success of A2J Author and its associated legal services initiatives, the statewide Web sites and NPADO, when contrasted with the shallow and sporadic penetration of these technologies in private law firms.

The professional segment that provides legal aid to low-income people is small compared to the size of the law profession in the United States. The demand for its professional services is essentially unlimited, as current resources are only able to address approximately 20 percent of the legal needs of the underprivileged. As a rule, the lawyer/client interactions are sporadic and not based on long-term relationships. Legal aid clients do not have retainer agreements. As a result, the introduction of technology by legal aid organizations to educate prospective clients and deliver simple services to prospective clients does not raise worrisome concerns such as lost clients and declining revenue. Legal aid professionals are deeply committed to delivering quality services and to meeting the needs of their clients, but legal aid programs do not need to spend significant resources to attract clients and retain them.

Another notable aspect of the TIG-funded initiatives, including A2J Author, is the nature of the TIG funding itself. The core operations and the core financial support of legal aid organizations

103. For a documented history of the increasing use of computers in law firms from 1985 to 1994, see Staudt, Does the Grandmother Come with It?, supra note 12, at 513–21.
105. Id. at 13.
funded by LSC did not change when the TIG grants were offered. By and large, legal aid lawyers and managers continued to do the same work in the same way, funded by their core grant from LSC and money from other charitable sources.

The TIG money funded additions to the staff and provided additional services to the targeted client community without reducing funding for the services that legal aid programs historically provided. As a result, professionals who were interested in these new technologies were freed by this additional money to apply the new tools to serve clients in new ways. The new methods did not disturb the habits of success ingrained in those professionals who preferred less automated approaches.

A2J Author fit well within the TIG-funded infrastructure formed by the statewide Web sites and the national public automated document server. Most A2J Author projects also required a document assembly template from HotDocs. Both the A2J Guided Interviews and the HotDocs document assembly template were stored and served up to the public from NPADO.

All of these NPADO resources were triggered by links from statewide legal aid Web sites. This trio of projects helped to create and sustain a cadre of legal aid technologists connected to one another across the country by the Internet. Further, TIG grants enabled legal aid agencies to hire or free up staff to learn these technologies and implement projects within the agency’s service area. All three projects offered training and daily support from Listservs, Web sites, and telephone support.

ALL THE WILD POSSIBILITIES

A2J Author has been described as a “transformative tool for legal services.” The transformation comes from the efficiencies and collaboration opportunities that A2J Author may be able to stimulate and help implement.

Imagine a single Web page with simple A2J Guided Interviews linking people to information about their legal rights and a wide

108. Telephone Interview with Glenn Rawdon, Program Counsel, Legal Servs. Corp. (Dec. 18, 2008).
variety of options for services and problem solving. The same A2J Guided Interviews could assemble documents that trigger or effectuate those rights. In the proper circumstances, self-represented people could electronically file the documents directly with the correct state and federal court system or administrative agency.

For those who might qualify for legal services, the guided interview could deliver electronic intake information to the case management system of the correct legal services provider. If the provider takes the case, then the intake information could be delivered seamlessly to a document assembly system to prepare the letters or pleadings needed as the first step of the legal engagement.

Problems faced by low-income people are complicated and are almost never presented as discrete legal issues. The legal problem is often wrapped in economic or medical problems. Legal aid addresses civil legal problems, but the criminal defense system is often intertwined with the civil issues affecting legal aid clients. Eve Ricaurte, a managing attorney at Iowa Legal Aid’s Intake System in Davenport, is working on an A2J Guided Interview that will sort out needs across civil and criminal lines.109 Before attempting this aggressive collaboration, Ricaurte led the Iowa Legal Aid initiative that put an A2J Guided Interview on the Web as the front door for legal aid across the state of Iowa.110 Her A2J Guided Interview for Iowa intake helps anyone in Iowa submit a request for legal aid online. Currently, she is cooperating with a public defender to extend the reach of the statewide civil legal aid intake project for Iowa to criminal defense.111

Predictions by consultants and futurists that information technology will cause huge disruptions in the legal profession over the next ten to twenty years are not persuasive. It is not likely that the makeup of large law firms and their clients will be drastically different than it is now unless economic forces of the current recession force changes. The core disruptive technologies available now to the largest law firms and their corporate clients were largely available ten years ago. Yet, the last ten years do not show a disintegration of the traditional large law firm, but rather the robust

109. E-mail from Eve Ricaurte, Managing Attorney, Iowa Legal Aid, to Ronald W. Staudt, Professor of Law, Chicago-Kent School of Law (Dec. 27, 2008, 12:17 CST) (on file with author).
110. Id.
111. Id.
growth of the firms, their economic indicators, and the businesses they serve.\textsuperscript{112} The economic crisis that began in 2008 may cause massive disruptions in this top-end market for legal services, but the Internet did not cause the economic crisis.

In the market for personal legal services and small business legal needs, the predictions of significant disruption have more bite. Those legal markets are not nearly as robust, and small firms and sole practitioners are not nearly as financially well-off as lawyers in the large firm segment. There are some successful models of technology in legal services that appear to be disruptive in the personal legal services market.

Visalaw\textsuperscript{113} and Visanow\textsuperscript{114} have built law firms that deliver immigration services to large companies and individuals over the Web. These law firms are profitable and growing, and both are almost exclusively Web-based. But, they are outstanding not only for their successful implementation of the model but also because they are so unusual.\textsuperscript{115} Richard Granat’s pursuit of the latent market

\\textsuperscript{112} See supra notes 7, 9 and accompanying text (describing the rise of the legal market despite dire predictions at the end of the twentieth century).

\textsuperscript{113} Gregory Siskind is the founder of Siskind & Susser, a top ten immigration firm that is located in Tennessee but serves clients from around the world through visalaw.com. See Siskind & Susser, The Immigration Law Portal, http://www.visalaw.com (last visited Aug. 2, 2009). Siskind launched this successful law firm as a sole practitioner from an Internet marketing base at the Web site. His firm relies extensively on Internet service tools to reach clients and deliver services to them. See generally GREGORY H. SISKIND, DEBORAH MCMURRAY & RICHARD P. KLAU, THE LAWYERS GUIDE TO MARKETING ON THE INTERNET 3–12 (2d ed. 2002) (discussing strategies for developing an Internet marketing plan for a law firm).

\textsuperscript{114} Robert Meltzer is the CEO of Visanow, another immigration law firm that delivers most of its services over the Web. See Visanow, http://www.visanow.com (last visited Aug. 2, 2009). Meltzer’s firm uses patented Internet-based technology to manage client legal matters, prepare documents and forms, and keep clients up to date on their legal matters. Id.

for legal services using Web-delivered “e-lawyering” processes has been successful, but not wildly successful. His competitors are not lawyers, for the most part, but paralegal drafting services and publishers.\textsuperscript{116} Outside of these pioneering and isolated examples, there has not yet been a technology-driven sea change in the way legal services are delivered to most clients.

On the other hand, there have been significant changes in the available technology and resources supporting the use of technology by legal aid organizations over the past ten years. The TIG projects have established a national baseline of Web sites for all states, the installation of a national server for document assembly and A2J Guided Interviews, and the growth of a cadre of experts in a variety of states who are skilled at document assembly and writing A2J Guided Interviews. Stimulated by these important successes, legal aid management circles now have an enthusiasm for using technology to deliver more effective and less expensive legal information and to provide services to the low-income clients of legal aid.\textsuperscript{117}

Here is a partial list of the potential transformational changes that A2J Author can help deliver:

- Public access to document assembly
- Customer-friendly Web-mediated direct services to clients
- Deep integration of legal aid agencies’ internal document and case management systems with customer-facing systems delivered over the Internet
- Wider coordination of legal aid agencies’ internal systems with the case and document management systems of other agencies
- Direct Internet connection between legal aid case and document management systems and those

In spite of these efforts, the Task Force is small, and its existence and work remain largely unknown to the hundreds of thousands of lawyers in the ABA.

\textsuperscript{116} See Granat, \textit{supra} note 1.

\textsuperscript{117} See e.g., Texas Collaboration Provides Major Boost for Legal Aid Technology, Pro Bono \textsc{Net News}, Mar. 2008, http://www.news.probono.net/e_article001054056.cfm?x=b11,0,w (“A far-reaching effort by the Texas Access to Justice Commission, the Texas Access to Justice Foundation and leading law firms, has given legal aid programs across the state access to new, state-of-the-art technology and an opportunity to greatly expand their capacity to help the four million Texans who live below the federal poverty line.”)
administrative agencies and courts that deliver benefits and decide cases

This emerging and fully transformative model for delivering legal information and legal services to low-income people requires a significant investment in core technologies. Web standards need to be part of the case management infrastructure of the legal aid agencies. Courts and agencies that administer financial assistance and food stamps need to be open to electronic filing via the Web. Robust document assembly tools like HotDocs that are capable of accepting interview information and delivering documents over the Web using standard XML need to be available and supported.

A2J Author is merely the thin veneer-making tool that helps these core systems face the public in an effective way. Most of the heavy lifting in this vision of transformation is handled in the background by legal aid societies, state justice commissions, public defender offices, courts, and administrative agencies building compatible data-sharing capabilities. But A2J Author is fueling the imaginations of access to justice innovators because it helps them to see the end state—the connection to the customer. By starting with the customer, A2J Author helps managers of legal services imagine new methods to deliver access to justice over the Internet to low-income people facing the barriers of complexity and cost. A2J Author helps us imagine all the wild possibilities.