HARVARD JOURNAL OF LAW TECHNOLOGY

Harvard Journal of Law & Technology Occasional Paper Series — February 2013^{*}

Preliminary Thoughts on Blue Sky Technology Driven Access and Decision Systems

By Richard Zorza



^{*} The *Harvard Journal of Law & Technology Occasional Paper Series* is an online-only component intended to showcase thoughtful and innovative writings on a wide variety of subjects related to the law and technology field. These pieces are reformatted for consistency, but otherwise undergo no editing or cite-checking by the members of the *Harvard Journal of Law & Technology*.

Ι.	IN	TRODUCTION	1	
п.	т	HE BLUE SKY ACCESS AND LEGAL AID SYSTEM	1	
	۹.	Most Services Delivered Through Technology	1	
	З.	NATIONAL DELIVERY	1	
(С.	TECHNOLOGY GATEWAYS PROVIDE CONTINUITY	2	
	D.	HUMAN DELIVERED SERVICES	2	
	Ξ.	HUMAN DELIVERED SERVICES PROVIDED BY A RANGE OF PROVIDERS	2	
l	₹.	LAWYERS BIDDING ONLINE TO PROVIDE HUMAN DELIVERED SERVICES	2	
(G.	BIDDING WILL BE QUALITY ORIENTED BY WEIGHTING WITH PRIOR OUTCOME DATA	2	
	Η.	BIDDING WILL ALLOW FOR AGGREGATION OF TASKS AND CLIENTS	3	
		Use of Aggregated Data for Human System Change	3	
ш.	-	THE BLUE SKY TECHNOLOGY DRIVEN DISPUTE RESOLUTION SYSTEM	3	
	۹.	MEDIATION AND NEGOTIATION SUPPORT	3	
	З.	UNDISPUTED FACTS LEAD TO ALGORITHM DRIVEN DECISION	4	
	С.	MINIMIZING DISCRETION	4	
	D.	SUPPORTING CREDIBILITY DETERMINATIONS	4	
	Ξ.	SUPPORTING MINIMIZED DISCRETION	4	
	Ξ.	Algorithm Risk Minimization	4	
со	CONCLUDING PROPOSALS			

I. Introduction

The excellent papers prepared for this Summit postulate a wide variety of innovations that make it easier for litigants to learn about, prepare for, present information to the court and perform the tasks required before and after judgment. They also include ideas for how technology can assist those who perform these tasks on behalf of those who can not do so themselves, and ways in which changes in court processing of cases can increase the percentage who do not need such assistance.

This paper proposes a broader transformation of the access and decision-making systems, assuming all (or rather most of) those changes. It suggests that the structure of legal services access delivery and even the courts will change – and that a different "blue sky" generation of technology will be needed to make this possible.

II. The Blue Sky Access and Legal Aid System

A. Most Services Delivered Through Technology

Most of the services that people get will be delivered technologically, with human assistance limited to two areas: 1) people who need help using the tech systems (a group that will get less as technology gets better, and people become more skilled), 2) situations needing professional expertise and skill, building on the work that people have already done for themselves, which divide into brief services and rare complex ongoing ones. While hardly blue sky, this will need tools for individuals to manage their legal matters, and their relationships with institutions. See the triage paper.

B. National Delivery

Most access services, since technology based, will be developed and delivered nationally, with locally input variations. This will need a new generation of national delivery tools, building on the web templates and document assembly interfaces, but designed for state customization of broader services.

C. Technology Gateways Provide Continuity

Just like online banking services, online legal services will have fully integrated continuity for the litigant, within and between cases. This is already being pioneered in the private sector, and is explored in more detail in the Triage Paper.

D. Human Delivered Services

Human delivered services will be triaged and connected through the gateways, and only when online services are not sufficient. Triage systems will ensure that such situations are automatically identified and the appropriate connections made. Those delivering human legal services will need better access to the tech-delivered services, and to additional tools to integrate, and plan based on, data in the triage, court, and other institutional systems.

E. Human Delivered Services Provided by a Range of Providers

There will be no need for the continued near-exclusive focus on delivery by salaried staff. It may well be that it will be much more cost effective for market-based providers to deliver the human-delivered services (and indeed technology delivered services). Management of the relationships will take new tech tools.

F. Lawyers Bidding Online to Provide Human Delivered Services

The gateway will be able to put out to bid, on an individual basis, the human lawyer provided service, with enough information about the person and case known to permit bidders to make reasonable estimates of cost for those human provided services. This technology will be like that developed by Google for bidding on ad words.

G. Bidding will be Quality Oriented By Weighting With Prior Outcome Data

Since the system will get outcome data, it will be able to weight price by outcome history of the particular provider – or only allow bids for those with the highest outcomes, thus creating a race to the top. This will use data mining from outcome data, as integrated with demographic and service provision data.

H. Bidding will allow for Aggregation of Tasks and Clients

The gateways will also allow aggregation. For example, the gateway can put out to bid an attorney of the day slot, when there are enough eligible people due in court on a particular day, and the services can reasonably be unbundled. This is also a data mining project.

I. Use of Aggregated Data for Human System Change

The aggregated data, particularly when combined with outcomes data, will make possible identification of issues needing reform attention – and to do so based on a common agreement about the actual functioning of the system. This is a data mining task, and one that should have been started long ago, based on the extensive data we are already gathering.

III. The Blue Sky Technology Driven Dispute Resolution System

There is already general understanding of the transformative potential of triage (particularly when court and legal aid triage systems are integrated) to ensure that courts direct cases into the most appropriate track for the resolution of the case.

However, the blue sky component described here goes further and explores the possibility of technology as the primary (or assistive) dispute resolver, based on information about the case, outcome histories, and research based algorithms. While the potential of this approach is highly anxiety-producing, we need to be part of the process of thinking about what a system might look like, or we may find ourselves reacting rather than innovating.

The core approach is as follows:

A. Mediation and Negotiation Support

Based on available data, parties are offered outcome patterns, options, etc, which should help them make their own choices.

B. Undisputed Facts Lead to Algorithm Driven Decision

When underlying facts are not disputed, and there is no issue of discretion, an algorithm determines the outcome, based on prior decisions (and this should just be the application of the formal rules).

C. Minimizing Discretion

Because discretion is so subject to bias and error, the goal is to minimize exercises of discretion. When the decision depends upon discretion, it is important to separate areas in which discretion is as yet unavoidable, and those in which discretion only exists because we do not yet understand the underlying metrics. As research gets a better and better handle on the underlying metrics, we will be able to reduce discretion by handing more and more at least presumptive decisions to the algorithms.

D. Supporting credibility determinations

Given that credibility determinations are likely to be the last element that relies upon human judgment, we need tools that help such decision-makers structure their decisions on credibility. For example, we need data on when not telling the truth in one area correlates with lying in another area, or when limiting responses indicates an unwillingness to tell the whole truth. (We have to face that in the long term we will understand the chemistry of the brain well enough that these determinations will be made based on chemical and electrical measurements; that current tools are unreliable and crude does not mean that they always will be.)

E. Supporting Minimized Discretion

To the extent that discretion remains appropriate, we will need tools that structure the information on which the decision is based, thus leading to transparency and legitimacy. Such tools will show prior patterns and results, variations from prior patterns, standard deviations, etc.

F. Algorithm Risk Minimization

As these systems are built, legitimacy can be maintained by permitting appeal to a pure human system. Not all will take the appeal. As the systems become more reliable and more trusted, the scope of review on appeal can change.

Concluding Proposals

These areas should be the subject of brainstorming, writing, and proof of concept pilots of certain components. Some of the access delivery ideas should be explored with access to justice commissions, and the court process change ideas with the court community. LSC should task a staff person with maintaining momentum in these areas, and ensuring that its TIG grant program is used to move these ideas forward, at least conceptually.