The Future of Law and Computational Technologies: Two Sides of the Same Coin

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The rapid advancement of artificial intelligence ("AI") introduces opportunities to improve legal processes and facilitate social progress. At the same time, AI presents an original set of inherent risks and potential harms. From a Law and Computational Technologies perspective, these circumstances can be broadly separated into two categories. First, we can consider the ethics, regulations, and laws that apply to technology. Second, we can consider the use of technology to improve the delivery of legal services, justice systems, and the law itself. Each category presents an unprecedented opportunity to use significant technological advancements to preserve and expand the rule of law.

The deployment of AI raises many interesting questions about the application of existing law and regulation. AI also presents an opportunity to improve our existing approaches to fundamental principles of justice, including the ways that we approach fairness, accountability, and transparency. Computational technologies offer the distinctive capability to embed law, regulations, respect for human rights, and democratic principles directly into processes, products, systems, and platforms by design and default. Equipped with this knowledge, our mission ought to be to use law and regulation to guide the development, deployment, and maintenance of AI toward improving society, without unnecessarily impeding innovation.

Technology has also demonstrated the potential to revolutionize legal-services delivery, thus improving access to law and legal services for everyone. In the United States, estimates are that more than 80% of the impoverished, and more than 50% of the middle class, lack access to legal services, according to findings from the [Legal Services Corporation](#) and cited in [Access to Information, Technology, and Justice: A Critical Intersection](#). Even the legal needs of businesses can go unmet. Computational technologies hold great promise to automate the delivery of various legal services for this wide spectrum of recipients. For basic legal needs, access to legal services might come in the form of smartphones or other devices that are capable of providing users with an inventory of their legal rights and obligations, as well as providing insights and solutions to common legal problems. Better yet, AI and pattern matching technologies can help catalyze the development of proactive approaches to identify potential legal problems and prevent them from arising, or at least mitigate their risk.

As legal technologies advance, savvy lawyers will use them to augment their services. Innovative lawyers will embrace emerging technologies as a way to replace low value, repetitive tasks with increased efficiency, reduced costs, and greater value for their clients. By doing so, lawyers can also aim to play increasingly important roles as part of interdisciplinary teams that focus on solving some of society's most "wicked problems." One obvious area in which lawyers can begin to demonstrate this value is through updating laws, regulations, and governance frameworks for new technologies and our rapidly emerging digital society.

But history shows that innovation in the delivery of legal services has been slow. The lack of innovation in legal-services delivery stems, at least in part, from regulations that prohibit lawyers from sharing fees with, and receiving investment from, anyone who is not a lawyer. The practical result of this is that lawyers and technologists rarely collaborate on legal services delivery projects.

But change is underway. Today's sophisticated legal-services clients demand demonstrable efficiency, quality, and better outcomes. An increasing number of lawyers work strategically with allied professionals to improve processes, better manage projects, embrace data-driven methods, and leverage technology to improve legal services and systems. Basic technologies and AI are slowly making their way into the legal industry, from legal aid organizations and courts to large law firms, corporate legal departments, and governments. Recognizing the failure of the existing legal market to produce adequate access to legal services, jurisdictions such as the United Kingdom have loosened legal-services and lawyer regulation. Likewise, several U.S. states, including California, Utah, and Arizona, have undertaken regulatory reform efforts.

We risk squandering abundant opportunities to improve society with computational technologies if we fail to proactively create frameworks to embed ethics, regulation, and law into our processes by design and default. Law, regulation, and ethical principles must be front and center at every stage, from problem definition, design, data collection, and data cleaning, to training, deploying, monitoring, and maintaining products, platforms, and systems.

In a fast-moving, digital world, law must exist closer to the action. Does a world in which "code is law" require law written in code? We shortchange our future when we fail to envision the possibilities. We must establish audacious goals and commit to overcoming the obstacles to achieve them.

To move forward, technologists and lawyers must radically expand current notions of interdisciplinary collaboration. Lawyers must learn about technology, and technologists must learn about the law. They must work together to develop a shared vocabulary. Multidisciplinary teams with a shared commitment to law, regulation, and ethics can begin to proactively address today's AI challenges, and advance our collaborative problem-solving capabilities to address tomorrow's increasingly complex problems. Lawyers and technologists must work together to create a better future for everyone.

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