Conference on the Future of Legal Services 2019
Content track: Reality checks on LegalTech – what works and what doesn't
Jason Barnwell: How to bridge the AI chasm in the delivery of legal services

The Conference on the Future of Legal Services requests "[A] proposition of how legal services are going to develop in the future." This submission adjusts the request by observing a practical challenge to innovation (*how to apply more artificial intelligence {"AI"} and machine learning {"ML"} to legal work*) and proposes a practical approach to build the future (*a practical approach to converting information rich content, communications, into training data*). Why do we care?

Many organizations want artificial intelligence applied to their legal work because they must innovate to keep up with the business they serve. They seek the promise of increased productivity. They desire deeper insights that can help them develop and execute strategy. They want to demonstrate capability because it gives them a good story to tell. But there is a practical challenge to unlocking AI's potential for many kinds of knowledge work. We do not have adequate data to transform most of the work we do using AI and ML.

Applying AI and ML approaches requires data to build the models that make the magic happen. We need data that are clean (accurately labeled), signal rich (contains instructive differences), and high volume (statistically relevant sizes). And we need data that are specifically relevant for our domain because the nature of the work and the contents that comprise our work (e.g., words and phrases) are often domain specific. We do not have these data for technical and cultural reasons.

Legal professionals' technical work habits make sharing and applying structure to their information and knowledge hard. Legal professionals often reduce their work to jargon heavy words, captured in emails, sent to discrete recipients. These data are expensive to extract and refine because they are unstructured, unlabeled, and maintained in siloed storage.

Legal professionals' cultural work habits make sharing and structuring their information and knowledge even harder. They do not like to work in the open. They prefer that only their most highly refined work be scrutinized. They are willing to subject others to process, but they do not like process applied to them. They are craftspeople who take delight in distinguishing the small details rather than seeking patterns.

These are strengths that create weakness. A sharp analytical knife that can slice the small differences between scenarios that are factually similar is a necessary tool of the effective attorney. And issue spotting often hampers innovation by ending ideas too early and focusing on the details instead of the bigger picture. Concerns about information sensitivity stop the exploration of what we could do. We must get people past the practiced response of "These ideas might be interesting for someone else, but they will not work for me because what I do is too special/complicated/sensitive."

We must address these technical and cultural impediments to apply AI to more of our work. We must put the content of our work that represents the full variety of that work into computing spaces that allow machine-based analysis. And we must entice legal professionals to label that work so we can train and build machine learning models that accelerate our work. We can offer a practical starting place.

We can give legal professionals tools and incentives to label the email they produce for their work. We can create the training data we need to build the future if we can entice legal professionals to decorate the text communications like email they use in their day-to-day work with simple text tags. These communications often capture the business and legal issues that drive our work, using the domain

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specific natural language of our work. Consistently adding an organization's prescribed, standardized tags and capturing the annotated contents creates the signals and training data that lets us create more value from the work our people do, using AI and ML techniques.

We must minimize the changes to how people work and give them reasons to invest in the approach to address change management inertia. The proposed behavioral changes are small and deliver immediate and long-term benefits for the people doing the work, leading the work, and consuming the work. Let's start with the doers.

Tagged emails benefit legal professionals individually. They are easier to find within our own inboxes. Search works even better when we have standard topic names that make the search results more precise. When search works better we save time by finding the contents we need quickly. It also removes the tax of organizing emails by filing them to separate folders. We can develop tag driven automations that handle basic, common, tedious tasks. For example, we can automatically create tasks, store attachments, and generate status reports.

Tagged emails benefit teams, at-scale. The combination of categorizing with tags and moving the content into a shared space allows teammates to build on the work and knowledge of others and accelerate their work. This is particularly beneficial in the modern work context that sees more dynamic teaming and collaboration that happens across organizational boundaries.

Tagged emails benefit individuals, teams, and leaders by delivering insights about the work. The approach is flexible and extensible because the tags are just text. Basic, automated analysis of tag counts lets us understand the volume, nature, and velocity of the work being done. For example, which clients have what questions. And the combination of tags and natural text can do special things when combined with machine learning.

We can use tagged emails to train machine learning models that understand legal professionals' natural language. Creating this semantic map unlocks machine supported scenarios that can operate on our work product to create more value and efficiency. Eventually, we may not need the tags to derive insights, drive workflows, and do other useful things because the machines can understand our meaning and intent to support and accelerate our work.

We can bridge the AI chasm to deliver legal services more effectively. A prototype tag based system is demonstrated here: http://bit.ly/cotfols2019