

Toward an Expanded Model of Litigation

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INTRODUCTION: THE IMPORTANCE OF SOCIO-TECHNICAL DESIGN

The call for contributions for this workshop describes the important new challenges for the legal search community this domain brings. Rather than just understanding the challenges this domain poses in terms of their technical properties, we would like to suggest that understanding these challenges as socio-technical challenges will be important. That is, as well as calling for research on a technical level to address these challenges we are also calling for work to understand the social practices of those involved in e-discovery (ED) and related legal work. A particularly interesting feature of this field is that it is likely that search technologies will (at least semi-)automate responsiveness review in the relatively near term and this will change the way that the work is organised and done in many ways – offering new possibilities for new ways of organising the work. As well as designing those technologies for automating responsiveness review we need to be envisioning how the work will be done in the future, how these technologies will impact the organisation of the case and so on. In this position paper we therefore outline the importance of understanding the wider social context of ED when designing tools and technologies to support and change the work. We would like to reinforce and expand on Conrad's call for IR researchers to understand just what ED entails [2], include the stages that come both before and after core retrieval activities.

The importance of considering the social aspects of work in the design of the technology has been established for some time. Ushering in this 'turn to the social,' and focusing on interface design, Gentner and Grudin [4] described how the GUI has *already* changed from an interface for engineers, representing the engineering model of the machine to one that supported single 'everyman' users (based on ideas from psychology). *From then onwards* the interface has evolved to support groups of users, taking into account the social and organisational contexts of use. This has particular resonance for the design of ED technologies: during ED in particular and the wider legal process there are often many lawyers involved – reviewing documents, determining issues, etc. Even if the way that their work is organised currently is not seen as collaborative in the traditional sense – with individual lawyers working on individual document sets to review them - their work needs to be coordinated and it seems likely that their work could be enhanced by, for example, knowledge of what their colleagues had found, how the case was shaping up, new key terms and facts turned up and so on. Work is often modelled for the purposes of design using process models, but this misses out on the richness and variety actually found when one examines how the work is carried out [3]. Technologies which strictly enforce the process models can often hinder the work, or end up being worked around as was the case with workflow systems since people interpret processes very flexibly to get the work done ([1], [3]). Other studies in other fields have found similar problems when systems are designed on for example cognitive models of how the work is done; they often do not take into account the situated nature of the work and thus they can be very difficult to use [5]. We believe, like [2], that a clear understanding of the social practices of ED is vital for the creation of high-quality, meaningful tools and technologies. We furthermore propose that work practice studies, to be used in combination with other methods, are a central part of getting the detailed understanding of the work practices central to designing useful and intelligent tools. Work practice studies would involve ethnographies, consisting primarily of observation, undertaken of practitioners engaging in the work of ED.

PUTTING THE E-DISCOVERY IN A WIDER CONTEXT

As a first stage of pursuing this research program, we have begun by trying to put the work of ED in a wider context, expanding on existing models like the EDRM one (see Figure 1). In order to propose a new expanded model, which we hope to further validate and refine with work practice studies, we have analyzed the limitation of current models. We take the EDRM model as representative of them, since it was

constructed as part of a common effort of standardization. It seems to us that, while accounting for all the stages, current models of ED mainly focus on the stages up to production. More specifically much of the work of the research community focuses on what is currently the most costly part of the litigation process, e.g. the review for responsive/non responsive documents. For this reason there are many ED tools in support of review. On the other side technology design would benefit from a widening of the current focus to all the *related* case work.

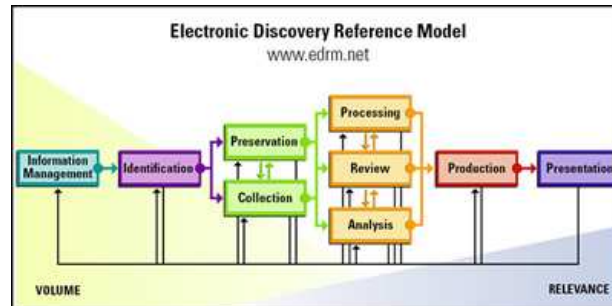


Figure 1: The EDRM model.

We believe this is important for a number of reasons:

- § As new tools change the way the work of ED is done, they could impact on other parts of the process of preparing the case. This should be easier to predict when one keeps in mind the case in it's entirety rather than ED in isolation;
- § tools that support ED might also be relevant in other parts of the process;
- § different parts of the process have implications for how ED can be carried out and as that process changes so there might be consequent changes elsewhere.

In particular there are two areas that need to be better highlighted. The first one concerns the case reasoning activity that ultimately produces the defence or attack line to be used to settle or to go to court. The reasoning about the case is likely to happen from the very start, so we expect it to be important to understand how the review activity informs that aspect in order to design the technology in support of case construction. The second aspect relates to the fact that to our knowledge none of the existing models, including the EDRM, considers the two sides of the process: the plaintiff and the defendant. We believe that this is important when considering design, because technology and reasoning tools could be applied in different ways to determine and find what is and what is not evidence, on the base of these two different perspectives and bodies of knowledge. To conclude, we believe that the design of technology in support of the litigation process is forced to face a number of challenges that are addressed at best by understanding the socio-technical aspects of work through extensive field studies. This research agenda brings additional challenges due to the very confidential and high work pressure nature of these settings, however we believe it is crucial to propose technology that fits with the very sensitive practices of the legal profession.

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