Summary of Discussion for:

Duke Surgery Research Central: an open-source Web application for the improvement of compliance with research regulation

Ricardo Pietrobon, Anand Shah, Paul Kuo, Matthew Harker, Mariana McCready, Christeen Butler, Henrique Martins, C T Moorman, and Danny O Jacobs BMC Medical Informatics and Decision Making 2006, 6:32 (July 2006) http://www.biomedcentral.com/1472-6947/6/32

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The Duke Surgery Research Central (DSRC) tool is a open-source system whose purpose is to assist in the administration of the research grant process. It has three basic goals: to allow researchers to visualize the administrative progress of their projects; to allow research administrators to track all projects; and to generate reports that would establish the current compliance status of individual researchers. The interface has two intended audiences, and therefore two different workflows: one for researchers and another for grant administrators.

The design objectives of the DSRC included: a simple and intuitive researcher interface; security protection behind a firewall; real-time task updates for researchers via email and/or RSS feeds; a clear workflow sequence for researchers; the ability to store peripheral information, including links to other sites; the ability for administrators to track task status; and task "bundling" for easy delegation.

The paper then carefully describes the various facets of each of the two interfaces. And though it's clear that much time was spent on clarifying the various functionalities of each interface, the results (at least from the screenshots and limited demo we were able to run during our discussion) seemed to lack this complexity. While the researcher interface looked intentionally simple, its generic, tab-based approach did not seem intuitive. Equally, the administrator interface seems much more complex and unintuitive than intended. And as we discussed in class, if you had to guess which interface got more attention and development, it would seem to be the administrators'. But the design objectives seem to be emphasizing the opposite.

The usability study we also felt was suspect, or at least not enough information about its conduct was given. Without the actual test parameters, however, it is rather impossible to judge. Still, the results stating that users had "very little trouble with the interface" except in two cases of general computer literacy seemed vague; it would be nice to have stronger definitions of what trouble was encountered. After all, the usability test is intended to be a direct measure of the success in the implementation of the tool.

While the concept of the DSRC has potential, after our examination we feel that this potential has yet to be met in its current implementation.