

Thinksheet: A Tool for Tailoring Complex Documents

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Imagine that you are a “knowledge worker” in the coming millenium. That means you must synthesize information and make decisions such as “Which benefits plan to use?” “What do the regulations say about this course of action?” “How does my job fit into the corporate business plan?” “What should I be careful about when I approach this client?” or even “How does this program work?” If the dream of digital libraries is to bring you all material relevant to your task, you may find yourself drowning before long. Reading is harder than talking to people who know the relevant documents and can tell you what you’re interested in. That is what many current knowledge workers do, giving rise to professions such as insurance consultant, lawyer, benefits specialist, and so on.

Imagine by contrast that the documents you retrieve could be tailored precisely to your needs. That is, imagine that the document might ask you questions and produce a document filtered and organized according to those you have answered. To choose a concrete example, suppose you are interested in social security. Instead of reading the law or the 200 page *Mercer Guide to Social Security* to figure out your benefits, you answer the 30 or so questions necessary to determine your benefits (incomes, marital status, ages of kids, etc.), and then receive as output a four page document that is the law as if it were written for you. If you could avoid reading long complicated documents in favor of short ones tailored to your situation, which would you choose?

We have been developing software to achieve such tailoring. We call it Thinksheet.

Thinksheet documents currently must be created by hand. A very careful reader has to understand the document(s) thoroughly and then program the rules into a thinksheet to generate the tailored document. The

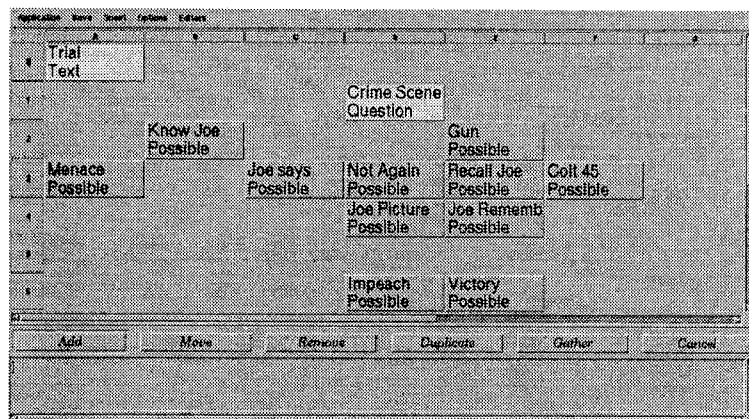


Figure 1: A screen shot of Thinksheet

reader could potentially use a conventional expert system, but programming such a system is challenging and “features” like conflict resolution render the conceptual model more difficult than necessary for such applications.

Instead, Thinksheet combines the technologies of expert systems, spreadsheets, keyword searching (in preparation for more advanced information), and database query processing. The conceptual model is only slightly more complex than a spreadsheet.

Our demonstration will show Thinksheet in action for applications from law, tourism, telephone billing plans, strategies, and others. We will show users how to create their own Thinksheets and how to integrate them with document and conventional databases as well as the internet.

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