Building Mashups by Example
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The paper’s authors are creating a prototype named Karma, which is a unified interactive mashup framework, which will be a new way to create mashups, by example, as opposed to using programs with widgets. It argues that the systems that use widgets are hard because it can be hard to find the widgets and because it is regular users cannot use it, since it still requires programming knowledge. However, their Karma system will instead work by letting the user build an example, which requires no programming knowledge. It integrates the five basic steps of mashup creation: data retrieval, source modeling, data cleaning, data integration, and data visualization, into one program.

The new item in this approach is the creating mashups by example paradigm. Instead of specifying using widgets and using programming ideas, a user can create an entire mashup simply by selecting, labeling, cleaning, and integrating one example of the data that they want to make, with the program propagating the changes among the rest of the items in the data source. This is a very simple approach that any non-programmer can do, so as long as there are no restrictions, this will be very successful. However, there are currently many limitations, such as how to retrieve the data and which cleaning algorithms are implemented.

This system would be utilized by almost every single business and many new businesses if successful. It will be usable by programmers and non-programmers alike and able to make very complex mashups quickly. Even regular users will thrive from creating mashups for personal blogs. The most common mashups seem to include maps, so many new and interesting combinations using maps should be the first type of mashup “type” to really become popular through Karma.

The biggest risk with the Karma system is that it works using a completely different concept than the previous systems, switching from widgets to creation by example. Anytime there is such a drastic switch, there is large risk. The payoff is tremendous if it works: a fully adopted and standardized mashup editor used by everyone for combining data sources. The program prototype is already made and can be ready to be marketed. However, much more detail and capability would need to be built in, some of which was described above. Only a few cases of data is currently covered.