

## Contextual Data Modeling (CDM)

CDM helps you extract more information than you ever thought possible from a computer-generated data table listing the “things” you work with. It is a new type of software in a category all its own.

CDM software is for individuals who analyze things – almost anything. CDM is arguably a new form of Morphological Analysis (systematically exploring with matrices all the possible solutions to a multi-dimensional, non-quantified problem complex involving abstractions). CDM is also systematic, dealing with data tables instead of matrices, and the concrete rather than the abstract. CDM can be compared with assembling a jigsaw puzzle. You do that by moving pieces around to find interrelations of their shape and image until you have assembled the single picture all the pieces make.

In CDM, “pieces” of data are moved around to find useful interrelations (identical, similar, perhaps sequential) that makes sense to you. These “pieces” of data are the parameters of the things (called “items”) you want to analyze. On a CDM data table you list (1) the values of parameters that describe the items (such as weight, type, color, age, date, priority, material, etcetera) and (2) the item names (or numbers). (3) is a patented function not yet embodied – images related to the item names on the data table. You will not move the pieces of data on the data table yourself. Our patented technology will automatically display, at a controlled speed, every possible permutation (arrangement of the parameter columns). As that occurs, the parameter values as well as the item names will change location on the table. As you view the many interrelations, your reasoning will lead toward several hypothetical conclusions. You cannot be sure you haven’t missed something good (or bad) unless you examine every permutation. That is a part of the modeling (manipulating) of CDM.

Another part of that modeling is on-the-fly editing. Unlike the two fixed parameters of jigsaw pieces (shape and image) the many parameter values you see on your monitor can be instantly changed. You can force a connection between 5.5 and 5.6, for example, by making them the same. Or changing light blue to gray.

Cognitive science speaks of “working memory”, a part of your mind that automatically selects and saves data you see on your computer monitor – your “external workspace.” Your mind automatically and unconsciously adds to your working memory – your “internal workspace” – data from your long term memory, i.e. your individual knowledge, experience, and skills. In that expanded context (the C in CDM) your reasoning generates ideas for editing, coloring, and further modeling until you reach personal conclusions from what you see.

Cognitive science informs us the content of your working memory may last only a few seconds. Your reasoning may be interrupted, therefore, if a slight change of the data on the monitor requires an exit from the data table. So the on-the-fly editing in CDM software supports an unbroken correspondence between your internal and external “workspaces”.

There is much more in CDM software! CDM software is highly intuitive, learned by modeling the provided sample data (perhaps using the tutorial).

Note: In addition to analysis, CDM supports both planning (by creating new items) and monitoring (tracking accomplishments of planned items).

---

Read more on our website, [www.execware.com](http://www.execware.com), and download the free trial version of Reason. It has no time limit, and the only crippling is the limitation to its one sample dataset. After you model it for awhile, you can edit it to reflect your own work. You can print the tutorial at Reason Help.