



## Case Study: Mindwalk

By Abraham Lustgarten (March 13, 2008)

**Cognitive mapping software automates processes for graphically diagramming words, ideas and tasks, which can give project teams and managers added insight in planning, transforming the way they make decisions and solve problems. Here's how it helped an AT&T program manager optimize a complex IT project.**

The stakes were high. Dave Davis was leading a meeting to launch a billion-dollar information technology project for one of AT&T's largest global corporate customers. His goal, as program manager for the telecom company's E-bonding unit, was to map out a toolset that would allow the client's hundreds of divisions and thousands of employees around the world to complete myriad transactions — from a repair ticket on hardware to a speaker phone procurement — electronically. It would have to support, as Davis put it, "an entire I-tel framework of tools" that used XML programming to create application-to-application integration between customers and suppliers that would take an order, route it, chart its lifecycle, and incorporate updates.

At the complex project's kick-off meeting, most of the notes were listed outline-style on a large white-board; a bullet-pointed brainstorm of action lists, causal relationships and prerequisites. Around the edges were a series of yellow sticky notes, each with barely legible and smudged scrawls of more thoughts that could be shuffled around. By the end of the meeting, the boards were full and it was tough to recall the logic of all that had been discussed, Davis recalls. "A lot of times when you are in a kickoff meeting, storyboarding, you end up with a bunch of questions and at the end you are like 'what did I mean when I said that?'"

Fortunately, one team member at that meeting was able to offer a lucid summary of the mess of notes and relationships, and instantly changed the way Davis would manage projects in the future. The team member had kept notes on a tablet PC using a mind mapping software called Mindjet, where a graphical set of moveable notes illustrated each of the points made in the meeting. Rather than listing them in the order conceived, the mind map allowed logical connections between them with lines and arrows that more or less visually traced how the conversation had progressed. "It brought structure to a completely unstructured white board form. Nobody really knew where things were going," Davis said. "I immediately said: 'that's good stuff,' and I went out and bought a license."

Mind mapping is a process for graphically diagramming words, ideas and tasks, which can aid organization, problem solving and decision-making. Hand-drawn schematics look less like structured lists and more like free-form tree limbs shooting off in dozens of directions and colors, each branch representing a new clause or category. The elements are organized intuitively, and foster an out-of-the-box brainstorming approach to organizational tasks by getting rid of hierarchy and sequential arrangements that influence prioritization. Increasingly, project managers are using software such as Mindjet to create mind maps that can help govern their largest initiatives.



Davis has since relied on Mindjet for more than 12 projects, using it virtually all the time, and he continues to use mind mapping to organize and lay out important decisions on that ongoing, billion-dollar contract. "It allows us to capture the issues in a contextual format," he says. On his screen, a series of bubbles, like dialogue in a comic strip, are linked in a sort of family tree. One is titled "work session," which leads to a set of bubbles categorized as deliverables, each tagged with due dates and names of those responsible. Other branches are coded "active" or "deferred," referring to the status of tickets. An arrow links one deferred status tree to another half a screen away. "It helps remind me that all these different nodes have a relationship," Davis says.

Davis finds mind mapping most useful when it comes to storyboarding, where Mindjet helps users walk through a process or sequence of events at a high level to imagine each possible resulting scenario.

With the global E-bonding client, storyboarding helped Davis identify an otherwise invisible but critical staffing problem, and helped solve it quickly. The group was walking through a scenario where an electronic order ticket could have been routed to the wrong place, and then assessing the capability for re-routing it back to the right work group. As these steps were identified, another process kicked in and asked, based on estimated ticket volume, "what is your head count to support it?" The team could see on the storyboards that it would be the third tier of processing that would handle such a problem, and that they would need to be able to do so roughly every two hours. What could only be seen in the storyboard format was that the tree branch dedicated to this response — which was annotated with staffing and resource information — wouldn't have the capacity to handle that frequency of requests.

"That was a piece of the puzzle that wasn't there," Davis says. So the staffing model was modified to show increasing productivity in other areas, thus freeing up additional headcount so it could be moved into the third tier problem-solving response group with the drag of a mouse. "It's a great tool for identifying and capturing issues," he says. "The sponsors needed questions answered. The mapping allowed us to do that."

In another case, Davis says the storyboarding helped provoke questions that helped limit the scope of the project. The boards helped to visualize the number of steps required for selling, processing and supporting the use of an e-bond for ordering a component. On screen, the team could see that there were many steps, and it prompted a lively discussion about how much revenue each step might create, and what costs were associated with each bubble. Seeing it laid out graphically made it clear that e-bonding was too expensive — that it would be more cost effective to keep it outside of the automated system. "It suddenly became glaringly obvious it wasn't worth it; it was a \$10,000 solution to a \$500 problem," Davis says.

Mind mapping has limits. It's not great for creating status reports and "reporting out," as Davis puts it, and if a project is more list-oriented, other software might track progress better. The strength of mind-mapping software is in brainstorming and devising strategies and processes — drawing the kind of road maps that help complex projects get done. When it leads to small gains in efficiency — like better staffing or the decision to keep a product launch out of the e-bonding system — Davis says happy clients are a bonus.



"Without Mindjet we could have identified it with sticky notes," he says. "But I would say \$10,000 was saved in not having to develop this, and we probably dropped it three weeks before we would have had we not had these tools."

"I have used mind mapping tools for well over 12 years - starting with VISIMAP and moving on the Mindjet (MindManager) about 8 years ago. I use it particularly during the conception stage of projects as it allows you to just blast out ideas without structure. As the project begins to formulate the structure can be introduced, a Microsoft Project schedule generated. I also use it to develop documents - again the ideas percolate then the structure becomes clearer, the writing follows and export to Word, a final bit of tidy up and there you have it. Presentations are a snap - do it MindManager and simply export to Microsoft PowerPoint. For those of us with quite structured ways of working, mind mapping can help let the creative side find expression (while keeping structure a clear outcome)."

sdrew - *March 16, 2008*

"Abrahm, I've used MindManager in the aerospace and defense project management business to build the Integrated Master Plan (IMP). This is an Event Based approach mandated by the procurement process that defines the incremental maturity of the program. Each event is a maturity assessment point, with Significant Accomplishment and Accomplishment criteria. MM is natural vehicle for capturing, reviewing and then publishing the results of the Product Development Kaizen sessions that develop the IMP. The final step is to export the map to MSFT Project as the starting point for the Integrated Master Schedule. Glen Alleman."

gballeman - *March 13, 2008*