

## **Stunning New Depictions of PM Enabled by ConceptDraw Office**

### ***Introduction***

New software doesn't often excite me. After all, software comes, gets upgraded and software goes – either because it becomes overburdened by "features" or gets rejected by the market. Or "new and improved" replacements may overtake it, or the rug gets pulled out from under because the supporting operating system is changed. Besides, software review is not my thing.

But in this case, I am taking the opportunity to test drive a new suite of project management relevant graphics programs to highlight three of my favorite topics:

1. A new illustration of a systems model of project management
2. My SCOPE-PAK brainstorming exercise designed to introduce to new comers the content and feel of project management, and
3. A simplified mind map of the project management knowledge that an accomplished project manager really needs to know.

I suspect that the most common software used in today's projects is one of the many Email clients for exchanging Emails, and programs for text editing and number crunching for the exchange of words and numbers. Yes, of course, there are various project planning programs that ultimately communicate by pictures of bar charts, but these are typically sophisticated, highly structured, and require something like an advanced degree in computer programming to be able to manipulate successfully. The effort to produce effective plans and maintain them up to date often exceeds the value and usage of the graphics produced. And that probably accounts for why so many more scheduling programs are sold than are actually used.

That a "picture is worth a thousand words" is well known. So an easy-to-learn-and-deploy graphics capability, especially across different computer platforms, would be a godsend – not just for quickly creating Gantt charts, but idea maps, organization charts, process charts and so on. Such a blessing may now be at hand, because it appears that CS Odessa Corporation has produced a suite of three programs that are ideal for just such creative diagramming.

These three programs are ConceptDraw PRO; ConceptDraw PROJECT; and ConceptDraw MINDMAP. Best of all, each of these applications are interlinked so they can exchange content with the others, and documents created on the MS Windows platform can be transferred to the Mac platform and vice versa. For its modest price, you get software for both platforms and, since the Mac is a much friendlier platform for graphics work, this makes it a software-of-choice for those like me who use both a Mac and a PC.

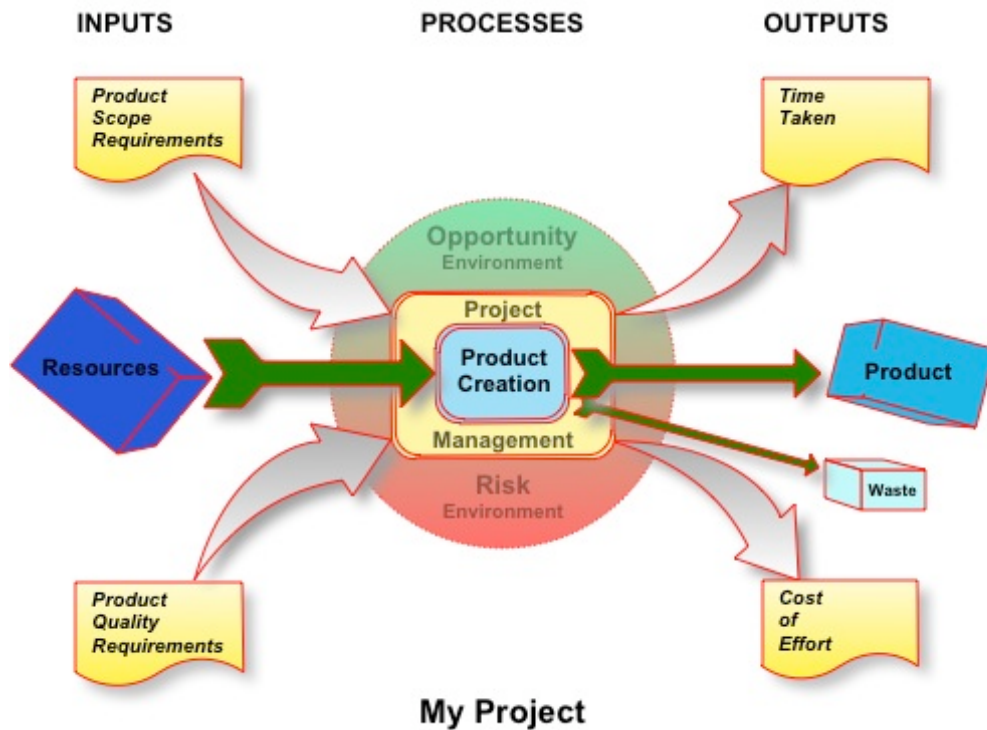
In the next three pages, I have used each program in turn to illustrate the three favorite topics that I mentioned earlier.

### **ConceptDraw PRO: The PM System**

ConceptDraw PRO comes with a large selection of plain and colored drawing shapes that, as you might expect, can be manipulated as vector artifacts with full drawing capability including such things as control over opacity. There is also a Template Gallery of over 20 topics, each offering multiple templates to get you started quickly. Interestingly, this Gallery includes Project Management as a topic

and this offers five useful charts frequently used in PM communications. When you open one of these templates you automatically get the associated library of shapes to work with, to say nothing of a variety of backgrounds if you want to get really fancy. Personally, I prefer to avoid clutter that is uninformative and hence unnecessary.

However, without dwelling on the technicalities too much, Figure 1 demonstrates the diagramming capability of the ConceptDraw PRO program. I created this stunning graphical explanation of the typical systems view of project management and its environment in about half an hour – once I'd figured out what I was trying to convey.



**Figure 1: The Project Environment**

To emphasize the true value of this graphic, here is its explanation.

At the core of any project is the business of creating some new or improved product. This is strictly a technological issue that requires its own specific methodology or process. Those in IT, for example, know very well what it takes to create a new program, just as those in construction likewise know what it takes to create buildings or real infrastructure. Each requires its own technological approach, and often there are alternative ways available for doing so. This is shown clearly by the green arrows moving resources (people, equipment and materials) through a Product Creation process of some sort, to arrive at a final Product – with inevitable Waste being produce in the process.

But this project production process needs managing, that is to say, it needs project management. Project management has a distinct process of its own that, unlike the diversity of technological processes, is relatively uniform for all projects. The basic artifacts of the project management process are the two inputs of Scope and Quality requirements, and the resulting outputs arising from the Product Creation process are Time and Cost. These are illustrated in our graphic by the two yellow documents of scope

and quality requirements feeding into project management with the gray arrows and subsequently resulting in the schedule and cost documents as outputs.

And all of this takes place in an environment of Opportunity and Risk that we call Project Risk Management. This is depicted by the circle that fades from green (for "Go") to red (for "Take care!") Now, just observe how these three concepts sit one on top of the other. The Product Creation process is backed by Project Management that takes place in an environment of Opportunity and Risk.

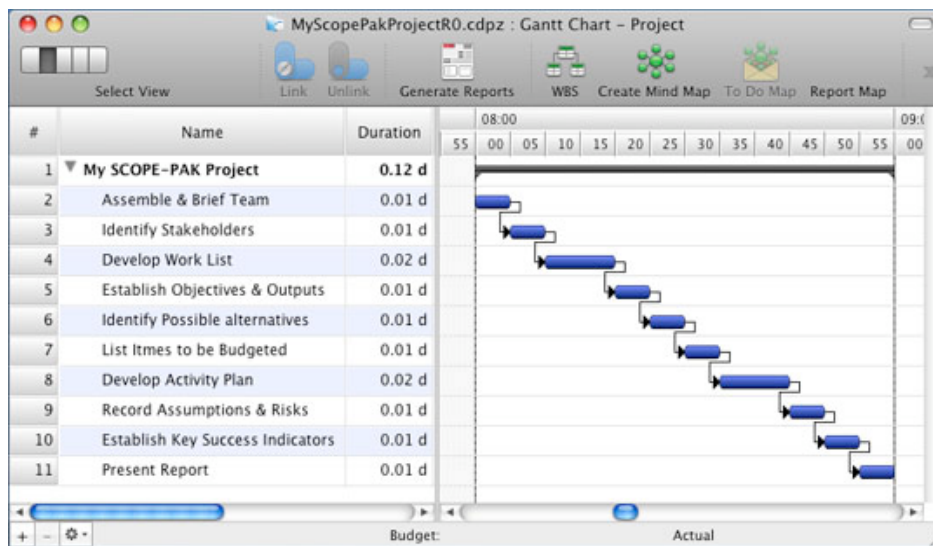
The most important point to note is that the process of product creation, and the necessary steps involved, i.e. the technological life cycle, is not the same as the process for managing the project, the project life span sequence.

**ConceptDraw PROJECT: The SCOPE-PAK Plan**

Yes, I do have a copy of Microsoft Project. And yes I have used other software such as the very expensive Primavera (someone else's copy). I used it for analyzing complex scheduling situations for purposes of resolving issues in cases of post-project litigation (and paid for by one of the litigants). In days gone by we've also used Time Line, by Symantec; and its sibling, On Target, which I rather liked because of its greater flexibility and simplicity; and Project KickStart for its library of project activities.

I also like Milestones Simplicity, for just that – its simplicity because it is really a graphics program designed specifically for producing colorful bar charts from a host of lines, patterns, and relevant icons. But none of these are, or were, cross platform. The best you could do is save your work as a PDF file and send it out on a take-it-or-leave-it basis.

Given the foregoing constraints, I was quick to put ConceptDraw PROJECT to the test. As a quick example I settled on my own SCOPE-PAK exercise to see what it would look like. You can see my first attempt in Figure 2. And, of course, you can read all about SCOPE-PAK here. [Link to <http://www.maxwideman.com/papers/scopepak/intro.htm> ]



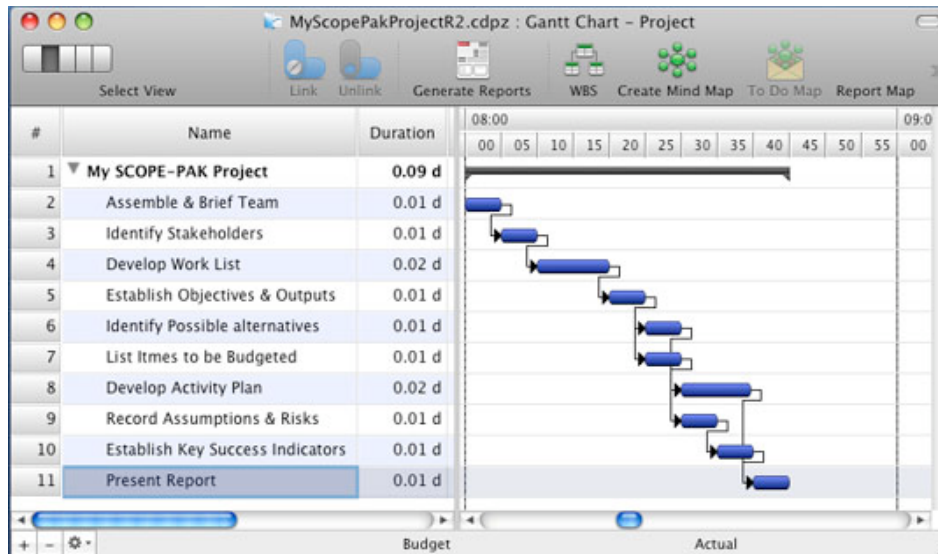
**Figure 2: The SCOPE-PAK brainstorming exercise**

Once I had found my way around the menus and short cuts, this chart took me about 15 minutes to create. The beauty of this software, apart from the fact that I am using a Mac, is that you can either type

in data or play around with the bars and links directly in the graphics panel. That is you can stretch or shrink and shunt bars around to suit your intuition. Its simplicity derives from the fact that the program is unencumbered by heavy and rigid background network logic constraints.

You can see in this illustration that, with a small brainstorming group of five to six people and a computer, you can actually create a real project plan in 60 minutes. It is better still if you are hooked up to a projector and screen. Yes, I know you don't believe it, but I've organized such groups many times.

But let's not be satisfied with that arrangement. If you decided that some parallel working would be in order then you can split the team in two for parallel working, with the result as shown in Figure 3.



**Figure 3: An accelerated version of the SCOPE-PAK exercise**

This illustration shows that, if you really try, you can do the exercise in 45 minutes – and, yes, I've done that, too!

By the way, changing that diagram took less than a couple of minutes.

### **ConceptDraw MINDMAP: The PM Knowledge Domain**

Some will be familiar with the idea of "mind mapping", especially those who have used a competing product: MindManager by MindJet LLC that is available only for PC users. For those not familiar with this technique, the idea is to put a subject in the middle of a piece of paper, and link to it whatever related topics come to mind, with subsidiary linked topics as appropriate. So, ConceptDraw MINDMAP is a graphics program for brainstorming generally.

It enables you to collect and present ideas for such things as: developing thoughts for business cases; listing project objectives or project risks; solving problems, or organizing and structuring activities required to execute a project. The program's ability to share content with the other ConceptDraw Office tools, especially ConceptDraw PROJECT makes it a valuable way to rapidly develop preliminary project plans. In fact, generating a project file and Gantt chart are only one or tow clicks away.

As an example of a mind map, I constructed the chart shown in Figure 4, albeit sometime ago in

MindManager and now transferred to MINDMAP. The original content was developed by twenty-one experts, who together represented considerable breadth and depth of project management experience around the world. They did so at a three-day working session in Lille, France, in February 2003. However, the source of much of the information arose from a prior detailed examination of then current project management standards and guides to elicit basic concepts and arrive at a consensus on:

1. A definition of the role of the Project Manager, and
2. Identification of 13 Units describing significant functions that need to be performed by most Project Managers in most contexts . . .

I subsequently modified the original overly complex diagram to produce the simpler consolidated version as shown in Figure 4. The numbers in the diagram are references to the 48 topics in the original study. Unnumbered topics are those that I feel were missing and that I have since added.



**Figure 4: Wideman's simplified map of project manager responsibilities and needed knowledge**

It was my hope at the time that this model, or something similar, could become generally accepted as the basis for project management content. That's because, in all, this mapping encompasses a much broader spectrum of knowledge relevant to project management than just the current eight specific PMBoK knowledge areas that you see gathered together here under the topic of "Integration". I also think that it

represents a much more logical grouping of topics for purposes of focused or specialty project management teaching and learning. Indeed, I often see project management courses offered that focus solely on one or more of these groupings.

The items in the yellow box in the top left hand corner, by the way, are those items that I believe belong in the newly emerging and separate discipline of project portfolio management. I assembled this group's content from entries first identified back in 2003 as I described earlier. Now, five years later, Project Portfolio Management (PPM) has come to the fore and, I suspect, still has some way to go before PPM is recognized for what it is – a new discipline, on a new plane, complete with its own tools, techniques and even its own Body of Knowledge.

In my view, there are lots of future opportunities for project managers and associated disciplines to move up the ladder into this domain, for those willing to study and accept the challenge.

Such is the power of graphics for effective communication.