Skills based resource assignment:
Dream come true or Nightmare?

What are we talking about here?

In Washington D.C., I recently attended the world wide launch of the new Microsoft Project 2002[*]. It was a nice affair that generated much excitement. With this product Microsoft is poised to challenge the "big names" in project management tools. It is positioned as an enterprise solution to project management, while still being able to be used by individuals. It has many new and exciting features. "Great," you say. "What's the big deal," you say? One of new features is really new only to Microsoft Project. It has been around a while in other project management tools.

Skills based resource assignment?

The first time I was asked to write an automated tool for project management, one of my clients suggested it might be nice for the tool to be able to assign resources to tasks based on their skill set. I had philosophical problems with the concept then, and, fortunately for me, computers in those days did not have the horsepower to even attempt something like that. So, in that case, it went away. Over the years as I have helped companies select automated project management tools, the concept reared its head again.

Some of the more sophisticated products have had "skills based resource assignments" for a long time. On the surface it seems wonderful, and probably can be made to work in some organizations. It is my purpose here to point out some pitfalls you could encounter.

As its name suggests, "skills based resources assignments" allows the tool to assign resources based on availability and the skill needed to accomplish the task. If you needed a COBOL programmer, or a network person, or a person that could use a certain type of construction tool, the system would match those skills to the task at hand. Wow! I confess, it sounds great. Should we be wary?

What could go wrong?

Let's start with what the tool needs to know in order to make this decision. First it is necessary to understand the skills required to accomplish the task. Each

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[*] Microsoft Project is a registered trademark of Microsoft Corporation.

tool's implementation of this feature would provide a way to delineate the requirements. It is extra work perhaps, but doable. Second, the tool would need to know who in the resource pool has those skills, and is available. It seems logical that the tool would have to be able to determine the level of expertise the resources have so it could assign the most experienced person.

If the tool needs this information, then we are going to have to provide it. If you have a 3 person project, you could probably do this; but you probably wouldn't need to. If you had a 300 person project, how hard would it be to provide this? Would the Human Resources department permit it? How would the information be maintained? When people came back from training, their information would have to be updated. As they gained experience on the job, their information would have to be updated. As people cross-trained within the organization, their information would need to be updated.

Could it be done? Probably it could; but at what cost? Keep in mind that in order for this to work, the skills information must be kept up to date. Do you currently have any difficulty keeping project data up to date? Would this added burden make it any easier?

And so…

I am not suggesting that you not avail yourself of this interesting and potentially useful tool. I am pointing out that there is no free lunch. To make this work properly takes a major commitment. Basically I want you to keep in mind that it isn't magic. If the tool needs the information, you need to provide it and keep it updated. Also, even though I only mentioned it briefly above, the Human Resources aspect can be a real stumbling block. This type of information is usually kept in personal files, if it is kept at all. HR is not big on disseminating it for any reason.

Well I hope this helps, and gives you something useful to consider as you enter this brave new world. Good luck.