

# Sifting With the CIFTER

© 2006 William R. Duncan, [www.pmpartners.com](http://www.pmpartners.com)

One of the key responsibilities of a Projects Management Office (PMO) is to ensure that the organization is competent to deliver a steady stream of successful projects. Whether the project is tactical or strategic, short or long, large or small, the organization hopes that *every* project will be highly successful, and expects that *most* projects will be reasonably successful.

Becoming competent requires that you improve the capacity of your organization along a number of complementary dimensions: getting better at deciding which projects to work on, getting better at managing each individual project well, and providing support from the top for good project management. This idea of *organizational competence* will be a recurring theme in later articles.

One aspect of organizational competence that is often given short shrift is the process of project manager assignment. In an ideal world, project managers would be as movable as books on a shelf: you could sit down, rank your projects in order of importance, rank your project managers in order of skill, and make your assignments by putting the two lists side-by-side. But in this non-Panglossian world most organizations are still making their assignment decisions based primarily on availability: whoever is free gets the next project.

Is there a reasonable middle ground between these two extremes? Is there something that you can do to improve project manager assignments in the real world? I would like to suggest that an excellent solution would be to match the *management complexity* of your projects to the *skills* of the project managers that you assign to them.

## Categorizing Projects

Many organizations have attempted to classify or categorize their projects in some fashion. These taxonomies usually involve size (cost, duration, number of people) or technical complexity. Unfortunately, these characteristics don't always correlate well with management complexity. For example,

the construction of a coal-fired power plant is large, but not especially complex technically.

At the opposite end of the spectrum, much drug research is quite complex technically but may involve only a few people. A large, simple project may waste the skills of a top project manager while a small, challenging project overwhelms a lesser PM.

In similar fashion, many organizations have made major investments in knowledge-based professional certification. Yet while knowledge is a prerequisite for skill, the ability to make the correct selection on a multiple choice exam does not guarantee an appropriate response in the often chaotic context of projects and project management.

In this article, I will focus on the first part of my proposed approach: how to categorize projects in terms of their *management complexity*. I am pleased to be able to share with you some work that I have done on behalf of (and with significant input from!) the Global Alliance for Project Performance Standards (at <http://www.globalpmpstandards.org>). GAPPS includes representatives from business and industry, from government, from all of the major project management professional associations, and from several colleges and universities as well. It is a diverse and representative group.

## Project Manager Roles

Over the past several years, GAPPS has met in France, Australia, Russia, the UK, and South Africa to wrestle with the question of what it takes to be viewed as a competent project manager. Early on, we concluded that *project manager* was a multi-level role much like *chief executive officer*. For example, the CEO of a 500 person firm may have responsibilities similar to those of the CEO in a 500,000 person organization, but few would expect that the former could step into the shoes of the latter and be seen as competent.

By combining research with hundreds of years of experience and many hours of discussion and debate, we finally settled on two levels of project manager that we call Global Level 1 (G1) and Global

Level 2 (G2). We intentionally chose non-committal names for the two levels since there is no generally accepted approach to titling project managers.

Common titles for someone functioning at the G1 level include project manager, junior project manager, team leader, and discipline leader. Common titles for the G2 level include project manager, senior project manager, and project director.

We also recognized that there were individuals involved in project management both above and below these levels. For example, competence in the program management role at a defense contractor may overlap that of a G2, particularly in the area of leadership and stakeholder management. Below G1, a new project manager or a competent subproject manager is likely to have some of the same skills required for competence in a G1.

### Distinguishing the Roles

To identify the project characteristics that distinguish these two roles, we identified well over a hundred potential items. We used a variety of group decision making techniques to group and name the key factors, then tested our results against a set of specific projects from a variety of application areas.

For example, if the GAPPS members agreed that the construction of a nuclear power plant required a higher level of competence than the purchase and installation of 100 computer work stations, did the management complexity factors support that assessment? More than a few of our early drafts were rejected when they were unable to pass this “sniff test.”

At our most recent meeting in Singapore, we finally agreed on the final form of the management complexity factors (see table 1). Although many contributed, and although I did most of the final wordsmithing, we named the list of factors after two of the key GAPPS members, Lynn Crawford of Australia and Masayuki Ishikura of Japan.

Using their names gave us a wonderfully descriptive and pronounceable acronym: CIFTER (“sifter”) for the Crawford-Ishikura Factor Table for Evaluating Roles.

### Using CIFTER

To use the table, you must of course understand the elements:

1. ***Stability of the overall project context.*** The project context includes the project life-cycle, the stakeholders, the degree to which the applicable methods and approaches are known, and the wider socioeconomic environment.

When the project context is unstable — phase deliverables are poorly defined, scope changes are frequent and significant, team members are coming and going, applicable laws and regulations are being modified — the project management challenge increases.

**Note:** some aspects of “technical complexity” such as dealing with unproven concepts would be considered here.

2. ***Number of distinct disciplines, methods, or approaches involved in performing the project.*** Most projects involve more than one management or technical discipline; some projects involve a large number of different disciplines. For example, a project to develop a new drug could include medical researchers, marketing staff, manufacturing experts, lawyers, and others. Since each discipline tends to approach its part of the project in a different way, more disciplines means a project that is relatively more difficult to manage.

**Note:** some aspects of “technical complexity” such as dealing with a product with many interacting elements would be considered here.

3. ***Magnitude of legal, social, or environmental implications from performing the project.*** This factor addresses the potential external impact of the project. For example, the potential for catastrophic failure means that the implications of constructing a nuclear power plant close to a major urban centre will likely be much greater than those of constructing an identical plant in a remote area. The management complexity of the urban project will be higher due to the need to deal with a larger number of stakeholders and a more diverse stakeholder population.

4. **Overall expected financial impact (positive or negative) on the project's stakeholders.** This factor accounts for one aspect of the traditional measure of "size," but does so in relative terms. For example, a project manager in a consumer electronics start-up is subject to more scrutiny than a project manager doing a similarly sized project for a computer manufacturer with operations around the globe.

**Note:** where the impact on different stakeholders is different, this factor should be rated according to the impact on the primary stakeholders.

5. **Strategic importance of the project to the organization or organizations involved.** This factor addresses yet another aspect of "size," and again deals with it in relative rather than absolute terms.

While every project should be aligned with the organization's strategic direction, not every project can be of equal importance to the organization or organizations involved.

**Note:** as with financial impact, if the strategic importance for different stakeholders is different, this factor should be rated according to the strategic importance for the primary stakeholders.

6. **Stakeholder cohesion regarding the characteristics of the product of the project.** When all or most stakeholders are in agreement about the characteristics of the product of the project, they tend to be in agreement about the expected outcomes as well. When they are not in agreement, or when the benefits of a product with a particular set of characteristics are unknown or uncertain, the project management challenge is significant.

7. **Number and variety of interfaces between project and other organizational entities.** In the same way that a large number of different disciplines on a project can create a management challenge, a large number of different organizations can as well.

**Note:** issues of culture and language would be addressed here.

**Crawford-Ishikura Factor Table for Evaluating Roles (CIFTER)**

Project Management Complexity Factor	Descriptor and Points			
	Very high (1)	High (2)	Moderate (3)	Low/Very low (4)
1. Stability of the overall project context	Low (1)	Moderate (2)	High (3)	Very high (4)
2. Number of distinct disciplines, methods, or approaches involved in performing the project	Low (1)	Moderate (2)	High (3)	Very high (4)
3. Magnitude of legal, social, or environmental implications from performing the project	Low (1)	Moderate (2)	High (3)	Very high (4)
4. Overall expected financial impact (positive or negative) on the project's stakeholders	Low (1)	Moderate (2)	High (3)	Very high (4)
5. Strategic importance of the project to the organization or organizations involved	Very low (1)	Low (2)	Moderate (3)	High/Very high (4)
6. Stakeholder cohesion regarding the characteristics of the product of the project	High (1)	Moderate (2)	Low (3)	Very low (4)
7. Number and variety of interfaces between the project and other organizational entities	Very low (1)	Low (2)	Moderate (3)	High/Very high (4)

The mechanics couldn't be simpler. Choose the term that you think most accurately represents the characteristics of the project under consideration.

For example, if you think that the stability of the project context is "high," that project rates a two on this first factor. Rate the other six factors and sum the numbers.

We recognize that the terms in the four columns are somewhat subjective, but as long as you are consistent in your assessments, you will be able to distinguish your more managerially complex projects from your less complex ones.

In addition, there is some overlap in the factors. For example, a project with a large number of distinct disciplines, methods, and approaches (factor 2) is likely to have a large number of interfaces (factor 7) as well. Once again, if you focus on the overall picture, you should get good results.

### **Assigning a Project Manager**

The assignment heuristics are equally simple: higher scores require a more skilled project manager.

CIFTER won't make any decisions for you. CIFTER won't help you find a skilled project manager if you don't have any available. But it can provide some guidance to help you make better decisions when you do have options. In addition, you can use it to assess your current assignments. While you probably won't be able to create perfect alignment, highlighting major mismatches will at least tell you which projects you should be paying special attention to.

If you have any questions, comments, concerns, suggestions, or critiques of CIFTER, please feel free to share them with me at [cert@asapm.org](mailto:cert@asapm.org), and I will pass them along to GAPPS.

---

### **About the Author**

William R. Duncan is a principal of Project Management Partners, a project management consulting and training firm headquartered in Lexington, MA USA. He was Director of Standards for the Project Management Institute, Inc. (USA) from 1992-1998 and Director of Standards for *asapm* from 2000-2005. He is currently chair of PMCert, *asapm's* independent certification body.

He was the primary author of the 1994 and 1996 versions of *A Guide to the Project Management Body of Knowledge* and his "process model" of project management was used to organize ISO 10006, *Guidelines for quality in project management*.

In addition to his work with his corporate clients, Mr. Duncan has worked as an expert witness on project management practices for a major USA law firm. He speaks widely throughout the world on topics such as Organizational Competence in Project Management™, Project Dynamics: the Law of Unintended Consequences, Project Recovery Optimization Process (PRoP™), and Project Portfolio Management.

Portions of this article are copyright 2006 by the Global Alliance for Project Performance Standards and are used with permission.

### **More about CIFTER**

You can find out more about CIFTER, with examples of its use, from the Certification website at: [www.asapm.org/Cert/resources/more\\_cifter.pdf](http://www.asapm.org/Cert/resources/more_cifter.pdf)