

Distinguishing PM Competence in Training and Development, Organizational Assessment and Certification

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Abstract—Nearly everyone appears to be boarding the Project Management Competence fast train (a reference to Shanghai’s MagLev Fast Train, where Shanghai is where we presented). But few people really understand the nature of PM Competence.



Some know how to develop it, yet few know how to assess its presence in a project team or Project Oriented Enterprise; and even fewer know how to adequately certify it.

certify it.

While professional societies have made significant progress in developing Competence-based Program and Project Manager Certifications, the “*forgotten many*” stakeholders have been largely ignored. It is not enough to build Project Manager Competence: one must build Competence throughout the team. This paper shares a perspective gained in 24 years of training, coaching, and assessing factors leading to demonstrated Project Management Competence.

The audience of this paper includes Project Managers, their Managers, Team Members, Human Resource Managers, Project Management Training Vendors, and Executives of Project-Oriented Enterprises and professional organizations who intend to improve project performance by improving *all* stakeholders’ Project Management Competence.

1. INTRODUCTION

In too many situations, we observe speakers who interchange the terms Knowledge, Skills and Competence without regard to their meanings. As a result of these flawed practices, a number of people have been certified in project management Knowledge, and believe they are competent as Project Managers. In the past, some companies even required that all PM job applicants needed certification, because they had the same mistaken impression, that Knowledge equates to Competence.

IPMA, the International Project Management Association, has worked for years to dispel the confusion and clarify the differences between Knowledge, Skills and Competence. IPMA continues to make progress, through its 4-L-C Four-Level Certification Program.

IPMA also works to help others improve their understanding of the difference between Knowledge and Competence. It is anticipated that this clarification will continue as project managers, Enterprise executives and project management training vendors rush to catch the Competence fast train before it leaves the station.

2. It’s All About Competence

2.1 Some Definitions

What is Competence? Some definitions will help. Webster’s Dictionary defines Competence as: Qualified, capable, or adequate for the stipulated purpose. ISO 17024 [1], the Competence Standard, defines Competence as: demonstrated ability to apply Knowledge and/or Skills and, where relevant, demonstrated personal attributes as defined in the certification schema. [2] Stacy Goff’s experience with the subject leads us to define Competence as: Consistently-demonstrated and appropriately used Attitudes, Behavioral Attributes, Skills and Knowledge, resulting in clear Enterprise benefit.

In the USA, the term Competency is the equivalent of the term Competence. To avoid confusion, we use the term Competence throughout this paper.

2.2 Societies Embrace Competence-Based Certs

Virtually every PM-related Society now offers or has announced Competence-based Program or Project Manager certifications. The market clearly recognizes that it must move to PM Competence. At the same time, even with this apparent “discovery” of the need for Project Manager Competence, very few Enterprises are paying attention to developing the Project Management Competence of all the other project Stakeholders.

These stakeholders are today’s forgotten many.

2.3 Before and Beyond Certification

Even with this refreshing “discovery” of the need for Project Manager Competence and the consequential rush to join the Competence Fast Train, serious questions remain.

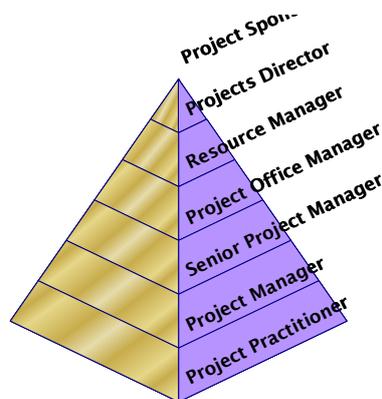
For example, as Dr. Lew Ireland, points out, “*Certification of the individual does not add value to the organization: Done well, it does **recognize value.***” And we agree. So the obvious next question is, what exists that assists one **to achieve the competences that do add value?**

3. Who Needs PM Competence?

3.1 Target Audiences: Individuals

Project Management Competence is not just for Project Managers. One must develop Competence throughout the team. Every project stakeholder must be competent in his or her role. For Example: A common project failure point is the gap in Competence (and resulting performance shortfall) from a Resource Manager who fails to correctly prioritize projects, and assign the right Team Members with the right Skills, the right amount of time.

But, one might ask, “isn’t that why we want to have competent Project Managers?” The problem is, even an incredibly competent Project Manager cannot compensate for the project stakeholders who cannot competently perform their roles—thus requiring the Risk Response action of finding and correcting your weakest links.



3.2 Beyond Individuals: Teams, Organizations

Project Management Competence benefits individual stakeholders. It has potential to benefit Project Teams as well. For example: we use Competence Assessment as part of Project Kickoff in larger projects. What better way to identify the strengths and gaps of your extended team—and what better timing for this action, than at Project Start-up?

For Departmental use, some elements of Project Management Competence are the closely-held secret of line Managers who have Upper-Management aspirations. For the Enterprise, PM

Competence is already a strategic and competitive advantage for many of today’s most successful organizations.

3.3 Understanding Competence’s Importance

Clearly, PM Competence matters in all Project-Oriented Enterprises. And this helps explain why most professional PM societies have either adopted a Competence-based Certification approach, or are now rushing to do so.

This Fast Train to PM Competence-based certification raises the question of how one traceably assesses and develops Competence. Another question: how does one determine current Competence requirements for the roles one plays, identifying gaps and strengths, and establishing a development plan against valid Competence criteria? But perhaps we are getting ahead of ourselves. Before we discuss how individuals and organizations develop Project Management Competence, let us look at the journey one travels to achieve any type of Competence.

4. Exploring PM Competence

4.1 ASK and the Competence Development Ladder

How does one achieve Competence? Can you *teach* it? And if not, how does one get there? Starting from the base of our Competence Development Ladder at right, one must first understand the differences between Project Management K: Knowledge, S: Skills, A: Attitudes and Behavioral Attributes, and C: Competence. A key point: assure that your PM training efforts contribute to project success, as opposed to merely consuming staff time and training funds with no improvement.



The basis of our Competence Development Ladder is the classic training and development ASK model: Attitudes, Skills and Knowledge. Familiar to many as a categorization of learning objectives and a foundation of Instructional Design, one begins with Knowledge, applies it to develop Skill, and then receives rewards and recognition to reinforce the behavior (reinforcing Attitudes).

To complete our Competence Development Ladder, and to reflect the role of Competence, we add its C to the classic ASK model: Thus **CASK**.

Let us look more closely at each of the Competence Development Ladder components.

4.2 Learning About Knowledge

Knowledge is an important foundation. But by itself, it accomplishes *nothing*; it is Potential Energy, just as we learned in Physics.

It must be applied to accomplish anything; and once applied it turns to **Kinetic Energy**. Kinetic Energy can accomplish needed results. Knowledge decays if not applied. We have tracked the half-life of unused new learning **at 2-6 weeks**. Clearly, we need more than Knowledge, even with some of today's most effective Project Management training.

4.3 Moving to Skills

Skills move us higher up the ladder towards Project Management Competence. They come from **experience** with proper application of the Knowledge. While Skills degrade slower than Knowledge, they do require coaching, redirection and reinforcement to sustain and grow. Case-study or simulation-oriented workshops can begin to build Skills, but most Skill-building occurs in the real world, and on real projects. Skills are not Competence. We have farther to go, before we reach Competence.

4.4 Attitudes and Attributes

Note that we are moving from factors that are easy to measure (Knowledge), to those that are harder to measure well (Skill), to factors that are very difficult to measure (Attitudes). Attitudes affect your inclination to change behaviors. Without willingness or eagerness to apply them, Knowledge and Skill are wasted. Without rewards, Attitudes dissipate. This shows the importance of understanding one's (and others') motivational needs.

What about one's Behavioral Attributes? These reflect your essential self, your personality. They involve Social Competences, and include thinking, behavior and leadership styles. They reflect willingness to learn, and to change. They are affected by your Value Systems, are harder to evaluate, and are, in our opinion, 90% of project success. We combine Attitudes and Behavioral Attributes as one crucial step in the PM Competence ladder.

4.5 And Then There Is Competence

Applying the preceding steps can lead to Project Manager Competence— however, for many there

is still one missing ingredient: **Opportunity**. Some never get the opportunity to grow; others do, but are not successful. Some succeed, and understand why. Thus given Opportunity, the right Experience, repeated correctly, can lead to Competence. The result: Demonstrated project benefits.

5. Developing PM Competence

5.1 Recognizing and Developing Competence

Are people born Competent? How do you know where you currently stand, and where to apply the most effort? Going to yet another class and memorizing processes and formulae are woefully inadequate, not only for today's certifications, but for improved Project Manager effectiveness!

5.2 Performing PM Competence Assessment

Our first Competence Assessment was in 1983, resulting from a Skills Needs Assessment that we had performed. Our client was a major electric utility that built and operated a Nuclear Power Plant. They asked if we did Competence Assessments: most of their Engineers had been assessed in their roles, but their Project Managers had not.

We worked with this client to set up a PM Competence Assessment Center, and thus extended our services portfolio from training and Skill Needs Assessment to PM Competence assessment and development. Our processes ranged from informal self-assessments, to more rigorous assessment by managers, to formal assessments that we performed, or certified others to perform, requiring evidence of Competency in results.

As a consequence, we also adjusted our Project Management curriculum to support attainment of needed levels of Project Management competence for a range of target roles in a PM Progression Ladder, and for key Project Stakeholders as well.

5.3 Establishing Competence Baselines

A key to PM Competence Assessment is to establish the right baseline against which to perform assessment. Our early 1980s baseline was the result of a PM processes analysis, our definitions of key Project Roles, and the level of Competence needed for each role in each competence item. In the 90's, we added Competences that included interpersonal skills and a General Management model to show additional disciplines one would master to achieve each needed PM Competence.

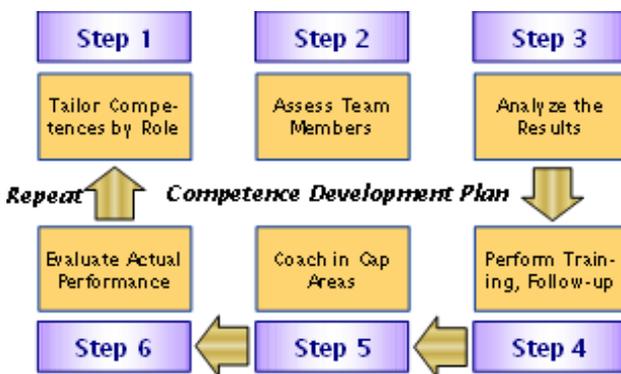
6. Enter PM CompModel

6.1 One Cannot Assess In a Vacuum

From the beginning it was clear that one cannot get the needed assessment results by merely determining the Competence of one Project Manager. We must understand the performance of all participants in the project interactions and outcomes. And, because one person could fill multiple roles, each person needed to be assessed against all the Competence criteria of *all* of his or her roles.

6.2 As Scope Grows, Better Tools Are Needed

While we were able to perfect our processes (see the PM CompModel Process steps below), the information management demands were daunting. We struggled with spreadsheet-based tools that gave useful results—but required significant effort to apply. Finally, in the mid-1990's, we started using a database to analyze the information.



6.3 A Competence Progression Scale

Given our view of Competence as a progression from Knowledge, through Skills, through Attitudes and Attributes, to Competence, we had a challenge: How does one determine the required level for each role and each criterion? Further, what scale helps reliably evaluate a person?

Our solution: to adapt Bloom's Taxonomy [3] (the 2000 update [4] is even more useful), because we are evaluating Knowledge at the initial level anyway. Then at the upper levels, we adjust Bloom to reflect the progression up our Skills — Attitudes — Competence Ladder. Bloom distinguishes Cognitive (Knowledge-based) from Adaptive (Attitudes and Behaviors) criteria.

We found that the Cognitive scale works for the Behavioral criteria. Bloom's Taxonomy is an especially useful solution because it bridges the gap between Learning and Competence Development. It also provides a consistent mechanism for

evaluating the level of a Learning Objective or Competence Criteria by classifying the verb and noun(s) in the statement.

6.4 Early Adapters

From the beginning, the PM CompModel process had great application in many Project and Program Management arenas. In addition, it had great usefulness in the Program Management Office. We have adapted it for specialized uses, such as expanding it to include key roles in Information Technology projects, and adding the needed criteria to assess Customers, Business Analysts, Sponsors, Resource Managers and key PM stakeholders.

7. Evolution of PM CompModel

7.1 CompModel Mapped to Competence Baseline

We updated our PM CompModel to reflect the structure of IPMA's Individual Competence Baseline (ICB), we immediately saw the benefits. It became much more powerful as the training and development *pathfinder* that allows Project Managers and stakeholders to improve Project Management Competences.

We earned a clear advantage in selecting the right baseline against which to perform competence assessment. Clearly, a body of Knowledge falls short, because we are dealing with more than Knowledge. The IPMA Individual Competence Baseline is globally well-known, because IPMA's national Member Associations use it as their foundation for advanced Competence-based certification.

Because it covers the key areas of PM Competence, this ICB Standard is great for competence development in addition to certification. It also provides the needed foundation for Stakeholder Project Management competence assessment and development. Others have begun with a body of knowledge taxonomy, and added the Behavioral Attributes and General Management elements that are usually missing in most generic PM approaches.

It identifies target Competence ratings for each of the levels in IPMA's 4-L-C system. Thus one can use the CompModel either to establish a personal, team, workgroup or enterprise Competence Development Plan, or to determine areas of focus as a pre-assessment to certification.

CompModel has target ratings for the roles in IPMA's 4-L-C program. It also includes rating targets for other key stakeholders: Project Sponsor, Resource Manager, and Project Management Office Consultant. We include those roles because of the assertion above that you cannot assess and develop Competence in a vacuum—one must consider all the roles in the project context, or the results are meaningless.

7.3 New Directions: Added Adaptations

At the 2006 IPMA World Congress, Stacy also provided PM CompModel to participants in our half-day Young Crew workshop. And, we made it available to other IPMA Member Associations. We have also adapted PM CompModel to other certification efforts, in support of their Competence efforts. Our purpose: to provide a mechanism for Competence assessment and development planning primarily for improved project success and secondarily for certification readiness evaluation.

8. Interventions: Training and Coaching

8.1 About the Actual Assessments: Out of Scope

We will not cover our actual assessment processes in this paper; that is an entire topic by itself. We will remind you, though, that one needs a level of assessment rigor that is appropriate for the intended use of the information.

Nor will we show you much of the CompModel tool's support of assessment and analysis of the results; that information is part of the download of the complimentary version at our website. But what is important for us to cover is what you do with the assessment results.

8.2 The Role of Training, Coaching and Pairing

Given that you perform an assessment (individual or organization), the next step is to establish a development plan that leverages the strengths and helps fill the gaps. While training can be part of the interventions, clearly, more focused effort on the part of managers and mentors is needed to continue the progression up the Competence Ladder.

Coaching requires a person who has available time, is in a position to recognize and reward progress, and who consistently demonstrates the desired Competences herself. In some organizations there may be no person who meets these requirements.

A combination of a manager and an external Competence coach may be needed. The person being coached also needs time and the opportunity to apply their new Skills and Competences.

Pairing is an interesting intervention, given two peers with complementary strengths and gaps. They do require time to perform this co-coaching—it is not something they do when they have nothing more important to accomplish. Again, managers must be involved to recognize and reward progress, or the Pair may backslide on their new Competences. We have seen challenging problems when the Competence ratings between Pair members are too great; it often works better when the gap between the two is minor.

8.3 Evaluate Actual Performance

If you can't measure it, you can't manage it. It is not enough to establish a Competence Development Plan, with measures of improvement. Even with demonstrated success in individual Competence criteria, the ultimate measure of Competence is in project performance. Thus, in the best Competence Interventions, project performance evaluation, focusing on the areas of gaps, but also related to all other Competence criteria are the needed measures of success. High effort? Yes, but is project performance important to you?

8.4 Repeat the Assessment Process

A first iteration of the PM CompModel process may require 1 to 2 years, depending on the number of persons being assessed, the extent of gaps, and the maturity of management and your processes.

And given closure on the six steps of the PM CompModel process, what do you suppose you do? You repeat the process. In a second iteration, it makes sense to include higher (in the organization) and wider (across the organization) project stakeholders, as they become the new weakest link in your project success. We have not seen organizations requiring more than three iterations.

8.5 The Competent and Mature Enterprise

We suggest that you perform an assessment of PM Competence for an individual, team, workgroup or Enterprise. Then establish and execute a Competence Development Plan. The result: increased PM effectiveness—something most Enterprise executives aspire to achieve.

And yet, we continue to see Enterprises that adopt Process Maturity initiatives with no consideration of their Competence in those processes. While we are strong believers in PM process maturity efforts, we consistently find Process Maturity improvement without improving stakeholder Project Management Competence to be largely wasted effort. PM CompModel offers the framework to avoid that waste.

9. Conclusion

Understanding, Assessing, and Developing PM Competence of all project stakeholders is the missing ingredient in many of today's "improvement" initiatives. PM Competence is not easy to gain, is difficult to measure, and competes with other options that promise to increase your competitive edge. And yet, every participant in every project clearly sees the consequence of project incompetence, whether on the part of the Project Manager, Resource Manager, Sponsor, Team Members, or other key stakeholders.



9.1 Summary

We explained the background and purpose of our long-used and popular PM CompModel.

We have shown its use for assessment and development of Program and Project Managers, *plus* project staff and stakeholders in a clear Project Manager's Competence Development Ladder. We have shown a way to establish the linkages between classroom training, real-world application, rewards and behaviors, demonstrated Competence, and formal PM Certification programs.

We have shown how individuals can use PM CompModel to gain insight into their readiness to apply for advanced multi-level Competence-based certification programs. How project teams and Enterprises can use it to improve their project performance. We have shown one way to bridge the large gap between process improvement and project performance, that is ignored by most PM Process Maturity models.

Ten-Year Update

This paper has been very popular on the IPMA-USA website, and in other nations where it has been re-published with permission. Since its original publishing, a variety of changes must be noted, as follows:

- IPMA-USA is the USA member association of the International Project Management Association. Founded as asapm, we re-branded ourselves to improve linkage with the World's first professional project management association.
- Our competence powertool, PM CompModel, will soon reflect the recently-released ICB4, the Individual Competence Baseline, version 4.
- IPMA-USA now offers a simpler knowledge-based self-assessment, PM-SAT, the Project Management Self-Assessment Tool[5].
- The PM CompModel is available as a consulting service for learning organizations, and for PMOs (Project Management Offices).

Acknowledgments

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- Rose Johnston: www.content-matters.com
- Bill Duncan: www.pmpartners.com
- Dr. Lew Ireland, now deceased.

This paper was originally presented at IPMA's 20th World Congress in Shanghai, China, in October 2006. We also offer a 1-day workshop for Project Management Office leaders and learning or resource managers; and we have a popular 1-hour presentation for Project Management organizations' conferences and meetings, or for in-house use for Enterprises that wish to improve their project performance.

References

- [1] International Standard ISO/IEC 17024:2003: Conformity assessment—General requirements for bodies operating certification of persons. ISO Copyright Office, Email: copyright@iso.org.
- [2] Stacy has provided Project Management training, coaching, pm methods, consulting and products such as PM CompModel since 1982.
- [3] *Taxonomy of Educational Objectives, Handbook 1: Cognitive Domain* (Paperback) by Benjamin S. Bloom (Editor); Addison Wesley Publishing Company (June 1956). ISBN: 0582280109.
- [4] *Taxonomy for Learning, Teaching, and Assessing, A: A Revision of Bloom's Taxonomy of Educational Objectives* by Lorin W. Anderson, David R. Krathwohl, Peter W. Airasian, and Kathleen A. Cruikshank (Paperback - 2000). ISBN: 080131903X.
- [5] Explore *PM-SAT, the Project Management Self-Assessment Tool*, at the IPMA-USA website: www.ipma-usa.org/about-us/learning/use-pm-sat-the-pm-self-assessment-tool.

About the Author

STACY A. GOFF, the PM Performance Coach, has coached and inspired tens of thousands of project and program managers, and hundreds of organizations, on five continents, for over forty years. A Project Management practitioner since 1970 and consultant since 1982, he has also been a strong contributor to professional organizations such as IPMA® and PMI® since 1983.



He is a co-founder and past-president of IPMA-USA, and 2011-2014 Vice President of Marketing & Events for IPMA, the International Project Management Association. In September, 2015, he was named an IPMA Honorary Fellow.

Goff's interest in project competence and performance began with establishing a PM Competency Center for a nuclear power plant in the early 1980s. It continued with international engagements during the 1980s and 90s as he helped organizations assess and improve their project and program performance. Today, he coaches, speaks and performs keynote speeches at major project-related events. And, he continues to pursue his interest in individual, project team, organization, and national and international PM performance.

Mr. Goff brings a results-oriented approach to Project Management coaching, consulting, and training. His insight for the needed PM Competences, and his delivery of effective training translate to improved project performance. In his working life, he combines his Project experience with sensitivity for the interpersonal skills areas—the human aspects of projects.

In his papers, presentations, workshops or in consulting, he combines his project experience with strategic linkage for all projects and programs. His insights and experience have provided competitive advantage for his clients for over 40 years. His business result: measurably increased **PM Performance**.

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