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Abstract

What does it take in project management to be the best-of-the-best, the top dog, a superstar, or world class? What does it take to practice project management at the high end? What does it take to be a great project manager? Thanks to recent studies and research, the answers are closer now than they have ever been before.

This is a how-to paper. It describes how to become a great project manager, and it identifies a list of top factors associated with great project managers. This paper draws on recently published results of studies and research by PMI^{*} and others about what top project managers know and do, about why their projects succeed or fail, and about their project manager competencies. This paper explores how great project managers successfully deal with the evolving and expanding definition of project success, with the expanding complexity of projects, and with their increasing dependency on executives and others for their success. A central theme is that great project managers have mastered the basics and have the discipline to adhere to them.

Introduction

Some Context

I aspire to be a great project manager. It is a feeling that began a long time ago, when I was lucky enough to work for a couple of bosses who inspired me to feel strongly about project management (Exhibit 1). Since that time, I have increasingly *perspired* in my efforts toward that goal. At times, I feel that I have been modestly successful, perhaps even occasionally demonstrating moments of project management greatness. It is a goal well worth pursuing, one which, as evidenced by the phenomenal growth of PMI[®] membership and PMP[®] credentials, increasing numbers of project managers are working toward. This paper is focused on individuals who already appreciate the value of project management greatness and who understand its impact on their careers and on their personal fulfillment. This paper is focused on how project managers can become great project managers. After taking a brief step back in time to highlight some great project managers from the past, this paper addresses some of the key dynamics that affect project management success. Inspiring new studies and research are presented and followed by a summary table of factors associated with great project managers. Fortunately for those interested in this topic, much has been written; project managers will appreciate the opportunity to further their reading by examining the list of references. This paper is not the first word on the topic of project management greatness, nor is it the last word, but it continues the ongoing conversation about great project managers.

Charlie T. was my first boss, and Mike B. was my second. Both were confronted with a young inexperienced electrical engineer fresh out of college who had responsibility for managing CIA development projects to build "gadgets" that agents could use overseas to help them collect intelligence—or in other words, to spy.

Because project management as a profession was at that time in its infancy and largely unknown, the primary source of learning was from on-thejob training. Fortunately for me, both of these bosses were incredibly talented. Charlie left me with an enormous respect for the front-half of the life cycle: the planning. To this day I live the mantra of the "seven Ps": "proper prior planning prevents particularly poor performance." Mike's legacy for me was focused on the second-half of the life cycle: the execution. His admonishment for most situations was to "fix it"—to be accountable for the progress of the project and to take action to keep things moving in the right direction.

This focus on planning and on execution is the one-two punch that we recognize today with the catchphrase to "plan your work and work your plan" and as the foundation for the PMBOK^{*} Guide.

Exhibit 1 – Personal Inspiration

Earliest History

History has provided us with a tremendous number of great project managers. A quick look back at a few of them will serve to illustrate several key points. Perhaps the first recorded use of project management was four and a half thousand years ago, with the building of the pyramids in Egypt; historians identify Imhotep as one of the great viziers and as the first-named architect, doctor, and project manager (Dunn, 2003). He is credited with the building of the world's first pyramid, thus receiving recognition not only for his technical skills but also because the king could trust him "to carry out his [the king's] will without fear of overthrow of his rule." Note that the aspect project management that this demonstrates is focused not on the aspirations of the project manager himself (such as overthrowing the king), but instead on delivering something that meets the needs of others (as is reflected in the project requirements established by the key stakeholder—the king). Great project management is fundamentally about meeting the needs of others. Also note that this fundamental aspect of effective project management ties the level of project manager success to the success of the project itself (we are talking about the pyramids after all; we would not remember Imhotep's name if his structure was modest and short-lived). This aspect of project management body of Knowledge (PMBOK[®] Guide) – Fourth Edition as creating a plan that meets the project requirements (PMI, 2009).

Illuminating History

At the end of the 1800s, the public became aware of the benefits of project management as a result of the fame of Thomas Edison, who invented improved telegraphic devices and developed and commercialized the long-lasting electric light bulb. Edison, holding over 1,000 U.S. patents, became known as "The Wizard of Menlo Park" because of his ability to repeatedly deliver new products. Edison also developed the first industrial research laboratory. He brought to the public's attention the benefits of instituting a discipline for managing the process of moving innovations through stages that resulted in deliverables. This fundamental aspect of great project management involving **process and discipline** is precisely what the underpinnings of traditional project management life cycle best practices and the *PMBOK*- *Guide* are based upon (PMI, 2009).

Adventuresome History

In 1914 Ernest Shackleton and his men survived the wreck of their ship, "Endurance," which was crushed in the Antarctic ice, and for the next two years, they were stranded 1,200 miles from civilization with no means of communication and no hope of rescue (Morrell & Capparell, 2001). When the ice began to break up, Shackleton set out to save them all, undertaking a heroic 800-mile trip across the frigid South Atlantic in little more than a rowboat. Unlike other polar expeditions, every man survived-not only in good health, but also in good spirits-all due to Shackleton's leadership. Here we have a tremendously dramatic example of a classic failure of a project when measured by the "triple constraint" (completion of the project on time, within budget, and at an acceptable level of quality): the expedition never even reached Antarctica, much less crossed it, as had been its purpose; the trip had been scheduled to take months, not years; and losing the entire ship was certainly never a part of the planned costs. Yet in spite of the failure of the project itself, the expedition impressively demonstrates an important quality of a great project manager: leadership. Business improvement writers and scholars have found Shackleton's story to be a valuable case study applicable to the office environment. Here we see leadership being practiced with an eve constantly on the true criterion for project success (in this case, not on reaching the South Pole, but instead on building the foundation for enduring future successes). In Shackleton's story we also witness leadership practiced with constant attention to the needs of others (save the men), and we view what is increasingly being referred to as "servant leadership" (Greenleaf & Covey 2002). What we see is likely the future of project management.

History Summary

Although a couple of short paragraphs on only a few great project managers can hardly be considered a complete history of project management, it can serve to highlight some basic "how-to" factors. **Planning and execution** is the one-two punch in great project management. I learned this through on-the-job training, and it has been folded into the life cycles that our various industries follow. From the beginning, great project management has

been about **meeting the needs of others**; over time, this has been etched in the stone of the leading standards. **Process and discipline** have formed the basis of traditional project management, and much of the *PMBOK** *Guide* advocates methods and tools toward these ends (PMI, 2009). Today, increasing numbers of great project managers recognize **leadership** as the "stern" for navigating the difficult organizational and project waters. Shackleton's adventure a century ago stands as a prophetic example for today's great project managers.

The Aspiration

Project Success Equals Project Manager Success

Most project managers aspire to be *great* project managers. As project managers, we are in a business where our own success or failure is determined largely by the outcome of our projects (Archibald, 2003; Kerzner, 2006). This is just as true now as it was several decades ago when Archibald and Kerzner first began writing about project management viewpoints (Archibald, 1976; Kerzner, 1984). It matters little who we are or what is the viewpoint taken, the equation is invariably the same: **project success equals project manager success**. When looked at from the executive viewpoint, project management is seen as a means to an end, and when the project succeeds, the project manager gets rewarded. When looked at through the eyes of the project manager, project success leads to bigger and better projects which, if successful, lead to career advancement. The old joke about the first prize in a project management contest being a new project and the second prize being *two* new projects reveals (in this case, rather ironically) just how strong a connection exists between our projects and our perceptions of success. Joking aside, in reality, the typical progression for the entry-level project manager *is* to take on ever-bigger projects with ever-bigger budgets and ever-bigger rewards (Crawford, 2006). Great project managers not only understand this, they make decisions and take actions to capitalize on it. The "how-to" factor is that **great project managers strive to work on and succeed on great projects**.

Success Definition Expanded

Simply put, a project has to succeed in order to be great. The issue with this simplification is that the definition of project success is anything but simple (Exhibit 2). The big change over time has been that the **definition of project success has been greatly expanded** (Kerzner, 1998). In the 1960s, the early days of project management, success was measured entirely in technical terms. Either the deliverable product worked, or it did not. During the 1970s that narrow definition was expanded to encompass completion of the project on time, within budget, and at an acceptable level of quality. This has become known as "the triple constraint" and has been widely used as the basis for much of the project management industry. During the 1980s, the definition of project success and its criteria expanded still further to include the acceptance of the customer. And during the 1990s, still more criteria were added, such as that the project not disturb the main workflow of the organization and not change the corporate culture. This expansion of the definition of project success has been difficult for some to deal with, while others have folded a success definition step into their life cycle process (O'Brochta, 2002).





One highly public example of this expansion of the definition of project success is shown by the space program. In the early days, scientists and engineers were focused on developing the basic capability to launch a manned rocket, a narrow technical success criterion. That accomplishment was followed by the historic challenge (and expansion of the project success criteria) by President John F. Kennedy to "land a man on the moon and return him safely to Earth by the end of the decade." By the time the space shuttle program was under way, the success

definition had further expanded to include the customer—specifically, to produce commercially profitable material in space. Recently, President George W. Bush took the success definition for the space program into the cultural realm when he articulated the goal to "extend human presence across our solar system . . . because doing so improves our lives, and lifts our national spirit."

While few of us have projects associated with national spirit, many of us do have projects that overlap with a more localized version of spirit, organization culture, and business processes. Business process re-engineering may have faded a bit from the popular jargon since its peak of popularity in the early 1990s (Hammer, 1990), but it is now that the project-based work force is confronted with its impact, as we are increasingly driven to be business savvy (Heerkens, 2005). We only have to look as far as the information technology industry for examples of just how strong the relationship has grown between the project work being done and the well-being of entire organizations that use the delivered product. Who among us has not bemoaned or applauded a feature change in the release of a desktop application? We react in this way because of the impact such changes have on how we feel about where we work and about our corporate spirit. The "how-to" factor for great project managers shown by this is that they will succeed more often if they **expand their scope of responsibility to be consistent with the expanded definition of success**.

Project Complexity Increased

Complexity in project management is now receiving some much-needed attention. The timing is excellent. The expanded definition of project success is causing more projects to become more complex; more complex problems are generating more complex projects. To be sure, it does not have to be this way; simple solutions can be produced for complex problems. In the engineering world, these solutions are often referred to as "elegant" (witness the Post-It- note or the iPod-). However, in the absence of incredible levels of innovation, more complexity is finding its way into today's projects. Projects have more stakeholders, more requirements, more interfaces, more systems considerations, more dependencies, and even more regulations. And since great project managers tend to work on or want to work on bigger and better projects, they will more likely than not find themselves deep in the jungle of project ambiguity and complexity (Frame, 1994). An increasingly popular "how-to" approach among great project managers for dealing with project complexity is to **adjust project management practices to match the nature of the project complexity**.

"Filtering" is one such approach that has been well researched (Shenhar & Wideman, 1997). "Filtering" can be used to choose projects best suited for a particular project methodology or project manager skill set. For example, technical uncertainty can be classified on a scale ranging from low-tech to super high-tech for ranges of technology from well known and mature to new and cutting-edge. The history of performance with the methodology in question would be used as the basis for scoring each candidate new project and deciding whether to allow the project to proceed using that methodology.

Complexity Dimensions		Time and	Team Size	Team Composition	Competing Demands	Problem and	Requirements Stability	Strategic Importance	Level of
		Cost				Solution Clarity	·	-	Change
Project Profile	Small Independent Low Risk								
	Medium Some Complexity Some Risk								
	Large High Complexity High Risk								

Exhibit 3 – Project Complexity Model

"Modeling" is another approach, which is making its way from the systems engineering discipline into the project management space. Engineers have had considerable success using modeling theories to deal with increasing levels of complexity for many problem sets, including weather forecasting (Weather Research & Forecasting, 2007), war gaming (Rubel, 2006), and, more recently, bioterrorism (Simpson, 2005). The basic approach used is to identify a set of representative characteristics or dimensions of a given project and then to group projects with similar characteristics into categories; for each of these categories, a particular model or methodology is applied. One such model (Exhibit 3) includes eight complexity dimensions and three dimensions for the project profile (Hass, 2007). Scoring a project using the model yields a selection of a project profile. For example, a decision might be made to choose a project profile with significantly higher levels of communications for a project to renovate a popular historic structure because of the large number of public interest groups and stakeholders involved with the requirements.

Project complexity modeling exhibits limitations similar to those of other modeling applications. The results are limited by how well the model has been tuned and adapted for the particular environment. Tuning the model would, for example, involve adjusting the classification of a project with a six-month schedule from being a relatively short project in the aerospace industry to a relatively long project in the spy-business of supporting CIA agents in the field. Other elements of the model would be similarly tuned.

Executive Dependency

These days, project success depends not only on the actions of the project manager but also on the executive. Unfortunately, sometimes this can mean applying best practice project management only to have the project fail because of executive inaction or counteraction. However, this trap can be avoided (O'Brochta, 2005). Great project managers recognize this dependence on the executive and in fact use their sources of power to get their executive to act for project success. The "how-to" factor for great project managers is to identify the actions that they need their executive to take and then work within their organizations to change the status quo, to be the catalyst for action within their own organization, and to get their executive to act for project success.

Organize and manage work as projects Pick the right projects Develop/maintain close stakeholder/customer relationship Adhere to a suitable project management process Ensure projects follow a documented plan Make sure projects are based on documented requirements Require cost estimates to have a written definitive basis Ensure project resources are commensurate with needs Engage middle management help Establish and use job definition/performance standards

Behave like an executive, ask the right questions

Exhibit 4 - Executive Actions

We are fortunate that there are so many high-quality and pertinent sources of reference information on this topic. By all means, read extensively, get plenty of experience, and **make a list for yourself of the actions that you would like your executive to take**. As an example, you might consider the list shown below (Exhibit 4), which I developed based on my experience over the past few years consulting executives who want to help project managers, as well as on my experience helping project managers themselves. In workshops that I led on this subject, I asked executives to create lists of "executive actions for project success" from which I distilled the list shown below. As much as possible I have trimmed the list to a minimum number of actions, focusing on those actions that are practical and achievable in most organizational cultures, and I have eliminated actions that are better suited to project managers and others than to executives. If this list were a tool, I would consider it be the "Swiss army knife" of executive actions for project success, focused on the essentials with a minimum of extraneous information. However, I must point out, perhaps even caution, that this list will not work for all executives or all project managers in all situations. As with any tool, skill and experience are required to use this list. Deciding what to include on this list and acting on it require considerable sensitivity to those involved and to the situation.

Aspiration Summary

Great project managers are distinguished by their **acceptance of the changed project environment** and their **determination to excel** within this changed environment. They understand the **expanded definition of success**

and have taken ownership of **satisfying the factors beyond the traditional definition**, such as the triple constraint. Great project managers **identify the elements of complexity** within their projects and use tools, such as modeling, to help match project management practices to the project's complexity. They are acutely aware of the increasing dependency they have on their executive for success, and they are engaged in **getting their executive to act for project success**.

The Inspiration

Recently Published

The good news for project managers who aspire to be great project managers is that recently published work can serve to inform and perhaps inspire them. Studies, research, and standards have been published about project manager success, about project failure, about new product development, and about project manager competencies. From these works we can extract "how-to" be great project manager factors.

Alpha Study

A survey of over 5,000 project managers and stakeholders has provided an extraordinary insight into what the top 2 percent know and do that everyone else does not (Crowe, 2006). This study focused on identifying the best project managers (referred to as "Alpha project managers") and then on determining what they did that made them the best. Opinions about these project managers were obtained from their team members, their customers, and their management. Opinions were focused on eight specific areas: attitude and belief, communication, alignment, approach and organization, focus and prioritization, issue management, relationships and conflict, and leadership. Some of the study results reveal large differences between what the Alpha project managers believe and do versus the non-Alpha project managers.

The Alphas were found to **believe strongly that they had enough authority** to manage the project (89 percent for Alphas vs. 49 percent for non-Alphas). This data supports the maxim to "take action and ask forgiveness later." Not coincidently, these findings are consistent with the research on executive success and failure (Charan, 1999) that reveals that executives fail most often for one simple reason: bad execution. This would imply that the executives who are most likely to succeed are adept at *good* execution—and who is better to execute project plans than the project manager who takes action and assumes authority for project management? Although in this study both Alphas and non-Alphas understood equally the importance of planning, the Alphas dedicated **double the amount of project time to actually doing the planning**. Alphas spent on average a total of 21 percent of all project labor hours on planning. Similarly, both Alphas and non-Alphas equally understood the value of communication; however, the Alphas were viewed by others as being much **more effective at performing the actual communication** (80 percent for Alphas vs. 49 percent for non-Alphas). The communication they paid the most attention to was with their stakeholders; Alphas constantly asked others for their opinions about the project, and they responded with information tailored to their stakeholders' interests.

Great project managers, the Alphas, do differ from other project managers. They act differently. **They act** with more authority, they plan more, and they communicate more. These are basic project management concepts that are well understood by virtually all project managers, but the great project managers actually practice the basics to the necessary degree.

Failure Study

"My life is failure. I research failure, I write about failure, I breathe failure, and I owe my success to failure," says the Chairman of The Standish Group as he considers 12 years of data representing more than 50,000 completed IT projects (Johnson, 2006). This data, which has been periodically used for the CHAOS reports (The Standish Group, 2004), has been summarized to form the basis for some basic project management lessons.

Project failure data has consistently shown year after year that lack of user involvement is the number one reason for project failure. Conversely, it is also the **number one contributor to project success**. As with the Alpha

study, the vast majority of project managers already know this; what separates the great project managers from the rest is how they *act* on their knowledge and how much they act. According to the study results, great project managers correctly identify the proper users and then **develop and maintain quality relationships** with them centered on their needs. They use their relationship for two-way communications, and the data is quite clear about the need for speed. The faster and more direct the communication between the users and the project manager, the greater the odds of success. Techniques such as agile or extreme programming with rapid communication embedded into the development process can dramatically speed up communication, as can integrated product teams where users are actually integrated into the project as team members. So too can incremental development where samples of the eventual deliverable frequently are produced for user consideration and feedback. This feedback, when centered on identifying the evolving set of real user needs, provides the great project manager information that can be used to manage scope by maintaining focus on the truly important success factors.

Other basic lessons emerge from the study: the importance of **executive support**, the need for clear business objectives, the need to optimize scope, the need to manage the project resources, and the need for a suitable methodology. I daresay that great project managers will find little that is new in these lessons; however, what they will find is strong reinforcement to **use the discipline necessary to stick to the basics and actually do what they know needs to be done**.

New Product Development Research

For over almost two decades the standard of excellence for research in the new product development area (Cooper, 2001) has been set through the examination of more than 2,000 new product launches at hundreds of companies. This research has concentrated on individual new product projects as well as on the business unit or company. The attrition rate of new products tells the whole story; for every seven new product projects only one succeeds. The research has been focused on determining what distinguishes these few successes from the many failures. Fortunately, the research has clearly identified a new dominant theme. This theme has emerged because of the changing project environment (such as changed project success definition, increased project complexity, and increased executive dependency), and adds much to the discussion about great project managers.

This new theme is "the need for speed" and its companion, "the need for change." The research shows that nothing is static, markets are fluid, and needs change at a far faster rate today than ever before. This demand for speed, coupled with fluid markets, requires even faster development cycles and more flexible processes. Reducing the cycle time between concept and product is an approach identified as central to success. Great project managers **reduce cycle time**. They have at their disposal a variety of life cycles, which they can tailor to the particulars of a given project, and they favor life cycles that are iterative because of the inherent early delivery of partial functionality. Great project managers do the work right the first time without sacrificing quality and thereby reduce rework; they do enough up-front homework and requirements analysis to tip the odds in their favor (this rings true for those familiar with the saying that "a requirement well understood is a requirement half solved); they organize around a true cross-functional team to reduce communication lag (also known as an integrated product team and sometimes known as a project management office); and they exercise the discipline to prioritize and focus.

Competency

Project management competency is another area getting some much-needed attention. For the first time ever, the U.S federal government has adopted a competency-based certification standard for project and program managers (OMB, 2007), a competency standard has recently been published for project management in the United States (PMI, 2007), and in Australia a standard has been published specifically for complex project management (Commonwealth of Australia Department of Defense [COA], 2006). A word of caution is appropriate here: competency in project management is often in the eye of the beholder. The notion that a list of traits or behaviors can be identified ahead of time which when followed will assure great project management is a bit of a canard. As the well-known and respected project management author (Frame, 1999) who directed PMI's project management certification program for five years states, "As time went by, I learned that things were not so simple. The intricacies of competence began to reveal themselves."

The new U.S Federal Acquisition Certification for Project and Program Management (FAC-P/PM) was adopted as policy by the Office of Management and Budget in 2007 (Exhibit 5). This competency-based certification includes not only the traditional project and program management sets of competencies, but it also includes competencies for leadership, systems engineering, and for acquisition. The federal civilian program and project managers practice their disciplines mindful of the well-established reliance on acquisition processes and regulations, they perform their roles and responsibilities within organizations with legacies of leadership, and they are encouraged/required to address the entire lifecycle of the program or project from a



Exhibit 5 – FAC-P/PM Competency Set

systems perspective. It is not to say that these competencies are not beneficial for the non-government program or project, but it is to say that they are now well represented within the U.S. federal civilian workforce. As a point of information it is worth noting that the PMP^{*} and CAPM^{*} credentials from PMI are recognized and do count toward a portion of the requirements to earn the FAC-P/PM credential.



Exhibit 6 - PM Competency Framework

From PMI we can see that their competency framework is inclusive of a broad set of elements, beyond just the nine knowledge areas of the *PMBOK Guide*® (PMI, 2009). Included are performance, personal, organizational, and industry-specific competencies (Exhibit 6). The competency framework reflects the findings of the Alpha study and the project failure study: that knowing what to do is not sufficient, and that the great project manager not only knows *what* to do, but also has the companion competencies associated with the performance; here we see the importance of communication, leadership,

management, cognitive ability, effectiveness, and professionalism. Here we see the need to listen actively and respond to stakeholders, to build and maintain effective relationships, to motivate and mentor, to use influence, to build and maintain the project team, to be assertive when necessary, and to operate with integrity. Here we see that the "how-to" factor is that great project managers are quite competent with the "**soft skills**."

The Australian government continues to be a leader in the project management area with their production and adoption of countrywide standards. One of their latest standards addresses the topic of complex project management (COA, 2006), and it does so with what has become the hallmark of project management: very high quality. This standard provides insight and emphasis for the competencies that are associated with project managers who are great enough to excel at the most complex projects. This standard calls to our attention an especially interesting set (Exhibit 7) of special attributes "that distinguish outstanding" project managers. Here we see



more reinforcement for the importance of "soft-skills" (i.e., "people skills") and for the importance of taking action to get things done. I am particularly drawn to the attribute "ability to influence." The text of the standard makes clear that at the heart of this attribute is leadership, defined as situational leadership, inspirational leadership, and **courageous leadership**. Again, I cannot help but point out the connection between what is perhaps one of the most forward-looking project standards of our time and one of the most compelling adventure stories, the expedition of Shackleton, which I discussed earlier. Others have likewise recognized this leadership connection (Pinto, 1998) and have been adapting the general theories and practices about leadership to the project management context. The "how-to" factor for great project managers from this standard is to **act like a leader**.

Inspiration Summary

These studies, research, and standards are fascinating and inspiring. A pattern begins to reveal itself that supports and enhances our understanding of how to be a great project manager. The "how-to" factors that emerge for great project managers start with acting like a great project manager (that is, like an "Alpha") by acting with authority, by spending more time planning the project, and by spending more time effectively communicating. Other "how-to" factors that emerge from looking at project failures and new product development are developing and maintaining relationships and then using those relationships to reduce cycle time. The project manager competency standards reveal factors that paint a picture of a fully developed individual with skills and ability in areas far beyond the traditional nine knowledge areas in the *PMBOK** *Guide* (PMI, 2009), Great project managers also have a full set of soft skills, and they demonstrate courageous leadership.

The Perspiration

Discipline

As evidenced in the Alpha study, knowing what to do and actually doing it are two different things. In that study, virtually all project managers were familiar with the concept of project planning; yet it was the Alphas who actually took part in planning twice as much as the others. Were the others not disciplined enough? Apparently they were not. "It is my experience that project managers are **not willing to make the tough and unpopular project-related decisions**, even though their instincts warn them that they are not taking the most effective action," says one of the most listened to modern-day project management gurus (Whitten, 2005). Similarly, one of today's most highly regarded business experts reports that "an absolutely iron will" is essential in moving from good to great (Collins, 2001). Even if you aspire to be a great project manager, and even if you are inspired by the information available related to this topic, then you still need to be willing to *perspire*, putting in the effort necessary to be a great project managers understand that "**project management is about applying common sense with uncommon discipline**."

Great Project Manager Factors

Reflecting on the "how-to" factors that I have discussed as well as on the many studies and the significant amount of research on the topic (represented by the references at the end of this paper), I have constructed a "how-to" list—that, is, a list of top factors associated with great project managers (Exhibit 8). Note that this is simply *a* list, and not *the* list. I do not pretend to have the wisdom to know what factors will absolutely work in every situation. I do know, however, that the time that I continue to spend investigating and discussing this topic is invaluable to me, and my hope is that your interest in this topic has been furthered a bit by my discussion.

What Great Project Managers Do	How Great Project Managers Do It				
Meet the needs of others	Satisfy the customer. Pay attention to what the stakeholders want and need.				
Are Heroes with a plan	Spend more time planning. Work tirelessly and courageously to accomplish the commitments made in the plan. Adjust plan and work as necessary to meet expanding definition of success.				
Employ process with discipline	Employ a process that captures the basics you know need to be done. Do not be too soft. Act with discipline.				
Are leaders	Lead and inspire first, then provide unwavering support for team in their efforts to follow. Act to serve the members of the project team. Be courageous. Act with authority.				
Work on successful projects	Showcase your talents on a priority project with visibility that succeeds. Your success is tied to that of your project.				
Succeed broadly	Ensure that your project success includes not only the traditional project success criteria but also the organizational and cultural criteria.				
Deal with complexity	Adjust your process and methods to match increased project complexity. Consider filtering and modeling approaches.				
Get executives to act for project success	Make a list of executive actions. Be the catalyst for change in your organization.				
Spend more time communicating	Develop and maintain quality relationships. Tailor communication to needs of stakeholders.				
Reduce cycle time	Produce deliverables faster. Use iterative methods. Get frequent customer feedback.				
Master the soft skills	Develop and use competencies to get work done through the efforts of others.				

Exhibit 8 – Great Project Manager Factors

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