

A Global Guide to Certification for Project Managers

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ABSTRACT

Since project managers assume responsibility for more than 300 billion dollars in software projects alone, a mechanism for identifying competent managers is vital to the economic viability of many organizations. Common ways of assessing project managers include a review of academic records and professional background. Unfortunately, a global environment makes it difficult to effectively compare and contrast various backgrounds. One method of addressing this issue is through certification. Internationally recognized professional certifications provide a means of establishing a common baseline among project managers. One such certification is the Project Management Professional (PMP) certification developed by the Project Management Institute (PMI). PMP certification identifies project managers who have satisfied a standardized set of requirements. Since certification has international recognition and may play a role in any project manager's career, each project manager must decide whether or not to pursue certification. This involves assessing the risk (time investment) versus the reward (career advancement). In order to help project managers evaluate this important decision, several hundred project management professionals around the world have been surveyed regarding their experiences and perceptions of PMP certification. Over 750 PMI members from 61 nations (145 responded) are asked about the merits of attaining PMP certification. The survey results are quantified and analyzed in order to determine if PMP certification is worth the effort.

INTRODUCTION

Nearly 25 percent of the world's gross domestic product [6] is allocated to software development. The Standish Group estimates that over 300 billion dollars are spent on 250,000 new project initiatives [7].

In addition, the IDC group projects a compound annual growth rate of 14.5 percent for project-oriented services [4]. This is an enormous financial commitment that is expected to continue into the foreseeable future. In short, successful project management is a growing worldwide initiative where most, if not all, nations are involved.

Figure 1 shows the projected growth rate in IT services by country through the year 2006. During this period, the People's Republic of China (PRC), Korea, and Indonesia will experience tremendous growth of 41, 28 and 27 percent, respectively.

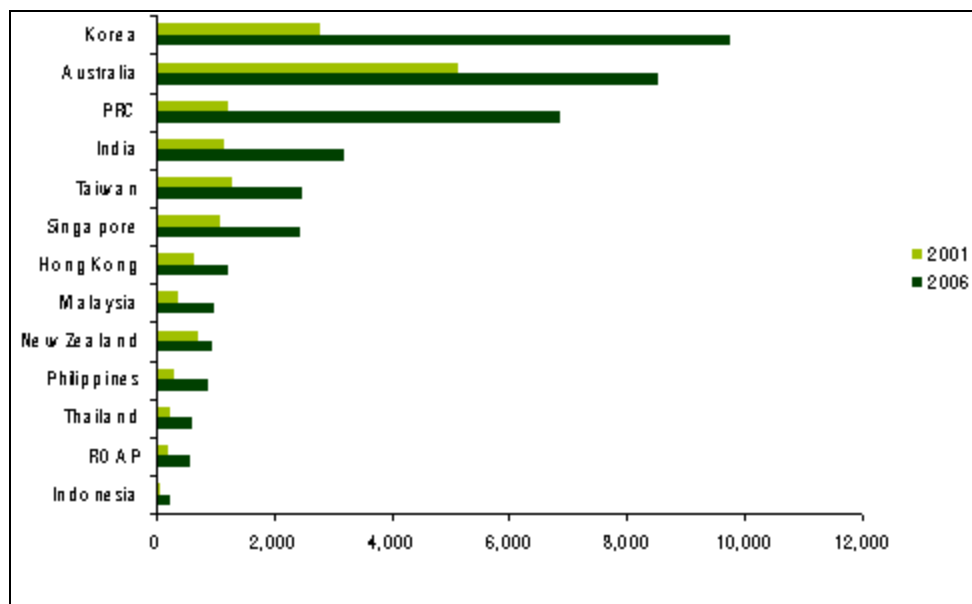


FIGURE 1: IT SERVICES GROWTH BY COUNTRY FORECASTED TO 2006 [4]

At the center of this colossal amount of resources are those project managers who will be expected to manage and direct all project activities. It is crucial that these professionals possess and maintain a significant level of expertise since incompetent staffing could have major financial repercussions of global proportions. The complex environment that project managers encounter is summed up in the following statement from O.P. Kharbanda: "It is within this context of diminishing resources, cost cutting, streamlining operations, and slashing overhead and excessive personnel, that project management techniques can offer a lucrative form of competitive advantage for those firms that have taken the time to learn and use it well" [5]. In an ideal world, the perfect manager would always be assigned to each project. However, in practice, an organization may hire an unqualified person (type I error) or it may fail to hire a highly qualified person (type II error). The immediate question: *How are competent project managers identified?* Management wishes to hire competent project managers and project managers want to demonstrate their skills in order to attain recognition.

In order to distinguish capable project managers a standardized external assessment must be used. This is sometimes difficult in the global marketplace due to different academic and professional records. The lack of common standards makes it difficult, if not impossible, to compare/contrast resumes. However, external assessments that are global in nature and which provide an accurate and reliable view of the individual can be useful. Many corporations have recognized the importance of global certification

programs. For example, AT&T Business Communications Division has adopted a formal project management certification program for its employees [8]. Certification is one way managers can identify proficiency and knowledge of current project management skills and techniques.

Since project managers must commit their time and money in becoming certified, this paper focuses on certification from the prospective of the manager. What are the risks and rewards associated with attaining certification and what certification programs are available for project managers? Answering these questions will help any project manager who is considering whether or not to pursue certification.

PMP CERTIFICATION

This paper focuses upon PMI's Project Management Professional (PMP) certification. PMI is one of the oldest project management organizations (established in 1969), is recognized worldwide [6], and is the world's leading non-profit project management professional association [6]. PMI has three principle goals: establish ethics, standards, and accreditation for project management professionals [2]. Today, PMI boasts over 137,000 members worldwide, 87,000 of which are PMP certified. PMI provides project management services in over 125 countries with many educational and professional development opportunities [6]. In October of 1999, the PMP certification received ISO 9001 certification from the National Registry and the Dutch Council for Accreditation. This certification signifies international recognition for PMI's PMP certification program. As such, PMP is the first professional certification program ever to attain ISO 9001 certification [3].

Certification survey

Deciding whether to pursue certification depends upon a manager's circumstances. He or she must consider the relevancy of certification to their career, risks/rewards associated with certification, and the scope of certification. In essence, project managers need to ponder the following questions:

How relevant is the PMP certification? If a certification process is going to serve as an accepted benchmark within the project management community, there needs to be continuous assessment of the PMP certification process itself in terms of its ability to embrace current technical and managerial innovations.

What are the risks and rewards associated with attaining and maintaining PMP certification? How difficult is it to attain PMP certification? Assuming it is not trivial to attain, what effort is required to maintain PMP certification? Knowing the collective risks, what are the perceived or actual benefits for having PMP certification? The sum of the risks and rewards provides a Return On Investment (ROI) regarding the pursuit of PMP certification.

How is PMP certification perceived globally? In July of 2004, international membership accounted for 33 percent of the total PMI membership. Considering the predicted international growth in project management services, it is reasonable to assume there will be corresponding growth in international PMI

membership in the near future. Therefore, it is important to understand how the international community views PMP certification.

In order to address these questions, a survey was developed and distributed to several hundred professionals from around the world. The survey requested information about perceptions and experiences in attaining PMP certification. The risks and rewards of PMP certification are explored and recommendations to project managers are provided.

SURVEY RESULTS

3.1 Respondent Demographics

A total of 775 surveys were issued globally. A total of 145 surveys were completed and returned, yielding a survey response rate of 18.7%. Of the 145 completed surveys, 114 were from individuals who were PMP certified and 31 were from those who were not PMP certified.

Figure 2 displays the demographic breakdown of the survey respondents by country. The majority of responses came from the United States of America (59 percent), followed by Canada (11 percent), and Australia (4 percent).

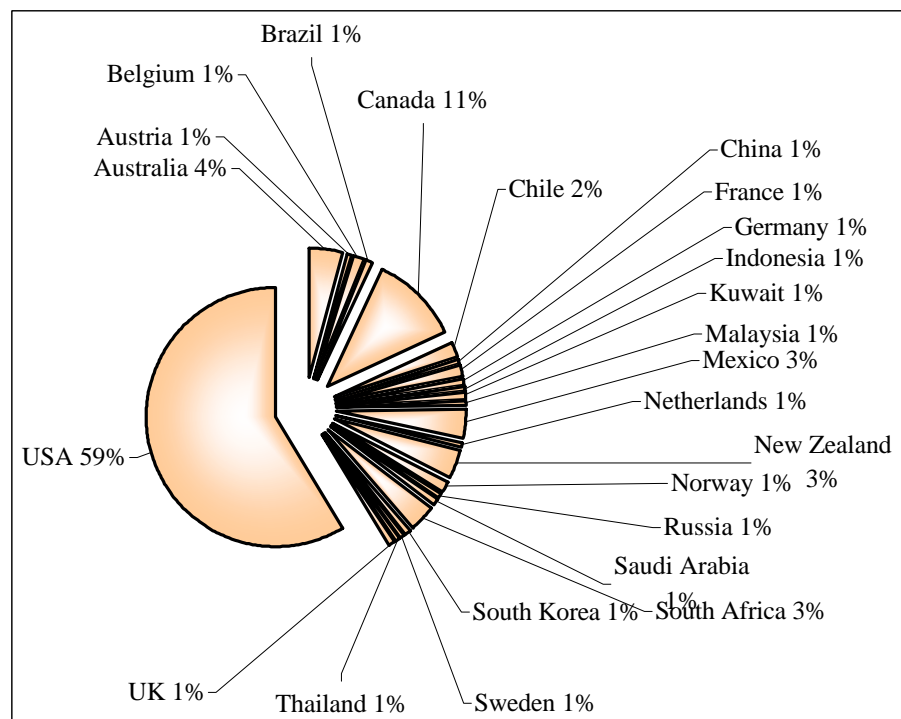


FIGURE 2: SURVEY RESPONDENT DEMOGRAPHIC BREAKDOWN (BY COUNTRY)

Overall, the survey respondents had very high levels of education. Over 50 percent of the respondents had a graduate degree or higher. Nearly 90 percent had a 4-year degree or higher. Figure 3 shows the distribution of education levels of the respondents.

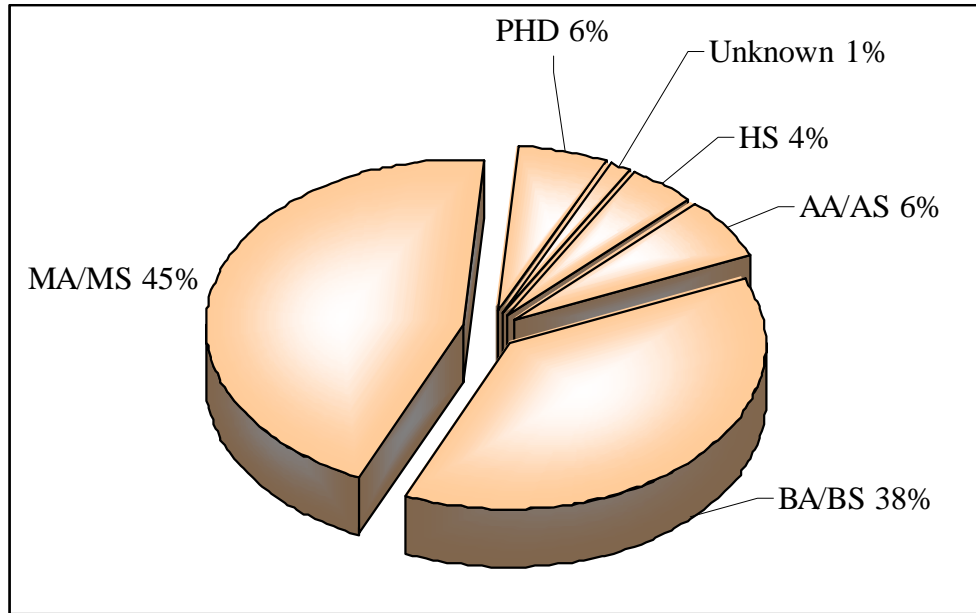


FIGURE 3: SURVEY RESPONDENT EDUCATION LEVEL DISTRIBUTION

Next, the respondents were asked to provide salary information. Since this question could be considered intrusive, the respondents were asked to provide salary ranges in \$25K increments (U.S. Dollars). Over 92 percent of the respondents chose to provide their salary range and did not select the “I can’t recall” option. More than 50 percent of the respondents fell into the 75K to 100K range. A linear regression was performed to determine whether there was a correlation between academic education level and salary. The r-squared value was 0.0131; therefore, it was assumed no correlation exists. Table 1 displays the salary range distribution of the respondents.

TABLE 1: SURVEY RESPONDENT SALARY RANGE DISTRIBUTION (IN U.S. DOLLARS)

Salary Range	Responses
150K+	8
125 - 150K	9
100 - 125K	34
75 - 100K	40
50 - 75 K	29
0 - 50K	14
Can't recall	11

Respondents had an opportunity to supply their job title. Since there were no prescribed answers, 88 unique job title instances were submitted. These answers were grouped into 6 different job title categories based on similar functionality (e.g. project manager and software manager), similar domain (e.g. academia and research), and rank (e.g. executive). The resulting 6 job titles and their respective responses are shown in Table 2. More than 75 percent of the respondents considered themselves to be Managers.

TABLE 2: RESPONDENT JOB TITLE

Job Title	Responses
Manager/Sr. Manager/Executive	109
Business (analyst)	11
Consultant	10
Technical	7
Academia/Research	5
Unknown (e.g. Retired)	3

3.2 Perception Risks/Rewards of Certification from PMP-Certified Professionals

Seeking certification has its own inherent set of “risks” and “rewards.” Basically, the risks associated with becoming PMP certified are the amount of time and effort required completing the PMP application process and passing the PMP examination. The reward is all of the benefits that are associated with becoming PMP certified. It should be noted that PMP certification requires a continuing level of risk since PMP certification requires the acquisition of Professional Development Units (PDUs) after attaining the initial PMP certification.

Eighty percent (113 out of 145) of the respondents completed their certification sometime between 1984 and 2002. These individuals serve as the basis for assessing the risks and rewards associated with attaining certification. Regarding the time risks, the respondents were asked to specify the number of months required to complete the PMP certification process. Most respondents (77 percent) stated that the PMP certification process was completed within 6 months. Overall, the primary response was 3 months (26 survey respondents) and the average was 6.2 months. Figure 5 and displays the survey results.

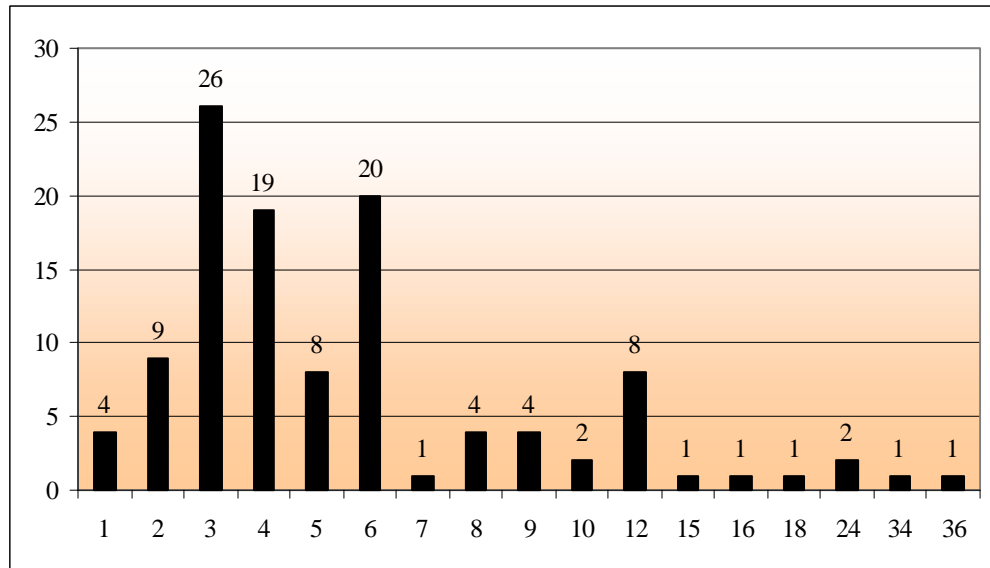


FIGURE 5: MONTHS REQUIRED TO ATTAIN CERTIFICATION

Regarding the rewards associated with PMP certification, the survey asked: What motivated you to pursue certification? The number one response was *to further my knowledge* (79 respondents), followed

by *to advance my career* (76 respondents), and *to increase prestige and/or respect* (68 respondents). It is interesting to note that *increasing my earning power* came in fourth. One respondent stated, “I sensed that in the coming years it might be a requirement to have the PMP certification at my workplace and other workplaces.” Another respondent wanted PMP certification to “... be a part of a legion of people who are building a new profession (project management) that can change the way the world does work.” These two comments also illustrate that the respondents have pursued PMP certification for reasons that are both external (e.g. to keep a job) and internal (e.g. to improve knowledge). Table 3 shows why the respondents originally pursued PMP certification.

TABLE 3: SURVEY RESPONDENT DISTRIBUTION: WHY PURSUE PMP?

Why Pursue PMP? (NOTE: Multiple answers could be selected)	Number of Responses
To further their knowledge	79
To advance their career	76
To increase prestige/respect	68
To improve their earning power	57
Other	27
To secure a new job	20
To keep a job	8

A second reward-type question examines the perception of benefits associated with certification. The responses matched up reasonably well to the respondents’ motivations. For example, the top three responses were *allowed me to further my knowledge* (87 respondents), *allowed me to increase my prestige and/or respect* (75 respondents), and *allowed me to advance my career* (53 respondents). Many respondents noted that a primary benefit was networking.

The last “reward” question explores how certification impacts earning power. Over one-third of the respondents recorded they experienced no improvement in earning power (58 respondents). This was followed by no response at all (33 respondents), and a 10 – 20% increase (18 respondents). Figure 6 can be contrasted with a recent salary survey taken among PMI members that revealed that passing the PMP examination resulted in a salary increase of 10%, on average [1].

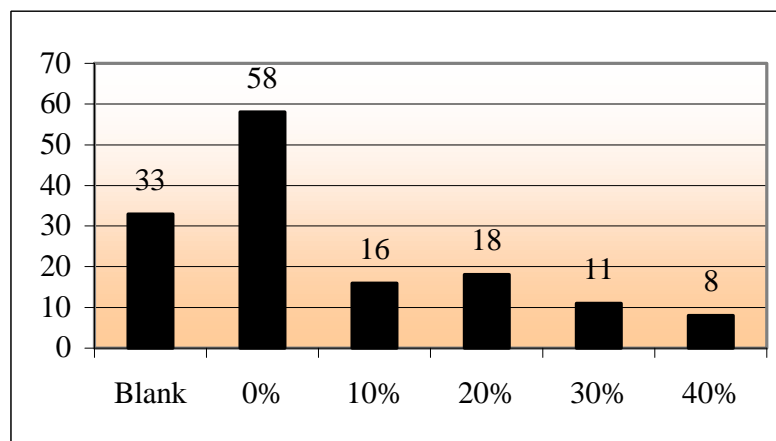


FIGURE 6: RESPONDENT EARNING POWER INCREASE

The last question posed was, “If you could do it again, would you?” An overwhelming majority (88 percent) would definitely pursue certification again. Only two respondents showed any reluctance. Clearly, most respondents believe that certification is a worthwhile endeavor.

The next question asked respondents to choose the primary reason they would pursue PMP again. The top three responses were *to increase my knowledge* (34 percent), *to advance my career* (21 percent), and *to increase my prestige* (20 percent). Two of the least popular reasons to pursue PMP again included *to secure a new job* (6 percent) and *to keep a job* (3 percent). One respondent stated: “Soon it will be a necessity and not a nice-to-have for people involved in project management.”

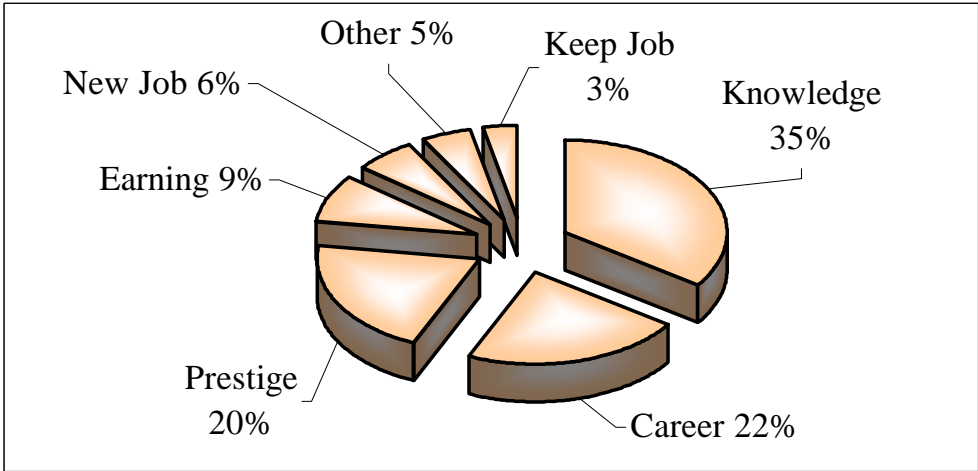


FIGURE 10: WHAT WOULD BE YOUR PRIMARY REASON TO PURSUE PMP?

It was difficult to find any criticism of PMP certification by those who had attained it. Many respondents did not offer any negative comments. The only written criticism was that “PMP is knowledge-based” and this person would like to see “a competency-based certification that would be exportable world-wide.” Other respondents complained that PMP did not mean anything to a majority of Information Technology middle managers.

The next most popular reason that PMP did not meet respondents’ expectations was it did not improve earning power. One respondent, who was particularly displeased with PMP certification, summarized PMP as a “well-managed marketing effort by some folks who have developed it into a global program.” Table 6 shows the results of this question.

TABLE 6: RESPONDENT DISTRIB.: HOW DID PMP NOT MEET YOUR EXPECTATIONS?

In what ways did PMP NOT meet your expectations? (NOTE: Multiple answers could be selected)	Responses
Other	30
Did not improve my earning power	16
Did not advance my career	12
Did not increase my prestige	8
Did not keep my job	5
Did not secure a new job	5
Did not further their knowledge	1

These managers were asked about the difficulty in retaining certification. Almost 90 percent of the respondents felt that acquiring Professional Development Units (PDUs) was reasonable or easy. The vast majority of respondents (71 respondents) described the requirements for re-certification as reasonable.

3.3 Perception or Risks/Rewards of Certification from Non-PMP Certified Professionals

Thirty-one of the 145 professionals surveyed did not have PMP certification. This section seeks to understand why these individuals may not have wanted certification. Asked what they had heard about the PMP certification process, nearly half of the respondents had heard some positive comments and over 87 percent had heard some positive and mixed comments.

The managers were then asked to characterize the reputation of PMP certification in industry. The majority of respondents (77 percent) reported that there was some awareness of PMP in their industry.

The previous question inquired about the scope (breadth) of industry recognition. A follow-up question sought to understand what types of professionals are aware of PMP certification. This question offers insight regarding the visibility of PMP certification within the management hierarchy. The number one response was middle level management (25 responses), followed by consultants (17 responses), and upper level management (10 responses).

Finally, the respondents were asked to give their impression of PMP certification. Over 73 percent of the responses indicated PMP added either some value or great value as displayed in Table 7.

TABLE 7: RESPONDENT DISTRIBUTION: WHAT IS YOUR IMPRESSION OF PMP?

What is your impression of PMP? (NOTE: Multiple answers could be selected)	Responses
It adds great value	9
It adds some value	19
Time requests are reasonable	7
Takes too long to pursue	2
It does not add much value	1
Not sure	0

The last several questions indicated that PMP certification is recognized by professionals and that it is viewed as adding value. Next, the managers were asked about their commitment in pursuing PMP certification. Over 90 percent of the respondents felt that they may pursue, plan to pursue, or are currently pursuing PMP certification. Table 8 displays the results of this question.

TABLE 8: RESPONDENT DISTRIBUTION: LEVEL OF COMMITMENT IN PURSUING PMP

What is your level of commitment in pursuing PMP certification?	Responses
Currently pursuing	13
Plan to pursue	9
May pursue	6
Doubtful I will pursue	3
Will never pursue	0

The next question asked why respondents were not pursuing PMP certification. Four respondents did not think that PMP applied to their career direction, four respondents did not have the time, and four respondents supplied their own reason for not pursuing PMP. One respondent stated: “A Master’s degree in project management as delivered by some universities is more appreciated in the marketplace today in Europe.” Another respondent added, “I will not gain enough from it in terms of career/earning prospects as it is not recognized as a major achievement yet.” The results of this survey question are presented in Table 9.

TABLE 9: RESPONDENT DISTRIBUTION: WHY NOT PURSUING PMP?

If you are not pursuing PMP, why not? (NOTE: Multiple answers could be selected)	Responses
Does not apply to my career direction	4
I don’t have time	4
Other	4
It’s not worth the effort	2

The last question of the survey asked those non-PMP certified professionals what they expected to gain from pursuing certification. More than one answer could be selected. The number one response was *to increase prestige* (18 responses). Except for a very few, the majority of respondents would pursue PMP certification for internal reasons such as prestige, knowledge and career, as opposed to external requirements. Table 10 summarizes the survey results of this question.

TABLE 10: RESPONDENT DISTRIBUTION: PMP EXPECTATIONS

If you are currently pursuing PMP, what do you expect to gain? (NOTE: Multiple answers could be selected)	Responses
To increase my prestige	18
To further my knowledge	14
To improve my earning power	12
To advance my career	11
To secure a new job	4
Other	4
To keep my job	2

DISCUSSION

One unanswered question is *How do we quantify the Return On Investment (ROI) for pursuing PMP certification?* Figure 5 provides an investment benchmark where the average amount of time needed to complete the PMP certification process is 6.2 months. The payoff is derived from Table 1 (the salary distribution) and Figure 6 (the salary increase from those who have achieved PMP certification). Averaging the ranges in Table 1 and assuming 175K and 40K as the average salary at the end ranges, the overall average salary is approximately 92K. Averaging the salary increase after attaining certification from Figure 6, the average increase is about 11 percent. Thus, the average payoff after the first year is 9,700 U.S. dollars. Assuming the worst-case scenario, where an individual worked 6.2 months full-time on acquiring certification, the amount of lost salary would be 47.5K (92K times 6.2 divided by 12). Thus, a person could recoup these lost wages in about 4.9 years. This model assumes a project manager commits 40 hours per week in the certification process. Realistically, the expended effort is much less. Therefore, the ROI would be much less than 4.9 years.

This ROI assessment does not measure the intangible benefits described in Table 10. For instance, the most significant advantage is the ability to stand out among peers. This can be most useful to a project manager when vying for an attractive project management assignment or when applying for a new job. Most of the reasons cited by respondents for becoming PMP certified are internally driven. Greater networking opportunities and prestige/knowledge are mentioned more often than salary increases or promotions. Therefore, PMP certification would be more likely to generate self-satisfaction and a sense of achievement rather than simply a new management position or monetary gain.

One major criticism of certification programs is that certification proves only that the professional is “book smart” but may not have the hands-on experience that is necessary in today’s business environment. PMP certification is no different from many other certifications in this regard. However, PMP certification does offer employers a baseline for new hires and since project managers must periodically re-certify, they are continually exposed to new ideas and project management knowledge.

CONCLUSION

Based upon the analysis found in this paper, PMP certification is beneficial to project manager professionals who want to further their careers. It may initially lead to some monetary benefits or job promotion, but the real benefits appear to be downstream in the project manager’s career. PMP certification identifies a manager as a professional and increases his/her credibility among peers and superiors. It may also reward managers with better and more challenging projects. The preparation time required to take the PMP examination appears to be worth the effort since PMP will provide project management professionals with the most globally recognized project management credential in the world. PMP certification signifies the project management professional takes career progression seriously and is seeking continuous improvement in his/her project management abilities and competencies.

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