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Project manager insights: An analysis of career progression

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Abstract

The project manager is key to the success of any project. But the path to becoming a successful project manager is ill defined. In this study, the authors analyzed interview results of 87 project managers' responses to questions associated with entry into the field, career progression, and advice for the new project manager, seeking to better understand practicing project manager career progression. Qualitative analysis techniques were used to identify recurring themes from the interview summaries. The themes and the resulting conceptual framework provide evidence that supports the development of successful project manager career path. Further, the results suggest individual project management competencies in soft skills as a key enabler of project execution.

Keywords: Project manager career progression, Project manager success factors, Project manager career path framework

Introduction

Project managers are informed by a number of sources contributing to a wide body of knowledge, including the International Project Management Association's (IPMA) 'Eye of Competence', The Australian Institute of Project Management's 'Professional Competency Standards for Project Management', the Project Management Institute's (PMI) 'Project Management Body of Knowledge' (PMBOK), PMI's 'Project Management Competency Development Framework' (PMCDF), and the 'Global Alliance for Project Performance Standards' (GAPPS) program. Studies suggest that in spite of the increasing familiarity with and implementation of the project management body of knowledge, a high percentage of projects continue to fail (Bolin, 2012; Kerzner, 2012; Kippenberger, 2000; McHugh & Hogan, 2011). Project failure occurs despite the project management standardization made possible by the compliance with generally accepted industry policies and procedures. In fact, it has been suggested that project management methodologies, in general, seem to play a limited role in project success by filling gaps in knowledge and supporting senior management control of projects (Wells, 2012). Not all projects fail, however, and studies examining the factors associated with successful projects point to the importance of the project manager's skillset and capability. The PMBOK itself may point to this indirectly by including a high degree of emphasis on the planning, and monitoring and controlling process groups rather than on execution (Koskela & Howell, 2002). This may suggest that the activities related to actual execution are linked to individual experience, training, capabilities and personal style. Since it is the project manager and project team who execute the project, it is not unreasonable to conclude that the project manager must play a significant role in converting project plans into execution.

Recognizing a gap in the literature and answering the call for further research on career progression (Hoekstra, 2011; McHugh & Hogan, 2011), the current study seeks to understand project management career progression by investigating successful project managers' views about their experience and project management careers. Although the literature provides some guidance on project manager success factors, including project careers, project manager competencies, and training and education, there is no substitute for actually asking successful project managers to relate their personal experiences, career progression, and advice about project manager careers to determine a career path. For this reason, the researchers undertook a study to analyze 87 project manager interviews using qualitative analysis of the interview summaries.

Students in a graduate project management degree program were assigned to interview a professional project manager and pose questions associated with getting started in the field, career progression, and advice to someone considering a career in project management. These interviews were posted to the learning management system for review. Although each interview included some general discussion and observations, the primary questions put to each project manager were as follows:

1. How did he/she get started in the field?
2. How has his/her career progressed?
3. What advice would he/she give to someone considering a PM career?

Literature review

The role of project manager is critical to the success of every project regardless of scope, budget or duration (Crawford, 2005; Kerzner, 2013; PMI 2013). He/she cultivates people skills, is comfortable with change and complexity and uses a broad toolkit of techniques to complete a project (Muller & Turner, 2007; PMI, n.d.; Sommerville, Craig, & Hendry, 2010). In order to complete these tasks, project managers are expected to assign important relationships, communicate values and pay attention to processes to execute the project (Turner 2006).

According to the PMI (n.d.), those who serve in the role act as change agents that make project goals their own and inspire a shared purpose within the project team. Additionally, the project manager needs to “pay attention to both the management and leadership roles; the emphasis shifts from one role or the other based on the size and characteristics of the project” (Anatmula, 2010, p. 14). Stated another way, he/she needs to see a project from initiation and planning through to completion and closure. This leads to the question, “What is the career progression that tends to produce successful project managers”? It is within this question’s framework that the following research study seeks an answer. It is important to establish a theoretical foundation by examining project manager careers, education, and competencies.

Project manager careers

A career is a sequence of professional activities and positions that individuals move along over a lifetime (El-Sabaa, 2001). Hoekstra (2011) further refines career development as an interactive progression of internal career identity formation and growth of external significance. In other words, individuals begin the process of managing their own careers, looking for future opportunities for career progression, and negotiating employment conditions (Hoekstra, 2011).

Carbone and Gholston (2004) noted that a project manager is often selected into his/her position based on technical ability. Those observations support studies that found project managers are rarely selected but are nurtured for the role, having been identified as either having project management potential, or, worse, as technical specialists who have availability (Hauschildt, 2000; Sauer, Li; & Johnston, 2001). Additionally, in their article about the ‘accidental project manager’, Darrell, Baccarini, and Love (2010) discovered that many managers were selected based on their technical and managerial expertise but lacked the required competencies to deliver the project. They also noted that most individuals selected into project management positions did so with little or no preparation.

Project manager roles require a different skillset compared with functional managers, and project managers need to take personal control over their careers (El-Sabaa, 2001). Anantmula (2010) found that project managers are interested in personal and professional goals beyond just their project responsibilities. Also noteworthy is the need to align the project manager appraisal system to identify gaps in knowledge or skill, to negotiate performance achievements, and to establish education and training needs for project managers (Lee-Kelley & Blackman, 2012).

Project manager education

One study suggested that 60% of project management skills can be learned through on-the-job training and experience, but that study further clarified that project managers cannot rely on experience alone (Wateridge, 1997). In a skills development study, authors noted that even though there are programs that cover project knowledge areas, less than half of the project managers felt their organizations prepared them for their role (Carbone & Gholston, 2004). Additionally, general business operations including systems, culture, project management, business domain, and interpersonal knowledge impact a project manager’s agility to improve (Hahn, Bredillett, Kim, & Taloc, 2012).

Even though universities offer training up to the graduate level in project management, there is no framework in professional practice to help project managers assess and review their skill requirements (Ahadzie, Proverbs, Olomolaiye & Ankhari, 2009). Seeking to further refine and identify required project manager competencies and characteristics, researchers noted a need for an informed and systematic approach to project manager education in universities (Brill, Bishop, & Walker, 2006). Considering the future of education, Lee-Kelley and Blackman found the need for “stretching learning” to include both on-the-job training and academic education to develop project managers who can challenge the status quo and evaluate new frameworks (2012).

Some criticism of higher education includes close ties to and influence by the professional organizations for the purpose of professional accreditation. In a study about developing a project management curriculum, Leybourne, Kanabar, and Warburton (2011) observe the following:

Despite the fact that these accreditations are professional and not academically based, many educational institutions have chosen to follow the standards set by these associations. Even a cursory review of academic course catalogues shows that there is significant variation in the quality, scope and credibility of academic courses. There is also considerable variation in the mode of delivery of such courses and, in particular, the growth of online delivery has extended the reach of institutions by providing new,

different and innovative ways of reaching, communicating with and assessing the student market for PM education. p. 2.

Finally, Chipulu, Neoh, Ojako and Williams (2013) noted a gap between what is being taught in higher education and the actual skills and abilities to prepare project managers for the decision-making challenges of leading projects. They went on to further identify that professional institutions' project manager frameworks have been criticized for lack of rigorous empirical basis.

Project manager competencies

Competency models are said to categorize and describe the capabilities, skills, and know-how that is likely to lead to success on the job (Axley, 2008; Campion, Ruggeberg, Carr, Phillips, & Oddman, 2011). Competency analysis differs from traditional job analysis in that competencies highlight those elements that should be in place in order to execute the strategy of an organization—rather than those that are in place due to the nature of the job itself (Zingheim, Ledford, & Schuster, 1996).

According to the Project Manager Competencies Development Framework (PMCDF) (PMI, 2007), “Competent project managers consistently apply their project management knowledge and personal behaviors to increase the likelihood of delivering projects that meet stakeholders’ requirements...and...bring together their knowledge, skills, personal characteristics, and attitudes when focusing on delivering a project” (p. 2). As identified within the PMI-PMCDF, “Personal competencies are those behaviors, attitudes, and core personality characteristics that contribute to a person’s ability to manage projects” (p. 23), it is observed that certain behaviors may be considered essential for the successful management of projects. These project manager behaviors could include: (a) motivator, (b) coordinator, (c) leader, and (d) integrator (Chen, 1997; Fisher, 2011; Neuhauser, 2007). Recognizing that the current project management competency framework has been influenced by professional institutions, Chipulu et al. further explain that they set the standards and accredit program; focusing on coverage on functional and cognitive competencies rather than social competencies (2013). This could lead to industry putting more weight on generic skills rather than project management skills and expertise.

Crawford (2005) found no significant relationship between a project manager’s senior manager’s assessment of effectiveness and the performance of the PMI’s required area of knowledge. This could indicate that social competencies may be just as important as functional and cognitive competencies. The personal ability to execute is further linked to a number of factors including the ability to lead and understand people, an intellect that supports the clarification of goals and problem solving, and a flexibility that allows for the changing of approaches according to the project phase or the issue of the day (Muller & Turner, 2007; Stevenson & Starkweather, 2010; Sull, 2007). Perkins (2014) explained the importance of communication between the project manager and project sponsor while Skulmoski and Hartman (2010) outlines several competencies that were explained as “soft” competencies. They also noted that project managers should have: (a) personal attributes, (b) communication skills, (c) leadership ability, (d) negotiations skills, (e) professionalism, (f) social skills, and (g) project management competencies (Skulmoski & Hartman, 2010). Finally, Brill et al. (2006) noted that project management requires a lot more than how to define scope and reach deadlines but also involved

problem solving and leadership as the two most important competencies among project manager competencies.

Method

The methodological approach chosen for the present study is qualitative in nature. The main objective was to investigate project managers and to understand the phenomena of project management by asking successful project managers to describe their views on how their project management careers evolved, and what advice born of experience they are able to share with others. In contrast to quantitative research, in which data is collected and evaluated using statistical techniques in order to test a hypothesis, qualitative research seeks to describe, understand, or build up a theory or conceptual framework associated with phenomena (Miles & Huberman, 1994; Taylor & Bogdon, 1984). Creswell (2013) describes this method as qualitative narrative research, where the researchers “Analyze the participants’ stories. The researcher may take an active role and ‘restory’ the stories into a framework that makes sense. *Restorying* is the process of reorganizing the stories into some general type of framework” (p. 74).

Project design

Students in a graduate project management degree program were assigned to interview a professional project manager and pose questions associated with entry into the field, career progression, and advice for the new project manager. A total of 87 project managers with a variety of U.S. and international experiences were interviewed, and posted the interview summaries into an online course blog for review and comment from other students following a topical protocol delineated in table 1.

Table 1. Topical protocol and questions

Interview/shadow a project management professional or a project manager

- How did he/she get started in the field?
- How has his/her career progressed?
- What advice would he/she give to someone considering a PM career?

The interviews yielded 129 pages of interview summaries of successful professional project managers discussing their careers and giving advice to the novice. Such a base of interview data lends itself to the research question, “What is the career progression that tends to produce successful project managers”? To begin answering the research question, each interview summary was examined twice, and themes were identified and logged in NVivo 9 qualitative data research software. To ensure that all instances of each keyword or phrase was captured, keyword queries were run in NVivo to identify and code any theme initially missed in the first two rounds of review and coding. After the coding was complete, the themes were collected and the frequency in which each theme appeared in interviews was noted. A word frequency analysis was performed against each segment of coded text in order to understand how closely each identified theme was related to others in terms of common words and expressions. Relationships between themes were then established, and then, all themes were classified into major groups. Finally, the conceptual framework was built up from the themes, classifications and relationships and the rationale for each step of the analysis was supported by excerpts from sample interview summaries.

Analysis

The analysis of the 87 interview summaries revealed 14 recurring themes. The themes related to the factors that project manager interviewees described as being linked to or supportive of the success that each experienced in his/her career. Each recurring theme is identified, supported by interview summary excerpts, and discussed.

Theme #1: “Worked the way up the ranks”

In this study, it was rare to find a project manager who began his/her career as a project manager. The typical example found in the interview summaries was a person who began a career in a particular role or technical discipline, was promoted into management roles over time and learned how to get things done within the company as a consequence of the career trajectory.

Typical examples of the occurrence of this theme in the interview summaries are as follows:

There is no set career path for becoming a project manager, Advancement generally occurs incrementally, and Project management responsibilities expand as you move up the organization’s hierarchy

In my case it was from working up through the ranks. It was by being a blue collar employee while in school that prompted me to focus my higher education to leadership and management. Rarely are new under-graduates hired in at a project manager level unless they are from a highly ranked school or have close to a 4.0 average. Through the honing of skills by experience and volunteering for job task opportunities... recognition by hiring managers arrive[d]

In these interview summary excerpts, we see current project managers who started in smaller roles and expanded their responsibilities as they became more experienced. The experience and know-how developed over time are fully employed in their current role as project manager. The inference suggested by this recurring theme is that individuals who rise through the company have built relationships, know-how, and a successful track record of accomplishment. This set of competencies appears to be ideally suited for taking a project plan and executing it. Since the PMBOK framework places more emphasis on planning, monitoring and controlling rather than execution (Koskela & Howell, 2002), the interview themes suggest that project managers are selected, or evolve into the role because of the individual skill and experience of the project manager with respect to execution of work.

Theme #2: General advice

It should not be surprising that experienced project managers have quite a bit of advice to offer that was gained from their successful careers. Much of the general advice is focused on the overall path to becoming a project manager along with the specific recommended focus areas. ‘Learning on the job’ is described frequently as well as the importance of building a track record of accomplishment. Again, excerpts associated with the theme of general advice reinforce the idea that successful project managers evolve by growing within the company, developing skills, and demonstrating solid performance.

The PM position comes with great responsibility for any program, and as a result, requires advanced education, specific training, and a rich history of leadership and performance. As Steven Covey said, 'begin with the end in mind'. Anyone considering a PM career should begin with a set of attainable goals for that path, and should work toward those goals diligently.

Basically, lots of education, mentorship, and good old fashioned on the job training are the best advice...for newly minted project managers. He stated that it takes time and experience to learn the correct way to manage a project.

There are two key points that emerge from the interview excerpts associated with Theme #2. They emphasize that a project management role emerges from education, training, and a performance track record. Those desiring such roles are encouraged to seek them by setting goals early in the career. Project managers are further said to be the result of an evolutionary growth process. The general advice sets the expectation that a project manager role is one that is the result of growth and experience—and to obtain such a role one must prepare to embark on a journey of sorts.

Theme #3: Unintentional career field

It is striking to see that most of the project managers interviewed did not begin their careers with the goal of becoming a project manager. Instead, the typical example from the interview summaries shows that the original intent of each individual was to get a job within their discipline, and then progress. The career progression led to management roles that culminated in project management roles.

In the mid 90's,...said she sorta[sic] fell into her career by accident; really out of necessity

He said that he sort of fell into the area of project management as a natural progression along his career path and found it to be a very challenging and rewarding work experience.

Comments such as these suggest that the organization performs a filtering function as individuals progress in their respective careers. Those who demonstrate ongoing promise in leading others and getting things done within the organization naturally migrate into positions in which these attributes are considered a necessity.

Theme #4: Leadership skills

Interviewees who rose through the ranks to become project managers often describe the element of leadership as being essential to their career progress. Qualities mentioned include the gift of being able to secure a following within the organization and to successfully demonstrate that they are successful leaders. The ability to influence others to do the work of the project is said to be a highly desirable project management skill, and essential to effective execution. Excerpts from interview summaries consistent with this theme are given below:

...and he needed someone who could manage them, he trusted my leadership abilities, and thus my project manager career began in earnest.

Look at yourself and ask 'Do people follow my lead in life?' People have always responded to my leadership? From grade school to college, working, playing Rugby and other sports, I have always found myself in a leadership position. Having that confidence in yourself makes people respond to your leadership and makes it easier to get people to do things.

The interview summary excerpts associated with Theme #4 are consistent with the indirect and influential nature of project leadership. Interview subject refer repeatedly to the need for trust, and the important of fostering an environment where people naturally want to follow you. This advice is ideal for the case of the project manager who, by the very structure of the role, lacks legitimate power, yet leads via expert and referent power.

Theme #5: Professional recognition

Evidence from the interview summaries suggests that professional recognition is sought as a late career phenomenon. Once the project management career begins to gel after a history of growth within the company, then project managers recognize it as a profession and then seek to refine their skillsets and to achieve the PMI (PMP) certification. Since most of the project managers interviewed became project managers as a result of career advancement—that was often unintentional in the beginning—it follows that the PMP would likely come later rather than earlier in the career trajectory.

A few of the members found themselves working in project management before earning the PMP certification. They said they were trained by their respective companies in project management and had to earn their PMP in conjunction with the company offered certification. After I mentioned that I was in school for project management most of the conversation turned toward preparing for the PMP certification.

Before getting his PMP he had not heard of the PMI but said that as recent as about two years ago more and more employers are looking for candidates with a PMP. He also stated that without his PMP he would have never progressed in his career.

The evidence from the interview summary excerpts associated with Theme #5 point to the rather late career recognition of project management as a profession. Those who find themselves managing projects may not recognize that they are a part of the project management profession. However, this knowledge appears to gradually dawn late in career as project managers pursue certification in order to validate their role and expertise.

Theme #6: Self-improvement

Project managers who are successful today not only advanced in their careers, but they also keenly worked to improve themselves over the course of their careers. Personal and professional development descriptions made it clear that those serving as project managers took an active role in preparing themselves for the next level of responsibility.

One should not only embrace their strengths, but also understand their weaknesses and learn to develop those areas. Equally, one should never avoid those things that they fear. Instead of avoiding the unknown, one should challenge themselves, overcome those fears, and find growth in those accomplishments. The PM position is typically full of unknown responsibilities, where weaknesses and fear can often be found, but positive growth can come from this when confronted.

The expertise and experience she has gained in this relatively short time have made me one of the subject matter experts in her enterprise and she is able to help guide a much larger program with the work she is doing for her projects.

One of the key ideas emerging in the interview summary excerpts is the need to overcome fear and weaknesses by confronting issues as they arise from the taking on of additional responsibility. The message appears to be that if a project management role is a career goal, one pursues it by fearlessly taking the lead and by seeking opportunities to take on more responsibility even if that particular challenge proves to be unfamiliar territory.

Theme #7: Recommendations for project success

The recommendations that project managers have for those embarking on a career in project management focus on attitude, teamwork, and work ethic. These interview summaries described work environments where being flexible and able to collaborate were key to project success.

Being able to maintain a calm demeanor under pressure and having a positive attitude are just as important as technical proficiency. Everything is a team effort, and being easy to work with is as important as being good at your job. A good attitude, a willingness to learn, and a strong work ethic to deal with lots of hours are keys to success and will get you hired pretty much anywhere. Request a mentor, and choose them yourself if you can.

The most challenging aspect of a project is dealing with people and communications. When focusing on what you're building or designing, most often people are what complicate things. For instance, if I give Sam a project and tell him to have it done by a deadline many things can arise. Sam could fall victim to family problems, scheduling constraints, or personal issues that do not allow him to meet the deadline. I have found that the best way to manage people is to give them the necessary plan, have them buy into the plan, and then step back.

Comments relating to "attitude", "teamwork", and "a strong work ethic" are emphasized in the Theme #7 interview summary excerpts. This recurring theme points to the importance of soft skills in the profile of a project manager. How are these skills developed and reinforced? Interview respondents often, as was the case in these excerpts, identify the importance of a career mentor.

Theme #8: Informal approach to project management in organization

The successful project managers interviewed frequently pointed out the informal nature of project management in their respective companies. In some cases, not only was the career path unintentional, but the actual role of the project manager was weakly defined. This situation put

pressure on project managers to stretch and take on more responsibility than originally anticipated.

With their lack of people and shoestring budget at the time, they required people to do just about everything by themselves on each project. Formally, I was working as a business analyst, coder and tester and since there was no one managing me I also performed the Project Management tasks

We may not call it a “project”, but if it fits the characteristics of one, then it’s a project.

The late career recognition of project management as a profession is reiterated in the interview summary excerpts associated with Theme #8. Interview subjects found themselves leading and coordinating activities that were unique, complex and with a clear beginning and ending. They were in essence performing project management without the recognition of the specific role, career path or profession.

Theme #9: Technical skills

The theme of technical skills as the entry point for a long-term path into project management recurs in the interview summaries. It is a starting point that gets an employee’s “foot in the door”, and in many cases is said to lead to exposure to management, and finally, project management.

First become a technical expert or experienced practitioner in your technical field.

The advice he offered me is that he recommends people that go into project management have a technical, analytical, or legal backgrounds

Although project management has been traditionally categorized as technical work, the emphasis found in the interview summaries is that technical skills are a means to an end rather than an end in itself. In the interview summary excerpts in Theme #9, we see that technical skill function as a career path entry point and that the soft skills of management and leadership evolve later as technical personnel gain more experience, work on more complex assignments, and as a result, have to lead teams and interact with other departments.

Theme #10: Communications skills

The communication theme that emerged described a successful project manager as one who is able to think on his/her feet and is able to present project issues concisely to every audience ranging from the project sponsor, to the project team, to the organizational leadership. The PMBOK focus on communication is supported in practice by experienced project managers as the following interview summary excerpts illustrate.

Communication is KEY. Without communication, nobody can be expected to stay on track. My class was once asked by a professor what percentage of time on a project is spent on communication. I retorted with 90% which most classmates poo-pooed. Now I would say no less than 95%.

I can't emphasize this enough. Interpersonal skills are everything in this job. If you don't know how to communicate and receive communication, you will struggle in this job. Most likely you will not last long in this career field if you don't hone these skills early.

Technical personnel are not generally known for their communication skills, yet project managers are. The implication is that technical people who desire to move into project management positions will need to adapt by developing soft skills among which communication is paramount.

Theme #11: Networking

Internal and external networks are said to be important from the perspective of getting things done in the organization, and getting career path advice and support from others.

The best advice received from the PMs I work with was “NETWORK, NETWORK, NETWORK”. You should strive to cultivate and rely on extensive informal networks inside and outside the firm to solve problems that arise...

The first piece of advice she would offer is that you need to build your team of experts and follow up with them regularly. Having a large stack of business cards at your disposal means nothing if you don't know who the experts are by sight—not just by email address or phone number. Reach out to the financial experts, the designers, the engineers, the systems analysts...make a point of meeting with them, making time for them, and touching base with them periodically even after your project is complete. You never know when you may need their expertise again.

The implication of the interview summary excerpts in Theme #11 is that work gets done through relationships that are established both internal and external to the company throughout the career of the project manager. A successful project manager is therefore said to be one who is deeply embedded in a web of carefully cultivated long-term relationships. Such relationships may be counted on for support as the need arises in complex projects.

Theme #12: Responsibility

Project managers take on the responsibility of delivering the project outcomes. The importance of learning to take on responsibility is emphasized as these interview summary excerpts suggest.

_____ said that the best thing a Program Manager can do for their career is to take on more responsibility. Sometimes you have to go looking for more responsibility and take the initiative. Once you get it, you have to work hard and put in your best effort.

The PM position comes with great responsibility for any program, and as a result, requires advanced education, specific training, and a rich history of leadership and performance. As Steven Covey said, ‘begin with the end in mind’.

Project managers have the responsibility of leading the delivery of the many goals of the project under the project triple constraint. The suggestion from the Theme #12 interview summary excerpts is that the ability to accept responsibility is a skill that can be developed and that

potential project managers should seek opportunities to accept responsibility and gain experience in meeting commitments.

Theme #13: Mentor

Some interviewees mentioned the importance of having mentors during their careers. The emphasis was not only on utilizing a mentor, but also on taking an active role in learning and in mentor selection as the following interview summary excerpts suggest:

Request a mentor, and choose them yourself if you can. Try to find answers on your own, then go to your mentor for help. Request leadership positions [and] don't wait for them to be assigned to you.

...there were a lot of PMs in the company and I was assigned to one...and shadowed his every move. So over time I picked up some PM skills and got more responsibilities to the point where I was promoted to a PM for the company.

The interview summary excerpts in Theme #13 express the need for project managers to take an active role in their career development. This is done not only by seeking out responsibility—but also by engaging with a mentor for guidance. Given that project management is carried out via networks of stakeholders, it is understandable that project management career development should not be carried out in isolation.

Theme #14: Execution skills

Although many interviewees stressed the importance of education, there is a common thread in the interview summaries associated with learning to get things done (i.e. execution) on the job, learning by doing, and developing experience over time. The following are examples of excerpts supporting the “Execution skills” theme.

Don't pay too much attention to the classes you take about Project Management. While they give you a good basis for things like EV, PV, formulas for tracking projects, templates for charters and plans, the only real way to become a good PM is to do it. Real life experience will trump any 'schooling' you get.

Don't be a victim. As PM, it's your job to keep the project on time, on budget, and within scope. This will be a constant struggle, and that's what you're paid for. When you run into obstacles, de-conflict, if it's not within your ability, be proactive and get help from the project sponsor.

“Doing” project management is all about execution. The thought expressed in these interview summary excerpts seems to be that while PMBOK places significant emphasis on planning and monitoring & controlling activities, the real work of project management is associated with “doing” or “executing”. The message in this theme is that this aspect of project management is not something that is acquired by formal training, but rather through life experience throughout the career progression.

From themes to theory

An inductive approach to developing theory begins with the data (interviews), seeks patterns in the data (themes), and then seeks to build up a larger picture of the phenomena under study (conceptual framework; Creswell, 2013). Themes are identified by a process of closely reading the text and constant comparison with other thoughts found in the interview summaries. In this research, the frequency of occurrence of the identified themes, and the relationship between the themes will be used as the basis to build of a clearer picture of the phenomena under study.

An analysis of the 14 recurring themes suggested that they may be classified into four major categories, as shown in table 2.

Table 2. Recurring themes

Category	Coded theme	Number of times occurring in interview summaries
Career path	Worked the way up the ranks	78
	Unintentional career field	50
	Professional recognition	40
	Self-improvement	27
	Responsibility	47
Advice for the project manager	General advice	74
	Networking	15
	Mentor	9
	Recommendations for project success	20
Organizational characteristics	Informal approach to project management in organization	16
Project manager characteristics	Technical skills	18
	Leadership skills	38
	Communication skills	13
	Execution skills	17

The grouping of each of the themes into categories was determined by the subject matter addressed by each theme. For example, the category of “Career path” is consistent with the themes that tell the story of how the individual joined an organization in a particular role, took on more responsibility as the employee gained in experience, and finally arrived in the role of project manager. When several themes describe different aspects of a higher level category, they are grouped together and identified as related.

Additionally, the inspection of the frequency of each recurring theme in table reveals the emphasis on the project management career path and the resulting specific advice to others embarking on a career in project management. It can be envisioned from the frequency of the themes and the resulting categories that project managers are saying,

1. “This is how I got here”
2. “This is what you need to know and do, in order to get here too”
3. “If you want to be a successful project manager, expect to get there by learning how to lead, manage, and get things done within your company as you work your way up the ranks”
4. “Here are recommendations on how to be successful in your journey and once you arrive”

Figure 1 represents the conceptual framework inferred up from the themes found in the interview summaries and suggests that the project management career path remains an informal one in many companies, and that project managers arrive at that role through years of experience in which they become accomplished in managing, leading, and executing as they rise through the ranks.

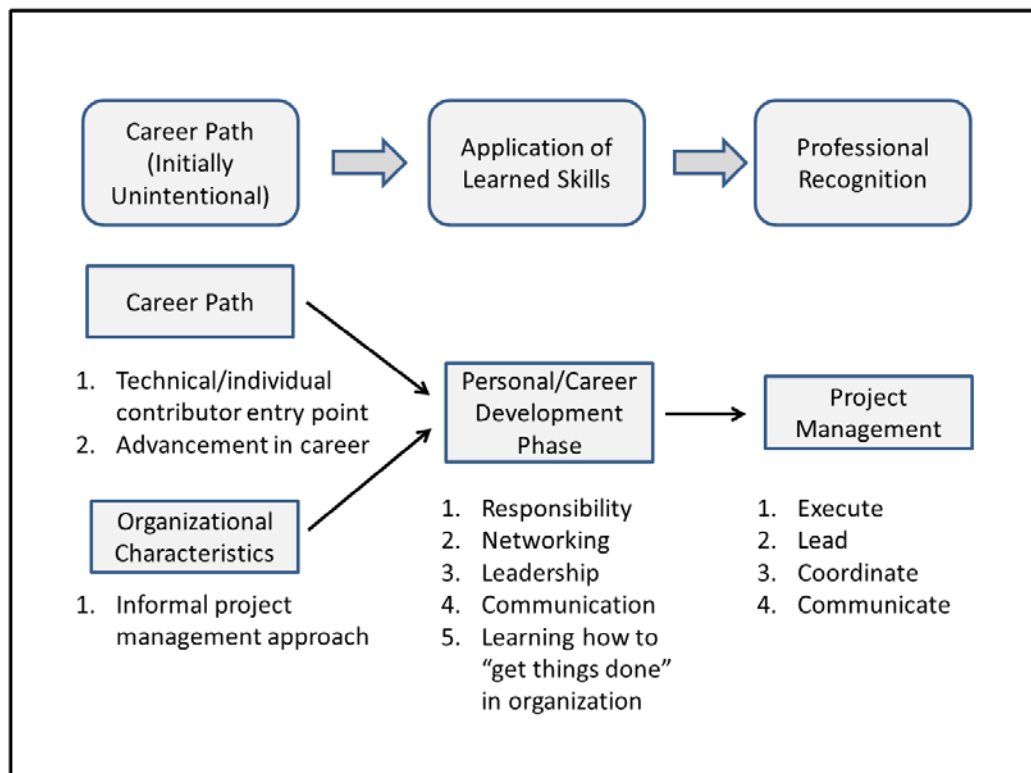


Figure 1: The conceptual framework of the project management career path

Correlation coefficient

Another approach taken to evaluate the degree to which each theme is related is to examine the similarity of words used in each theme. In this report generated by NVivo 9 based on the correlation coefficient measuring the relationship of common words found between themes, obvious relationships are illustrated in Figure 2. For example, in the network diagram resulting from the NVivo 9 analysis, we see two major groupings of themes based upon their relatedness. The upper portion of the diagram could be viewed as themes associated with the “hard skills” or “task oriented” side of project management (i.e. technical skills, self-improvement, professional recognition, working way up the ranks, responsibility), while the lower portion could be view as themes associated with “soft skills” or “relationship-oriented” skills (i.e. leadership, networking, and communications). It is interesting to note that the theme of “execution” is found in this path. It should not be surprising that the theme of execution was found amidst discussion of leadership and communication.



Figure 2. NVivo correlation coefficient between common words and themes

Project management is observed to be a communication-intensive role with few direct reports. Leadership and the ability to influence others within the organization would naturally be considered as a key component of getting things done within the organization. The story shared in so many interview summaries was consistent with the career trajectory of entering a company, taking on more responsibility, and learning how to get things done in a more or less unintentional career path.

Discussion

Koskela and Howell (2002) suggested that the paradigm of “project management as planning” and “project management as dispatching” was the implicit underlying theoretical framework for project execution—and that this theory base has natural limitations. These limitations are a result of the fact that plans never fully align with the reality of how projects unfold. Also, the authorization of work consistent with “project management as dispatching” misses the natural give and take that results from the negotiation of work assignments. As a result, individual competency may be said to fill the gaps that are said to exist in the PMBOK execution process group (Koskela & Howell, 2002). The fact that there is a PMI Project Management Competency Development Framework would seem to be consistent with the view that project manager capabilities contribute to project success. It should be asked, however, how do project managers develop the ability to successfully realize project goals, or, in other words, “to make things happen”? From where does such project management individual capabilities originate? The evidence from the 87 summaries of interviews of successful project managers suggests that it originates from years of navigating up the organizational chain of command by demonstrating accomplishment in the ever-increasing ability to get things done.

Limitations

The present study offers a glimpse into the realm of project managers’ career progression. One limitation to qualitative research is that it has high internal validity and low external validity. High internal validity is gained through this study’s high sample size as qualitative research is said to generally target 20–30 participants (Marshall, Cardon, Poddar, & Fontenot, 2013). Additionally, this research sample data was collected using the exact same interview instructions and retrieved from nine separate sections of a graduate-level project management fundamentals course, each taught by a different professor, suggesting that with many external variables, the results were consistent. The absence of ‘interviewer training’ for the many students performing the interviews and the authors’ lack of contact with both the students and the interviewees contribute to the low external validity. A second limitation is through the lack of demographic information collected. These conclusions could be more generalizable if demographic data had been collected from the interview participants, including his/her industry, years of experience, and if he/she was a certified project management professional.

Future research

The current study yields some interesting avenues for future research. First, the current study offers a conceptual framework for project manager career paths. The conceptual framework infers that project management career path remains an informal process in many companies and project managers arrive that their role through experience. Future studies can confirm the proposed conceptual framework and further test the assertions proposed in the current research endeavor.

Additionally, future studies could include demographic data and interview project managers in different countries and cultures to see if the results are consistent globally. The current research endeavor did not collect information on type of industry or years of experience, did not differentiate between domestic and global experience, nor if the participants were certified

project managers. Future studies could collect that demographic information and further explicate the themes proposed in this study.

Lastly, future studies could explore the suggestion that the success of executing projects may be tied to the project manager's soft skills, exploring such questions as, 'Does the project manager's leadership style and ability significantly influence project success?'; 'Does strong project leadership translate into successful project execution?'

Conclusion

Describing career progression is critical to the continued efforts of developing the project management profession. This research contributes to the topic of career progression by offering a conceptual framework providing insight into project managers' career progression. The themes reveal a strong undercurrent of execution focus language and advice. As employees work their way up the company ranks after starting out in a technical discipline, they learn to lead, to manage, and to take on additional responsibility. They develop relationships across the company, and learn the processes and procedures governing how work gets done within the company. In short, those who arrive at the position of project manager and are successful at it understand how to get work done in their companies.

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