Abstract

This paper explores one woman's journey through her recent promotion into management, and will identify key factors that helped prepare and position her to be ready to exercise leadership through a formal management role. It discusses assessment of qualifications and skills, acquisition of needed skills, the influence of luck and timing, and the use of mentors and delegation as survival skills to get through the transition period and become fully functional as a manager. It also includes insights into sensitive issues such as how to relate to former peers, how to gain credibility as the "junior" member of the management team, and how to juggle family responsibilities with increased time commitments at work. It emphasizes the importance of acknowledging the help we receive in reaching our own career goals and offering the same kind of help and support to those in the early stages of their careers.

Introduction

When we look at how far we've come in our professional careers, it makes sense to retrospectively examine the factors that helped and hindered us, and share those perspectives with those following in our footsteps. I recently transitioned from a senior staff position to a formal management position in the Facilities group at Sandia National Laboratories. I began as acting manager in April 1997, and was formally promoted in September. Looking back over my 12-year career at Sandia, I can identify several factors that influenced my promotability and the timing of my promotion. Although I had not specifically planned to enter management, I spent much of my career acquiring skills and building strengths that were not only essential for entry into management, but helped me gain the necessary visibility and recognition to be a viable candidate for management. This paper explores my journey and discusses key factors in preparing for, positioning for, and transitioning to management.

Preparation

When planning and establishing long-range career goals, one of the first questions a young engineer needs to ask herself is whether she believes she has both the interest in and aptitude for management. This should be a deliberate decision, based on an impartial assessment of one's skill set and accumulated experience in informal management roles. Even if entering a management position is not a specific goal, it is important to recognize that many senior engineering positions require management skills, and that failing to prepare oneself limits opportunities for the future. In my case, I could see early on in my career that I did not want to prepare mechanical system designs for the rest of my life. I knew I had strengths in
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communicating and team building, and I wanted to chart a course to use these skills in the workplace. In response to this recognition, I began to move in incremental steps toward committee work, presentations, and development of other communication skills, which led me to project management. These same skills gave me an edge in being selected as a manager later on.

Other factors to consider early in one's professional life can influence readiness later in one's career. Early career planning should consider long-term goals for education, certification, and training in one's field. If management is to remain an option, one must understand the corporate requirements, both formal ones and those embedded in the corporate culture, for advanced degrees, PE certification, and other credentials. In the case of Sandia National Laboratories, a master's degree in a technical field is highly desirable, if not tacitly required, for most technical managers. This is driven by the research and development environment, which boasts a high percentage of Ph.D.'s and places a high value on technical academic credentials. In contrast, being a manager in an engineering consulting business requires PE licensing in order to effectively fulfill one's management role in marketing and client relations. In many commercial companies, the MBA is the required "admission ticket" to be considered for management positions. These kinds of requirements are highly dependent on the corporate culture and must be evaluated on a case-by-case basis.

How does one evaluate one's suitability for management? Sandia National Laboratories requires potential management candidates to attend a pre-management curriculum in which they are challenged to examine their motives for entering management, assess their readiness, and determine areas needing development. One course presents a checklist for prospective managers that covers several areas considered essential for success in a management role, including:

- high levels of ambition and motivation
- desire to work with people
- desire to direct work (vs. responding to the direction of others)
- desire to influence the bottom line
- interest in psychology and human behavior
- desire to demonstrate leadership ability.

Positive responses to these factors are all key indicators that a technically trained person might enjoy and excel in management.

**Positioning**

Assuming one has the appropriate motivation and basic aptitude for management, and has set the stage to work toward obtaining the proper credentials and training, there are a number of positioning actions one can take during the course of a career to enhance and increase chances of selection. One thing that I found particularly helpful in retrospect was performing rotational assignments through various areas of the business unit. By the time I was selected as acting manager, I had worked in design; field engineering; project management; environment, safety, and health; sites planning; project development; and operations and maintenance customer service. Over time, this gave me the broader, corporate or "big picture" perspective essential for
functioning successfully at a management level. On several occasions, I was put into newly created positions, which gave me the opportunity to exercise initiative and establish benchmark roles and responsibilities. These tended to be high-visibility, cross-organizational assignments, so that I gained a reputation throughout the business unit and garnered the support of many managers for whom I had never worked directly. In addition, with each rotation, I gained a deeper understanding and appreciation of the strategic missions of Sandia National Laboratories and how they translated into facility needs. These varied assignments gave me additional perspective to view issues from a “big picture” point of view. With this seasoning, my more recent senior staff assignments gave me the opportunity to take an informal leadership role by providing strategic perspective and guidance to other managers and staff. This demonstrated my ability and desire to contribute at a management level.

Another key factor was the outstanding support I received through the years from my supervisors and other mentors in the business unit. These individuals provided tremendous value in terms of my preparation for management. They supported my graduate education and my SWE activities, sent me to appropriate training, enhanced my visibility in the organization, or simply provided guidance and counsel regarding politics, dealing with upper management, and other complex issues. Of course, it is helpful that I work in a business unit where management has progressive viewpoints regarding career development and routinely encourages mentoring and the creation of development opportunities for future company leaders.

Simply reviewing lessons learned from bosses can be insightful. In a recent Wall Street Journal article, Hal Lancaster says in his regular column Managing Your Career, “New managers’ former bosses can help form philosophies and styles.” He recommends “sitting down with a legal pad...and think of every boss you ever had and the things they did well and not so well.... You can probably come up with a list of do’s and don’t’s that will serve you well.”

Despite the best possible preparation in terms of education, training, mentoring, and key assignments, it is important to note that timing and sheer luck may play just as important a role in being selected for management. In my case, a new position was created that embodied my best and most recently exhibited skills, making me an extremely favorable candidate for the job. This was made possible by the fortuitous transfer of another manager out of the organization, an element of sheer happenstance. By contrast, five years earlier, when I was at home on maternity leave with a nursing newborn baby, I had been asked to bid on a manager position that required being on call nights and weekends. This was ill-timed and a poor fit for Sandia’s needs and my constraints at the time.

Decision Point

If an engineer has laid out her career roadmap, and prepared and positioned herself for management by addressing the factors discussed above, there is still a critical decision point - when to bid for and/or accept a position in management. When is she really ready to make the transition from staff to management? How does she know when the moment is right?
Such opportunities for promotion are a good time to reassess one's desire to be a manager, as discussed earlier. (Am I really ready to give up doing the work and start directing it?) It is also essential to consider one's credentials and skill level in relation to those required for the job. (If I am lacking any skills or credentials, can I acquire them while in this new position?) It is a time to revisit one's career plans and make sure that all milestone goals have been met. (Did I get that master's degree yet? Do I really want to try to juggle a management job and go to school on the side?) It is worthwhile to look at the expectations of the management position in relation to the support system one has in place, both at work and at home. An April 1997 article in the Wall Street Journal talked about the aversion to joining management ranks that has developed in corporate America, and its effect on employees' decisions to enter or step down from management because of the demands the job makes on both time and energy. For me, this concern generated a serious talk with my spouse about shifting the burden for child care and household tasks more his way, and finding ways to lighten the load for both of us (i.e., hiring out more services). It also meant negotiating for very good clerical support at work to help make the transition smoother and reduce the number of hours required just to keep up.

**Transition**

The transition required after accepting a promotion is challenging for a variety of reasons. Along with the issue of changing roles in an organization come the subsidiary issues of getting others to recognize the change, learning to look and act the part, adopting a visionary leadership role, learning and applying personnel management skills, and adjusting peer relationships.

Preparation for management had always included dressing for my next job - it's a personal value I bring to the workplace. So it was doubly important for me to dress the part after I was named as acting manager. I continue to wear business suits almost daily, although the corporate culture of Sandia National Laboratories does not require it. I find it easier to exercise authority when dressed this way, and never worry whether I will be dressed appropriately for an unexpected meeting with upper management.

I did have to make a few adjustments to my style and demeanor in order to fill my new role as manager. Knowing from experience that this transition can be challenging, some of the other members of the management team encouraged me and told me not to be afraid to "take my place at the table". I found I had to apply that advice literally as well as figuratively, since it is a norm at Sandia for staff members to yield their seats at a conference table to managers and withdraw to the periphery. Another related challenge was that of gaining credibility with a new peer group. As the junior member of the management team, I felt I needed to listen and learn, but also to project confidence and competence to my colleagues. There is a fine line between these two points, and the balance point changes over time as the team gels and the new manager matures. Each manager brings some special talents and depth of experience to the table, and as time goes on, each learns to respect the others for their unique expertise. The key is to stand firm in one's own area of expertise, and defer when appropriate to others' strengths. It may also be helpful to observe the social styles of the new peer group and use that knowledge to communicate more
effectively. If a colleague is very analytical by nature, offering a little more information or detail may help convince her that an idea is sound.

I feel more pressure to be completely professional in my dealing with staff, peers, and upper management. I must consider more carefully how my actions might be perceived by others. As a staff member, I knew and adhered to the corporate code of conduct. Now, I go out of my way to ensure that my actions can not be construed as unethical in any way.

I realize that, as a manager, I am a role model to others and represent the company in a more visible way. I also take very seriously the responsibility I have to treat staff fairly and act as a coach and mentor. I am responsible for the performance of others, and the staff members deserve the same consideration I received as a junior engineer to help develop their careers.

A new manager may wonder how she should relate to friends and former peers in relation to her new position. This can be immensely complicated, especially if friends were also candidates for the management position just filled, or if the new manager has worked as a staff member in the group she is to manage. Even in the most comfortable of transition circumstances, new managers must take care not to share the large body of confidential information to which they now have access, such as personnel performance. Conversely, new managers may find that former peers are not quite as forthcoming in sharing personal information or rumors from the corporate grapevine. Staff members realize that managers have a perspective that is somewhat more corporate-oriented, and have obligations to bring certain kinds of information to light, even if that information was acquired in confidence.

This transition was not as painful for me as I had feared. I have not yet had to manage people who were good friends, although I have been in several discussions about key assignments and performance. Every manager has this dilemma to some degree, and it should not be used as an excuse to abdicate responsibility. If I truly feel my input about a friend could be biased, I say so. Certain circumstances, such as blood relationships, can be good reasons for excusing oneself from decision-making. Company policy may dictate what to do in these instances. Overall, I find that I relate the same with friends in matters not related to work, though I recognize that communication is occasionally less open in work-related matters.

**Survival Tools**

A new manager can use a number of survival tools to help ease the transition. Learning the art of delegation is an absolute must for new managers to handle the increased workload and time demands, both at work and at home. One of my first tasks was to learn how to use a secretary. Every manager/secretary pair develops a special partnership based on the skills and organizational talents of each. It takes time to optimize this partnership, but the new manager must start developing it immediately and come to agreement on how to handle phone, e-mail, paper mail, scheduling, and other critical areas. Delegation to staff and even other managers should also be used as an option to avoid instant overload. A new manager should resist the urge to take on all the action items at meetings, unless it is appropriately her task. Prolonged hours at work due to late meetings and extra work can also take a toll unless delegation is applied at
home. This may translate into hiring a cleaning service, bringing home carry-out meals a little more often, or juggling child care responsibilities with a spouse. Obviously, an appreciative and supportive spouse is a tremendous asset. A new manager may also have to consider reducing her outside commitments, since spare time and energy may now be expended at work.

Corporate training courses are an excellent resource to get up to speed quickly on the nuts and bolts of management duties and responsibilities, and the background required to execute them. For me, this list included corporate financial systems, interviewing/hiring, personnel management, performance evaluation, and legal responsibilities such as equal employment opportunity awareness. In addition to the specific “new manager training” I mentioned above, my company also has an outstanding array of computer training courses and professional development skills in areas such as project management, communications, and negotiation. The only problem I have had in taking advantage of this resource is finding the time to attend the classes.

Mentors and former bosses can be excellent sources of advice and counsel related to factors such as organizational politics, group dynamics, hidden agendas, and organizational history. These are subjects that can’t be learned from books or training courses, and can be critical factors in a new manager’s success.

Maturing

Achieving the goal of promotion to management does not mean the end of career planning. This is an excellent time to review career plans and adjust long-term goals and strategies for accomplishing them. Learning never stops - even after the traumatic period of transition to management. It is important to receive periodic feedback from bosses, peer managers, and staff to understand strength areas and challenges, and get training or coaching to apply the principle of continuous improvement and prepare for future goals.

Perhaps one of the most critical roles a manager fills is that of coaching others in their professional and career development. This is an awesome responsibility, since it affects the long-term success of the entire organization and the individuals who comprise it. As a new manager settles into a level of comfort in her new role, there are many ways she can encourage and assist others in career development. In addition to coaching staff on critical skills and the training to acquire them, a manager may find herself mentoring individuals across organizational boundaries. It is especially important for women managers to take the extra step to seek and encourage such opportunities with female staff members, since there are typically few female managers in a technical organization. These up-and-coming female staff members can find the advice of female mentors particularly germane to the issues and challenges they face.

Summary/Conclusion

It’s never too early for a professional to look at her long-range career plans and consider preparing for management. The process is the same for recent college graduates and midstream
professionals. First, evaluate personal strengths and challenges, and decide if management is really an appropriate path. If the answer is "yes", prepare for that path through education, training, mentoring, and any other tools at your disposal. Learn the organization and position yourself through job rotation, high-visibility assignments, mentoring, and top-notch performance. When the opportunity to enter management presents itself and the time is right, make that final decision to go forward. During the transition period, take your place at the table, make adjustments as required, and get all the help needed for success. After the transition period, don’t stop career planning - start preparing for the next career move. Finally, with increased confidence and comfort, it’s time to help others along the way. Serve as mentor, and coach employees and others in the organization in both technical skills and skills that can’t be learned in classes.

In retrospect, it becomes clear that there is a cycle of development and support as we progress in our careers. No matter what path we choose, the notion of helping others as we have been helped is critical to organizational and individual success. When we see how far we’ve come, we need to acknowledge those who helped us get there and provide that same support to the next generation. In practicing this principle, we fulfill our responsibilities as professional engineers and as members of our community and society.

Curriculum Vitae

Jan Williams is manager of the Facilities Project Development Department at Sandia National Laboratories in Albuquerque, NM. Her recent entry into management follows 15 years’ experience in facilities design, construction, project management, and planning. She holds a BSME from the University of Missouri, Kansas City (UMKC), and an MSCE (Construction Management) from the University of New Mexico. She has been active in SWE since 1984 on many levels, and most recently co-chaired the 1997 National Convention in Albuquerque. She is a 1994 SWE Distinguished New Engineer, and was recognized by UMKC with an Alumni Achievement Award in 1991. A member of NSPE and ASCE, she is a registered PE in New Mexico.

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