

Building a Construction Management Career

Construction Project Management chapter 3.1 on the nature of people and chapters 3.2 - 3.5 on management and communication describe the range of peoples' natural talents and tendencies. Chapter 1.1 on personnel for construction projects and 1.2 on personnel for builders identify construction management job possibilities. The student seeking to plan and start a career must determine how their natural talents, knowledge and skills can best be applied to the industry to guide selection of the first job and build a entire career. Some guidance on these decisions is provided below.

Talents and skills

A construction manager needs some competence with all technical and management aspects of construction management, but nobody can be excellent at all things. A successful career can be crafted with one very strong competency and a second fairly strong competency — like a major and minor in college. And although some field and some office experience is highly desirable and can be obtained early in a career, one will soon gravitate to either the field or office, and then usually remains on that track.

Communication style

Field personnel most frequently communicate informally verbally in person face-to-face. Written communication tends to focus on facts, such as incident reports or logs.

Office personnel communicate informally verbally in person as well, but also more formally and in a public speaking role such as a proposal presentation. Written communication, both informal and formal, occupy a significant portion of office personnels' time. Competence and comfort with these more formal types of speaking and writing are needed for a successful office career.

Numerical skills

Field personnel will deal with a large volume of numerical information such as job cost reports, the labor distribution, and records of material delivery. These tasks are ongoing, but occupy only a fraction of the working day.

Office personnel will have a heavy responsibility for estimating, scheduling, budget planning and monitoring and control. In larger firms, with specialized functions such as an estimating department, estimators will be heavily involved with numbers work every day. Although estimating involves interesting and rewarding analysis, judgment and people skills, enjoyment of numbers work is essential.

Organizational skills

Field personnel will be most heavily involved with organizing people and groups of people. Trade skills and specialization, crew sizes and the portion of the work

subcontracted and self-performed will influence many of these decisions. Field personnel also work with and administer communication and documentation systems—but these systems are usually, but not always, developed by the office.

Office personnel develop and use or formal organizational structures. Some natural talent and longer time horizons are required for satisfactory execution of this responsibility.

Sales

Field personnel can perform their work so that the firm is likely to be asked back for future projects, but do no direct selling.

Office personnel may sell a little or a lot. Larger firms will have a business development person or department, and company officers or owners will also be involved with selling major projects. Some firms are structured so that project managers are responsible for an accountant or customer and are involved with selling change orders and additions to current projects, as well as securing new projects with the same customer. In larger specialized firms, some personnel such as estimators, schedulers, or purchasing agents may do little or no selling.

Although competition can be fierce, sales involves knowing the competitors' strengths and weaknesses and likely positions, and then convincing potential customers of your firm's superior competence. This is not high pressure, quick close, door to door selling, or the type of selling students may have experienced with sales of something such as raffle tickets. But although it is higher level and more complex, it is still selling and the construction manager must have some talent for and comfort with this task.

Construction technology

Both field and office personnel must know construction means, methods and equipment and work together as a team to plan and execute the project. The estimator must understand probable means and methods and types and quantity of equipment needed to prepare the estimate, but the field superintendent will be heavily involved in the final decisions.

For example, for an earth retention systems for foundation installation, the project manager and superintendent will work together to establish an approach. The project manager may secure the professional engineer to design the system and then gain needed permissions. The project manager and superintendent will work together to establish installation sequences coordinated with the structure installation.

Segregation of these two functions occurs in some firms with the estimator saying, “we got the job, now let the field figure out how to build it”. But this does not effectively manage the project or use or improve the skills of either the project manager or field superintendent.

By the conclusion of the construction management student's education and related summer jobs or internship work there has been exposure to all the skills and activities described above, and the student has an idea of very satisfying tasks to be sought and those that should be minimized. Truthful statements are critical. Natural talent, tendencies and weaknesses should be recognized when selecting a first job and a career path.

Size of firm

Larger firms will provide more formal training with opportunities for mentoring. But these firms can have much more job specialization which limits diverse experience and the ability to see the big picture. These firms' projects will tend to be larger and more diverse in type and geographical location.

A smaller firm will have more informal training programs with fast learning expected—"sink or swim". The instructions may be short and brusque, but will be from the experienced firm decision makers. There will be less specialization. Those who can function well in this environment can learn a lot and see the big picture fast.

Size of project

Assignment to a single big project for 2-4 years can be a very exciting first assignment—and naturally attractive to the young. Everything will be large and complicated and challenging. The disadvantage is that only one type of project and set of personnel and circumstances will be experienced, so determining what is normal operating procedure or unique to the project will be difficult.

Very large projects may be in distant areas of the country, which will require relocation. Although this can be fun and interesting at first, it can become less appealing when a family is started. Field personnel will come home only on weekends at best. Office personnel may be headquartered in the home city and travel to the jobsite a few days per month for medium sized projects, but may be on-site full time for large projects.

Construction managers performing smaller projects may perform 2-10 projects in the time of one larger project. And these projects will typically be local with little or no out-of-town travel required. With the repetition of multiple projects, patterns emerge and proven approaches for future projects are developed. With this rapidly developed experience, an employee can move to the top levels of the firm and 4-10 years.

Amount of work self performed, and usual project delivery methods

There is a construction management career continuum of: self perform all work, self perform significant portion of the work, mainly subcontract work, construction manager at risk, owner's agent not at risk, and project owner. A career path may follow the direction stated above, but the reverse direction is difficult and sometimes impossible.

Working 3 years at a position self-performing no work may not disqualify an applicant to a self-performing firm, but 7 years probably will.

Self performed work

Construction managers and trade employees at firms self-performing work will use the same monitoring and controlling systems and procedures. Information will be of high quality and can be definitively verified. And since you're playing with real money evaluation of performance can be intense and precise. A few years reviewing this information, combined with jobsite observation can produce intuitive judgment capabilities that can be obtained no other way.

Monitoring and controlling techniques for subcontracted work will be a less precise. Even if the subcontractor has "open books" and is willingly to communicate their performance (which is rare), their accounting and control systems will be different and not fully discernable, so evaluations will be less reliable. Those working for the project owners will be yet one more step removed, with a corresponding reduction in information quality and experience gained.

Students must realistically assessed the capabilities and preferences

Students must first evaluate their skills, natural talents and inclinations and then decide a suitable lifestyle: is frequent travel acceptable or is a more stable residential situation sought? And the type of firm for learning and communication styles and opportunities for diverse experience must be chosen.

Some may be fortunate to find a single firm that will offer the diverse experience to build a successful career. Others may have to move to different firms to gain the needed skills and experience. If the multiple firm career path is required, starting on the self performed end and moving towards the owners' end of the spectrum must be sought.