



Evaluating Various Job Functions to Map a Typical Career Path in the Roofing Industry

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The general contractors contract the majority of the work on construction projects to sub-contractors. Hence, attracting the next generation of workforce, Generation Z (Gen Z), at the sub-contractor level is critical when addressing workforce issues. Roofing is one of the critical scopes within a construction project provided by a sub-contractor. Gen Z has various characteristics and preferences to consider when attracting them to the roofing industry. One of the significant attraction factors for Gen Z is a visual career path within a specific industry. This paper aims to document a general career path to attract a new generation of professionals and retain current professionals in the roofing industry. A focus group with nine (9) roofing contractor companies from different regions of the U.S. helped map a typical career path and collect information on job responsibilities, compensation for each position, experience requirements, and standard benefits within roofing contracting organizations. Educators, trade schools, and roofing contractors can use the information and the proposed flowchart in response to the need for a visual career path to attract Gen Z workers.

Key Words: Generation Z, Career Path, Workforce, Roofing

Introduction and Literature Review

The construction industry plays an integral role in the U.S. economy. Construction is a complex industry that creates supply and demand for other industries, such as manufacturing and infrastructure. In the United States, the construction industry employs about 6%-10% of the workforce (Assaad, 2020). A typical construction project consists of the principal general contractor and a subcontractor. The nature of the relationship between the two is a contractual partnership that is transactional, cost-driven, and sometimes adversarial (Martin and Benson, 2021). One common denominator between both general contractors and subcontractors is the significance of a strong and skilled workforce.

General contractors emerged in the 1880s due to the construction industry becoming more complex and specialized (Wermiel, 2006). General contractors are significant to the construction industry because they are key to aligning the execution of all scopes to better the project at hand. They are responsible for the coordination and execution of the entire construction project and usually employ a higher-level approach to the project than the subcontractors. Therefore, the general contractor

workforce must embody a strong sense of emotional intelligence and organizational and interpersonal skills. The contractor workforce can be divided into field and office career paths. Research has found that the office workforce display high levels of interpersonal skills, empathy, and social responsibility compared to the workforce in the field (Songer and Walker, 2004).

Operating within the same industry, but differently than general contractors, are the subcontractors. Subcontractors typically sign a contract with the general contractor agreeing to perform a specialized scope of work. The goal of a subcontractor is to further develop a horizontal and integrated structure, supporting a broader project with the completion of their individual scope (Errasti, 2007). With a precise skillset in one specific scope of work, the subcontractor workforce tends to include skilled labor who demonstrate a depth of knowledge. Within the construction industry, people are the greatest asset. Moreover, subcontractors perform most of the work on a construction project (Dykstra, 2018), around 80-90% (Hinze and Tracey, 1994). Hence, it is critical to focus on workforce issues within the subcontractor workforce.

The construction industry is projected to have a 2.9% annual employment growth rate, making it the most rapidly growing industry in the goods-producing sector (Henderson, 2012). Just like the construction industry, the roofing sector expects to see a significant increase in the need for workers. The roofing contractor industry expects to increase its workforce by 3.8% in 2021 (IBISWorld, 2021). The roofing industry is composed of subcontractor organizations that complete their scope of work in part of the broader project. According to the U.S. Bureau of Labor Statistics, the roofing industry currently has 128,680 employees working at a mean hourly wage of \$22.60. The roofing industry is experiencing significant changes in advanced technologies, increased safety, and better communication with clients and trade partners (Delvinne et al., 2020). These changes are causing the roofing industry to be a highly desirable work environment but need additional employees to meet the industry demands.

The construction industry must direct its attention to the next generation of workers entering the workforce, Generation Z (Gen Z), to address worker shortage issues. Since Gen Z are more likely to pick an industry that aligns with their preferences, the industry must understand Gen Z's career preferences to overcome workforce issues. This generation desires a strong organizational culture that fosters relationships within the workplace. As a product of these relationships, they desire to have their ideas listened to by managers (Özkan, Mustafa & Yılmaz, Betul, 2015). Gen Z workers desire to be on a team. The generation displays a fear of missing out, and team inclusion is one way to combat this fear (Liu, Liu, Yoganathan, Osburg, 2021). Furthermore, this generation is self-confident and high achieving, which leads them to work hard to meet their aspirations. Additionally, different from other generations, Gen Z workers are conscious about their brand and online presence. A shift in personal enjoyment to professional branding through social platforms plays an integral part in their self-expression (Vitelar, 2013). Developing leadership qualities is another aspect of Gen Z (Panvar et al., 2019). Knowledge about different career opportunities linked with career growth is also an important attraction factor (Bigelow et al., 2019). Hence, a visual career path to attract Gen Z into any industry is essential.

After conducting an in-depth literature review, there is a lack of studies documenting a visual career path in the roofing industry. This paper aims to develop and document a general career path to attract a new generation of professionals to the roofing industry. Furthermore, the paper analyzes and compares responsibilities, compensation, experience, and benefits for each position within roofing contracting organizations.

Methodology

Figure 1 shows the four (4) phase research methodology of the study.

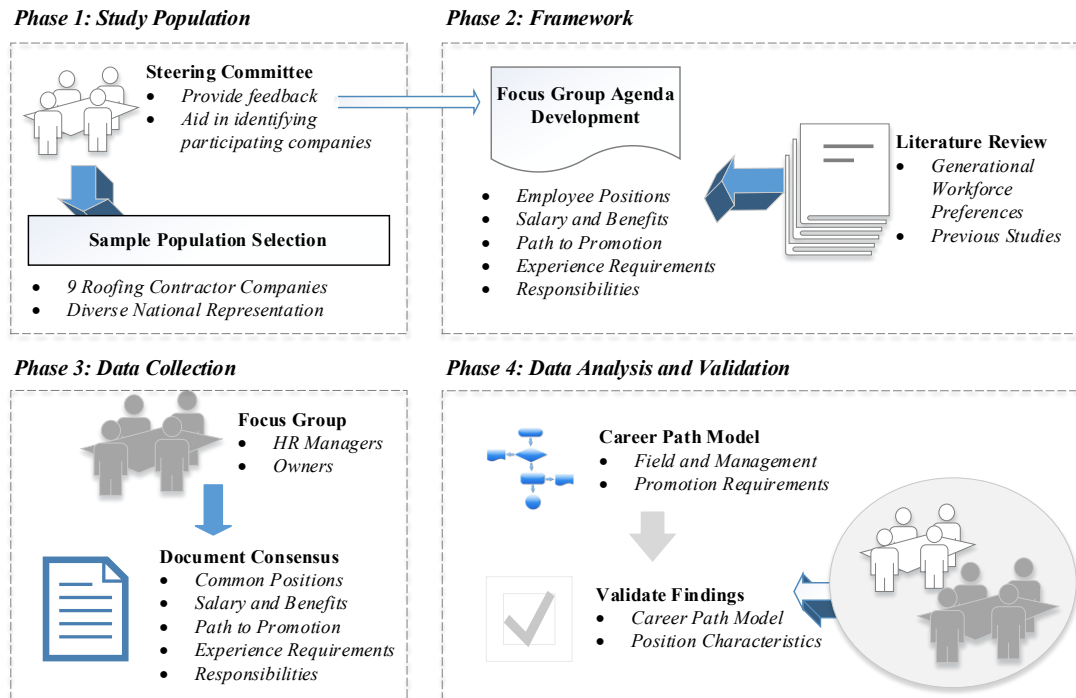


Figure 1. Phases of Methodology

Phase one consisted of forming a steering committee that assisted in developing the study framework and selections of participating companies. The focus group participants were selected members from the National Roofing Contractors Association. A total of nine (9) roofing contractor companies participated in the focus group over Zoom. The participants represented seven different states, covering all regions of the United States. Participants were also representative of small and large companies, with company revenue ranging from 8.5 million to 670.5 million (95.32 million average). The significance of the focus group was being able to prioritize quality over quantity by selecting diverse participants and asking in-depth questions.

The research framework was established in phase two and included an in-depth literature review on generational workforce preferences that influenced the focus group agenda. The agenda included discussion around various positions in the roofing industry, salary and benefits for each position, path to promotion, experience requirements for promotion, and individual job responsibilities.

In phase three, the data was collected through focus group discussions among (9) nine roofing contractor companies. The primary participants of the focus group were the H.R. Managers and/or the company owners that had an in-depth knowledge about their company's positions and individual job characteristics. One participant from each company was represented in the focus group. The focus group was executed by the researchers over zoom and lasted about one-hundred-twenty (120) minutes. The key information such as the common positions within each company, starting position for a new worker entering into the roofing industry, and their typical career path and promotion path

were collected in this phase. Salary, benefits, experience, education requirements and the responsibilities for each position were also collected. The data was documented through consensus among the participants in the focus group after each discussion point. Each individual company was given dedicated time during the focus group to discuss their company's positions and individual job characteristics. The data for the various jobs was documented and mapped in real-time during focus group. After each discussion point, the participants were asked to provide any changes or updates to reach consensus.

In phase four, the focus group discussions were analyzed to develop a general career path within roofing contractor organizations and specifically analyze the positions, experience requirements, responsibilities, average compensation ranges, and the benefits offered for each position. The mapped career path and the relevant information for each position was again validated with the nine (9) roofing contractor companies participants to reach consensus.

Results

Responsibilities

The common positions and their responsibilities for roofing contractors were collected. The positions were determined based on the common positions utilized by the individual participating companies from the focus group. The data shows that as employees progress into higher positions within a company, responsibilities broaden in scope. The entry-level positions tend to be more technical in practice than higher positions requiring more leadership and management skills. The entry-level positions are narrow in scope, focusing on a few responsibilities, compared to higher-level positions that incorporate a broader range of duties. The responsibilities of positions in both the field and office demonstrate the same trend of broadening in scope as position ranks become higher. Furthermore, the leadership demands as one progresses in both the field and the office grow. The sales associate focuses more on the technical side of making sales, while the manager leads the team and expands business operations. The findings for the individual positions are outlined below.

- Field Technician: Installation, material handling, and cleanliness on the jobsite.
- Field Coordinator: Overseeing projects and coordinating activities that involve sub-contractors.
- Field Superintendent: Overseeing progress on-site, meeting labor/productivity goals, crew scheduling, and safety.
- Junior Project Manager: Assisting the project manager as needed, arranging and managing jobsite meetings, estimating for more straightforward scope and low-cost jobs, estimating maintenance and service jobs. Depending on company, may be identified as a Junior Estimator
- Project Manager: Estimating and managing projects, overseeing daily operations, managing reports and documentation, bidding process, and H.R. functions: safety, production and on job mentorship. Depending on company, may be identified as an Estimator
- Senior Project Manager: Managing a team of project managers or a team of estimators, mentor to junior project managers / junior estimators / project managers / estimators.
- QA / QC Director: quality check surveying, I.R. scan, preventative maintenance plans, technical services.

- Sales Associate: Establishing and maintaining customer relationships, seeking new business opportunities.
- Sales Manager: Managing the sales team and expanding business operations

Compensation

The average compensation for each position is shown in *Table 1*. There is an overlap in compensation between field and office, both showing steady compensation increases as the employee progresses in their career. On the field side, there is a 39% increase from entry Field Technician to Field Superintendent. On the management side, there is a 56% increase from entry-level junior project manager/junior estimator to senior project manager/senior estimator. The highest paid position is the QA/QC Director since this is the most experienced and high-ranked position. The sales position compensations are significantly lower than other positions, but the sales team also makes a healthy commission on sales.

Table 1

Average and Range of Compensation

Position	Average	Range
Field Technician	\$57,500	\$50,000 - \$65,000
Field Co-Ordinator	\$60,000	\$50,000 - \$70,000
Field Superintendent	\$80,000	\$70,000 - \$90,000
Junior Project Manager	\$57,500	\$50,000 - \$65,000
Project Manager	\$70,000	\$65,000 - \$75,000
Senior Project Manager	\$90,000	\$90,000 and above
QA/QC Director	\$107,500	\$100,000 - \$ 115,000 and above
Sales Associate	\$57,500	\$50,000 - \$65,000
Sales Manager	\$70,000	\$65,000 - \$75,000

Experience

When analyzing a career path, the experience requirement increase as the employee progresses. Entry-level positions need little experience, and more emphasis is placed on training programs or college and university degrees. However, as an employee progresses in their career, experience gained in preceding positions is essential to promotion. On average, typical years experience before promotion from entry-level positions (Field Technician and Jr PM/Estimator) is four (4) to seven (7) years. However, this can be accelerated based on company needs and employee capability. The field and office career paths reflect similar experience requirements. It is important to note there can be overlap in the career paths. For example, a junior estimator or junior project manager could be qualified based on field experience. The experience required and the sequential job promotion do not always have to be linear, strictly sticking to the field or the office. The experience requirements for the individual positions are outlined below.

- Field Technician: Entry level position, trade school-based experience, years before promotion: four (4) to seven (7)
- Field Coordinator: About four (4) to seven years (7) years of experience as a field technician, can move up faster if given adequate training and proper orientation
- Field Superintendent: Prior experience as a field technician and/or field coordinator, leadership and technical skills needed, years before promotion to O&M: one (1)
- Junior Project Manager: May be hired internally from the field with prior field experience or a college graduate, years before promotion: four (4) to seven (7)
- Project Manager: About five (5) to seven (7) years of experience as a junior project manager or junior estimator
- Senior Project Manager: Project managers and estimators with leadership skills
- QA / QC Director: Need extensive amount of experience in the industry, detailed knowledge of the processes, assemblies, and procedures
- Sales Associate: may be hired internally from the field with prior field experience or a college graduate

Benefits

A detailed matrix of benefits for each position is outlined in Table 2.

Table 2

Position Benefits

Position	Insurance	401K match	Bonuses Programs	Vehicle or vehicle allowance	Profit-sharing bonus	PTO	Base salary plus commission
Field Technician	X	X	X	X	X	X	
Field Co-ordinator	X	X	X	X	X	X	
Field Superintendent	X	X	X	X	X	X	
Junior Project Manager	X	X	X	X	X	X	
Project Manager	X	X	X	X	X	X	
Senior Project Manager	X	X	X	X	X	X	
QA / QC Director	X	X	X	X	X	X	
Sales Associate	X	X			X	X	X
Sales Manager	X	X			X	X	X

There is little to no variation in benefits across the career path for both the field and office sectors. All positions for both field and office receive the same benefits that include insurance (health, vision,

dental), 401K match, bonuses (depending on the company), vehicle or vehicle allowance, profit sharing bonus, and paid time off. However, the sales team (associate and manager) receives different benefits. Their benefits include insurance (health, vision, dental), 401K match, profit sharing bonus, paid time off, and base salary plus commission. Consistent benefits are critical since it ensures the same care and coverage from the company, irrespective of position.

Career Path

As displayed in *Figure 2*, a potential workforce in the roofing contractor organization can choose either the field or the management path.

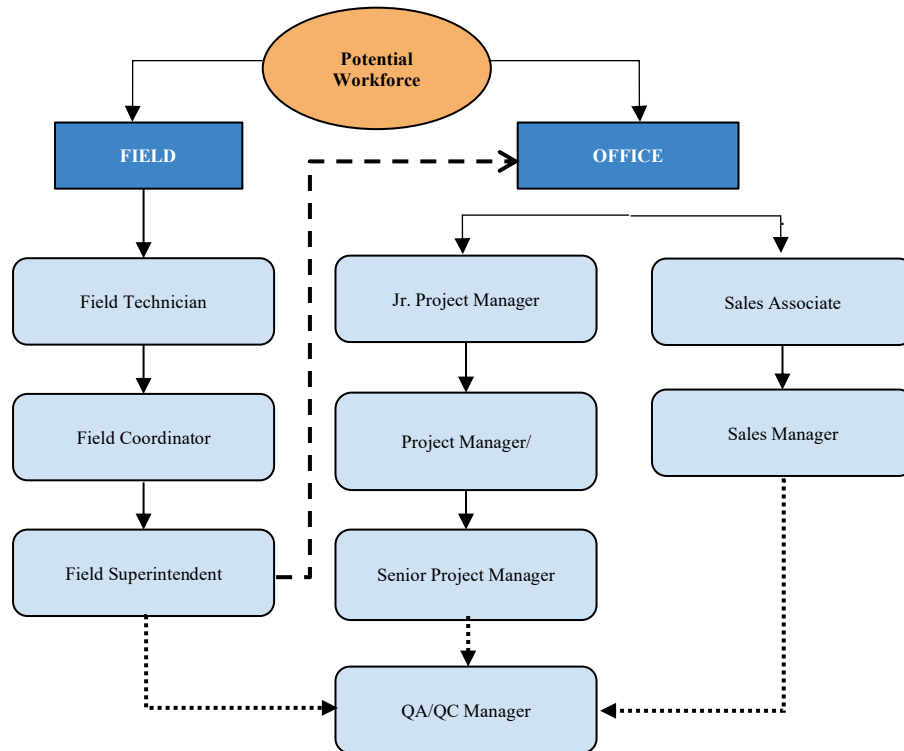


Figure 2. Visual Career Path Model

A recent college graduate looking for an entry-level position within roofing contracting companies would either be employed as a field technician or field coordinator classified as “field position” or a junior project manager/estimator or sales associate classified as “office position.” Over time this employee will progress in rank throughout their career. QA / QC Manager positions generally require extensive experience within the roofing industry and are not typically considered entry-level positions.

Conclusion

The main objective of this study was to develop and document a general career path to attract a new generation of professionals and retain current professionals within the roofing industry. As an employee progresses in their career path, they take on a broader scope of responsibilities, including leadership and management. There is a 39% increase in compensation from the entry field positions to the highest field positions and a 56% increase in entry office positions to the highest office position within the career path model. The highest-paying position within the career path model was the QA/QC Director, earning an average of \$107,500 compensation annually. Experience required increases as employees progress along their career path. Typically, an average of four to seven years is expected in each phase of the career path before promotion. This is applicable for both the management and the field. The benefits associated with each position for field and management, with the exception of the sales team, are similar across the career path.

The contractor's section of the roofing industry allows employees to take on greater responsibility with time, become leaders within the industry, earn a rewarding compensation, work hard to gain the experience needed for a promotion, and receive decent benefits. All of these components of the visual career path align with Generation Z's career expectations. Knowledge gained from the literature review points to a generation that desires career advancement, leadership opportunities, and a great reward for hard work. While these align with the components discussed in the study, the most significant conclusion to be made is Generation Z's desire for a clear and visual career path. Roofing contractors can use the information and the flowchart proposed to attract Generation Z. The flowchart clearly defines the career path they would embark on once entering the roofing contracting organization.

The limitation of this study is the representative sample of the focus group. Even though the participants represented each region in the U.S., further research is needed that analyzes more companies from every state to validate the findings. Further research is also needed to gauge the perception and interest of Gen Z about the proposed career path in the roofing industry. The results of this study pave a path to future research in motivators for success and promotion among the Gen Z workforce. This study outlines the visual career path associated with the preferences of Generation Z, but future research is also needed as to what motivates Generation Z to progress in their career path.

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