

Introduction of Construction Management - Assignment 1

What makes construction industry is different from other industry

Being the tertiary sector in the economy, construction industry requires high demand on professional, skills and technology among other industry, which also leading it as a risky industry in both safety and company profit. The work involved is diversified, from labour intensive hand dig cassions to multiple usages have high capacity of cranes. While other industries require a number of fixed assets like land, building, industrial machinery etc. a construction business can theoretically run even without the need of an office. Depending on the project the required personnel and machinery can be hired, the site can be bought using borrowed capital and units can be sold off through bookings, periodic work completion contracts etc.

The accident rate in the construction industry is four times higher than that in any other industry. Why?

There are work activities which being conducted in construction industry and are rarely/less happening in other industrial sectors: working at height, working at confined space etc. Construction work activities are in great variety which involves deployment of different Personal Protection Equipment (PPE) in varying working condition. Unexpected environment/happenings may sometimes be encountered. Meanwhile, other industrial is comparative static. Some construction workers may have insufficient training/experience and awareness during the change of working environment and sudden happenings.

Injuries happen due to poor abidance by safety and health standards, lack of training among workers, limited oversight and control, and the absence of a comprehensive framework for the application of safety standards for the construction sector.

Outline the main duties and responsibilities of the construction supervisor

Main Duties of Construction Supervisor overseeing the activities at a construction job site. This includes managing construction crews, inspecting ongoing work, ensuring adherence to local codes, arranging for necessary equipment and keeping construction project costs at or, if possible, under budget. Construction Supervisors work mainly for contractor. They can specialize in commercial or residential construction, though some oversee both types of projects.

Construction Supervisors must perform diverse tasks to ensure that construction projects are meeting deadlines and being completed in a safe and timely manner. They also ensure that all equipment is working properly. We analyzed several job listings and found the following among the core Construction Supervisor duties and responsibilities.

➤ Manage Construction Teams

From on-site visits to project scheduling and team building, a Construction Supervisor is a hands-on manager of various laborers working on a particular construction project. The Construction Supervisor makes sure that teams are working together with the sole objective of completing a project while adhering to deadlines, specifications and codes. They are likely to be involved in selecting specific contractors and sub-contractors and ensuring that these individuals are working well together.

➤ Adhere to Safety and Building Practices and Codes

Construction Supervisor keeps track of the project progress to ensure that it is not only meeting the contract specifications, but that personnel are maintaining safe work practices and following local regulation/Code of Practice. They would also communicate with inspectors about compliance with contract specification and assist with on-site inspections. They may hold regular meetings with construction manager/safety team/engineers/workers to review worksite safety.

➤ Construction Supervisor Skills

Construction Supervisors should be detail-oriented problem-solvers with the ability to meet deadlines and work with various personality types. Strong oral and written communication skills are important for Construction Supervisors. They should be able to work outside in all elements and be in good physical condition, as bending, lifting and walking are all activities they will likely participate in while visiting a construction site. In addition to these general skills, a Construction Supervisor could be expected by potential employers to possess the following skills.

Discuss some important features of the construction industry

Features of the construction industry can be divided by its output, its size, nature of demand/construction work, variety of construction technology, and structure of industry.

Features of construction output are durable or long lasting such as house, building and road, large and heavy units, unique, immobile, complex process, and expensive. Construction industry is a capital good industry. It also requires other industries to support them and contributes to the gross domestic product of the country. Many workers are required by the construction industry. The main client of the construction industry is a government regarding to their policy in infrastructure development. Demand of construction is in various types and sizes. There will be different locations, different resources, different inputs and different stages of their process. There will be different locations, different resources, different inputs and different stages of their process. There are discontinuities and uncertainties in the demand pattern.

Even though there is numerous technology invented/developed in the construction industry, but the construction industry still needs a lot of workers with many levels, skilled or unskilled.

The construction industry has a high accident rate to compare with other industries. It is mainly caused by the complexity of work, and overlapping of different work trades within a single task.

How has the growth in technology affected the construction industry

Like other industry, the construction industry has also got on the rapid growth train of technology development. Unlike other manufacturing industry (i.e. car industry), a revolution

The digitization allows the construction features can be built in a much efficient and effective way: Take for instant, with the assistance of digitization technology, time required to draft/prepare a working drawing is much less than the age of hand drafting. The lately Building Information Modelling (BIM) provides thoroughly information of the target features by building a virtual model in the computer, from calculating the gross area of the residential apartment to the route of a ventilation pipe. Some sophisticated machines/plants assist the construction work to be executed with fewer hazards to workers in dangerous site condition.