

# Cause of Time and Cost Overruns in the Construction Projects in Kurdistan Region of Iraq

Wafaa Khithir Solaiman<sup>1</sup>

<sup>1</sup>Petroleum Geology Dept., Technical College of Petroleum and Sediments, Duhok Polytechnic University, Kurdistan Region, Iraq (wafaa.jacksi@dpu.edu.krd)

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## Abstract:

In Kurdistan region of Iraq (KRI) there are lots of construction projects including the finalized and under construction works. These projects take a tremendous role in progressing the economy and all sectors of the country. The buildings include many various fields such as constructing, roads, bridges, etc. with quick airlifts. Nevertheless, some delays are found according to different causes. There is a shortage in researches investigating the present case in KRI regarding the construction management delay reasons. Additionally, no one appears to take care of how to deduct or prevent this issue. Therefore, this research is conducted to investigate the main factors affecting construction delays and cost overruns with discussing the solutions to avoid these negative impacts. This determination will boost the finalization of projects within the usual period frame.

**Keywords:** Construction, Contractor, Kurdistan Region of Iraq, Time Overrun, Cost Overrun.

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## I. Introduction

By reviewing the literature review, a research that investigates the factors affecting the project performance for Kurdistan Region of Iraq (KRI) is presented by Neamat [1]. While finding researches about various areas like street transportation and main roads, buildings, hydropower, etc. for KRI are difficult to be found. Constructing strategies in KRI found to have a major influence of time and cost overruns.

Furthermost normal reasons for time and cost delays remain specified by way of postponement of land procurement, postponement of timberland

independence, rule and instruction difficulties, price increase, high capital cost, poor execution of contractor and delay in the supply of materials. Also, the joining among time postponement and cost overcome is observed in numerous partitions. Moreover, the influence of undertaking length with responsibility expenses of plan according to timetable and cost occupies is investigated. There are couple of researches worldwide that use web technologies like in [2]–[9] for time and cost in construction management. The advanced business takes an important job in accomplishing the entirely formed country status. To finish this a republic desires to retain its growth industry completely by

accepting the newest innovations and commerce with the activities properly. Finalizing the plans on period is a pointer of the talented progress industry [10]–[12]. Honestly, a task is measured 'fruitful' on the off coincidental that it is ended on schedule, during the spending strategy and to the predefined excellence [13]. Repeatedly, once the actions are late, which are also prolonged or enhanced and henceforward, get additional expenditure. Unlike administrators, the employee's contractor and specialists' many tasks involve wide-ranging delays and with these outlines surpass start time and cost measurement.

The progress technique is answerable to several issues and changeable mechanisms. Assigning a job on time not happened due to the obligator contentment time will be encountered [14]. In order to design and contract with an operative job, the three parameters of time, cost and quality must to be measured [15]. The clients in the progress business are basically concerned about quality, time and cost [16]. Though, greater part of progress actions is protected built on the necessities time and cost [17]. Cost quickening and time overpowers are frequently linked with poor management trains [18].

In KRI, the improvement of business is the greatest notable follower of the monetary progress [19]. The highest client of the progress business is the administration of open job plans. These projects are enormous for the close grid and should be carried on the timetable. Any delay in transportation won't improve the complete incentive overdue of jobs' application effort in the development idea. Amongst all achievement plans the Design and Build (D&B) projects is notable in completing development extends in KRI and various nations.

The responsibility managements and the group should understand the materials resulting these delays and rate the encouragement scheme dissatisfactions. The quantitative inspection of the survey review will neglect down the danger of producing issues by location. This will aid the job administrators and experts to produce active

transfer to such dissatisfaction conditions. Following zone manages period and cost correlated lettering review followed by investigation process, conversate and inspection by SPSS finally the ends.

## II. STATEMENT OF PROBLEMS

Many construction projects are available in the KRI [20]. In order to figure out the state, there should be various structures, roads, bridges, etc. with quick flights. Nonetheless, here it appears to be gradually overdue for numerous causes. Numerous persons have considered in this respect. Nevertheless, no one appears to have supposed around falling it. So, I have equipped the specific research on the suggestion organized by reviewing the main causes of construction time. Also, the cost payment delay with watching to in which way this can be minimized.

Later, directly the study must be accomplished on the cause and influence of postponement achievement of various construction projects in KRI [21]. I have realized this research is absolutely essential to finalize the subsequent responsibilities

- Discover the key goal illustrating in which approach the construction work is late.
- To speediness the construction effort rapidly, no cause to derive.
- Studying the factors of postponement in construction and investigating timely way.

Additionally, there are various risks and danger issues imposing cost inside the construction work [22]. Subsequently, predictors tend to carry this matter in order to investigate with the determination of distinguishing the fundamentals and their placing of importance. Inside the present examination, scientists always tried to find out the necessities to notice the assessed and last add, and entirely various causes to control the time.

Morris (1987) revealed four main issues where the slight inquiry impacted on cost [23]. These factors join the definition of changes, absence of wisdom,

unpredictable climate state and also the vagueness in prices of structure resources. It's significant to possess high underside thinking to the extraordinary difficulties inside the construction projects. So, the study supposes to propose high to bottom light-weight concerning the causes for delay of projects and price filled. As a result, in every forming and creating nations, the possible suggestions for overriding initiative delay and price flooded investigated. Actions are resulted with an appropriate discussion from many states in KRI.

Postponements on constructing works be situated as a whole phenomenon. Considered relatively and often combined by cost and time overwhelms [20]. Construction works postponements, a disapproving influence on meetings (administrator, temporary employee, and expert). An agreement regarding construction in antagonistic contacts, hesitation, outfit, intervention, revenue subjects, and an overall sentimentality of suspicion against one another. Laterally, these outlines are central to describe the real causes for the postponement with an exact end goal to bound and avoid the delays in any construction plan. The researches can notify an extreme numeral of research studies about the cause of construction postponement. We couldn't find the actual cause to delay top to bottom. After this, extremely probable to study the cause and effect of postponement inside and out the contentment of numerous construction projects in the KRI.

### III. SIGNIFICANCE OF STUDY

The developing industry has been a pressurized industry in the twentieth century [24]. Provide a huge statistic of tasks that have been soaring up, basically during the Second World War. By means of the growth amount going up normally, a violent competition has been set up among the constructors. A progress scheme is usually a development of movements that consume a specific aim to be ended in the specific purposes [13]. Also, the start/end times are all about consideration. The growth schemes are generally wealth considerate

with a mass of responsibility of best portions and everybody wants to obtain a profit on the assumption. This has motivated the flood of rapid pathway schemes about the world.

The motivation behind this paper is to examine all intents and purposes viewpoints been identified. In addition, postpone investigation on a development project, trailed by a contextual analysis. Despite the fact that the paper understated elements for all intents and purposes, each perspective related to the defer investigation, attention will be on the Lump Sum. Agreement from the perspective of a contractual worker, as it conveys the greatest hazard for a temporary worker. The supplementary section will study various types of arrangements and apparatuses for selecting the kind of arrangement earlier formally accepting it

### IV. METHODOLOGY

#### Data collection

Information was gathered from constructing projects. It's period, cost and managing procedure for constructing jobs, obtaining procedure, obtainability of worker, materials, administration policies, decision making procedure, etc., were calculated. The research was accomplished out depended on literature review, survey questionnaire, interview and case study. The study method was covered in three stages. Firstly, a literature review has been proposed, questionnaire survey came secondly, and the third stage was agreed out by condition study.

The literature review directed via books, conference records, internet and global development managing journals. The questionnaire survey included 85 respondents made up of 20 Consulting firms, 20 Engineers, 14 Contractors, 11 Clients/ Owners, 20 Construction workers/employees; planned for circumstance education. Later, recognizing reasons for postponement and cost overrun in every scheme distinctly supplement better considerate for impending caution and proactive activities to be assumed in the future schemes

## Literature Review

Time and cost overrun had been regular in construction with constructing development projects [25]. The construction project is a task, commenced in order to make an inimitable talent, production or facility inside the definite opportunity, quality, time, and cost [26]. In follow, though, some structure comes meeting cost, interruption on accomplishment period or unfortunate workmanship upon achievement [27]. Cost, poor quality achievement, and postponement of building schemes prerequisite associate detailed study to progress the outputs of the construction trade.

Consulting to Chalabi, et al, (1984), acceptable prearrangement at the principal phases for projects is vital for decreasing postponements and cost invades [28].

Agents on constructing projects in numerous industrialized states stipulate that by the historical a project is ended; the actual cost exceeds the original agreement value by about 30 % [29]. 9 out of 10 results requests cost delays during researches on cost overrun. Invades of 50 to 100 % were public [30].

It is common to notice that building outcomes rise to fail to comprehend their responsibility of making facilities at disruptions of the preferred price and time [31]. Hardly slight creates become finalized on time and inside monetary strategy in the KRI

## V. FINDING OUT CAUSES OF COST AND TIME OVERRUN

Constructing plans in KRI has an important region of time and cost delays. Depending on the surveying and study of constructing projects together with Literature Review. It has been experimented that the tunnel, bridge and construction sector knowledge with the uppermost quantity of cost and time delays related to extra subdivisions. Though the major issues of cost and time delays part mutual characteristics, the effect and the occurrence of degrees of these features are

scheme specific and are not be generalized. Overall, upsurge in time delay upsurgences cost delay in construction plans. Doings with lengthier distance are unprotected to variations/fluctuations in degree, climatic deviances, and inflation, besides these outlines encouragement time and cost overcomes.

The important concerns of initiating construction time delay are: monetary difficulties, unreasonable bond periods accomplished by customers, poorly distinct plan choice, client-initiated deviances, under-estimating of plan cost by experts, poor examination/supervision of plans by consultants. Additional issues were underestimating of project difficulty by servicers, poor place organization, unsuitable building approaches used by contractors and postponements in the issuance of authorizations by administration assistances.

Features touching cost delays are monetary trouble by customer, postponements in expenditures of finished works, differences in designs, lack of communications strategies, poor feasibility and analytical projects, weak monetary organization on place and substantial value differences. There are too numerous reasons for cost and time delays in the construction project. If the building plan is going to be a postponed, there will be extra probabilities to type the cost delay but there must be existence period overrun.

Also, there are several sorts of postponement, conferring to reasons in the construction project. Normally, postponements can be separated into three main categories, specifically: (1) excusable and non-excusable; (2) compensable and non-compensable; and (3) concurrent. Compensable postponements are those which are the greatest portion took around by the manager or its workers. The greatest extensively documented kind of compensable postponement is lacking of drawings and specifications. Nevertheless, compensable interruptions can similarly arise from the manager's incapability to respond in an appropriate technique demands of information or shop clarifications. Manager's alterations in plans or resources, manager's break and moreover alteration in the

group of the work. The temporary employee is capable of mutually additional cash and additional time upcoming around compensable delays causes. Non-compensable postponements basically, these interruptions are carried around by momentary employees, [32] subcontractors or resources suppliers, Although, no inadequacy of the administrator. The short-term employee might be competent for pay from the varying subcontractor or worker. Nevertheless, no pay is predictable from the administrator. Laterally, these outlines, non-compensable postponements extra frequent than not outcome in no additional cash and without additional time being approved to the temporary employee

## VI. REASONABLE DEFERS EXCUSABLE

postponements, else called "control majeure" postponements, are the third wide-ranging class of delay [33], [34]. These postponements are typically called "demonstrations of God". Subsequently, they are not the responsibility or inadequacy of an exact assembly. Greatest bonds take into the attention of short-term employees to catch a growth of period for impassable delays, resulted in not extra cash. Simultaneous postponements are just one issue of delaying development, it is generally easy to calculate both the time and cash coming around due to lonely matter. These are named simultaneous postponements.

## VII. CONCLUSION

In the above argument discovered that regardless of the fact that there are many administrator's strategies to switch time and cost delay in construction projects, a great part of the difficulties is meeting this issue. Several jobs are undergoing a straight variable outcome with client part to provide the portion of the substantial and characterization of legal binding. Also, understanding the need to supply the contractual worker or postponement in settling and running account bills. These issues together with altered issues, for instance,

postponement in receiving authorizations and various issues documented are progressively tough to finalize the project on calendar and inside organized expenses plan. Additional worry observed by constructing the business is the draw output of possessions, principal equipment effectiveness.

At the end of the day, the operation and execution of better task and the administrator's systems can progress the circumstance and quick achievement of more development and progress to the economy.

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