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Application of Time Management in Construction Projects

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ABSTRACT - *The aim of this project is to study the practice of time management on construction project. The objectives of this study are to judge the respondents' participation in the planning of construction works, to investigate how progress records are kept and to identify the process of monitoring the development of work on the construction industry. To achieve these objectives, there were thirty questionnaire sets distributed to the respondents. The project manager has the highest percentage in both recruiting a planning method statement and project planning meetings.*

***Key words*:** Time Management, Respondent's, Questionnaire, Project Manager, PPP, Primavera.

1. INTRODUCTION

Successful project management assures the completion of project in time, within budget, and to the project specifications. Therefore, this study is important to examine on how time is managed on construction industry. So that the management staffs can get a clear understanding on time management and they are able to avoid them early. Stakeholders need to know their roles and their responsibilities. Construction works need to have a good and detail progress records to deal with future entitlements. This study is to let the executive staff to know the importance of monitoring the progress of work on construction industry. Lastly, this study can become a parameter for future development in other possible areas.

1.1 TIME MANAGEMENT

Time Management is essentially the ability to establish and plan the time spent on activities in a day. The result of good time management is increased efficiency and productivity. It is a key aspect of project management and involves planning, setting goals and arranging for a better performance.

1.2 OBJECTIVES

1. To judge the respondents participation in the planning of construction works.
2. To investigate how progress records are kept.
3. To identify the development of monitoring the progress of work on the construction industry.

2. Benefits of Adopting Time Management in Construction

1. Generating knowledge of the details and fewer revelations well into the project by the need to pre-plan the project.
2. Maximizing quality control measures by properly sequencing the work.
3. Improving planning of resources such as materials, labor and equipment.
4. Improving coordination efforts between client and construction operations.
5. Buying-out materials and critical elements with sufficient lead time.

3. METHODOLOGY

To achieve the first objective, a review was conducted to investigate further consciousness in the industry of time management issues. To achieve second and third objective that need the questionnaire survey in order to investigate how progress records are kept and to identify the process of monitoring the progress of work is done on construction industry. Generally, the questionnaire designed for this study consists of three parts where each part of the questions will reflect to the capability that have been stated above, namely Part A – Parties Involvement on the Planning of Constructions Works, Part B - How Progress Records are Kept and Part C - The Process of Monitoring the Progress of Work.

3.1 To assess the respondents participation in the Planning of construction works

Objective 1 was to judge the respondent's interest in the arranging of development works. Picking the correct task control methods to suit the procedure in overseeing time is critical as it will help with dealing with the danger of undertaking postponed. The choice of the best possible investigation technique relies on an assortment of elements including data accessible, time of examination, capacities of the procedure, and time, assets and exertion designated to the investigation. In light of the 30 sets of information gathered from the studies, underneath are the outcomes for this goal.

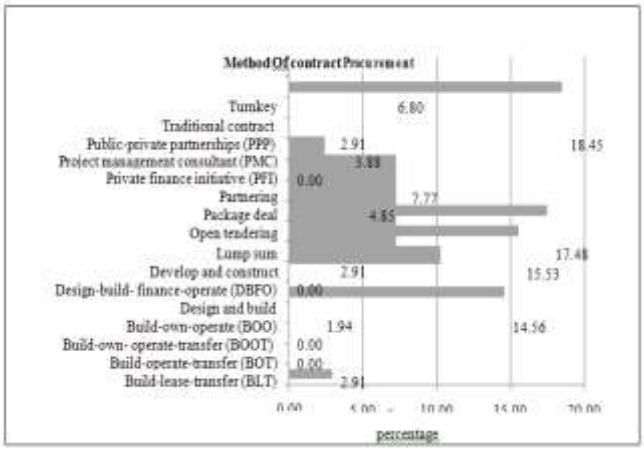

Fig 1.The percentage of respondents involving in the method of procurement

The investigation of reactions in Fig.1 demonstrated that an extensive extent, 18.45% of all ventures was at present being built under conventional contract. The bar graph was the most loved tools for time administration utilized by respondents which were 29.33%. Around 26.67% of respondents knew about stream outline while none of the respondents had utilized line of adjust in their undertakings. Minutes of meeting were a prominent apparatus for time administration undertaking which has 24% of respondents utilizing it. Different instruments for time administration were correspondence (8%) and completely connected system (8%). The most mainstream programming projects utilized by respondents to plan development plans were Excel and Microsoft Project which has 43.55% individually. Different virtual products were less utilized by respondents, for example, CA Super task and Pertmaster. Around 11.29% of respondents have utilized Primavera and Power Project (1.61%) in arranging their ventures.

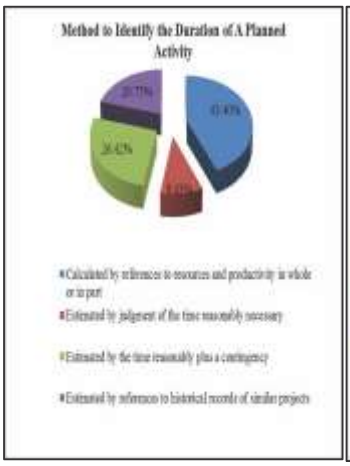

Fig 2.Establishment of the Planned sequence of work

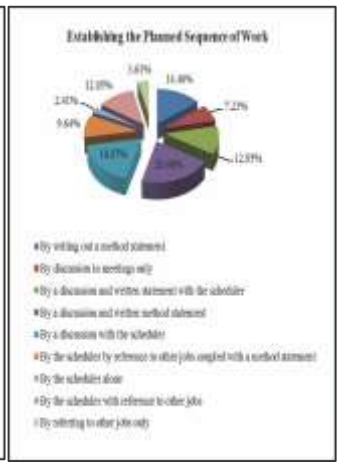

Fig 3. Method to identify the duration of a planned activity

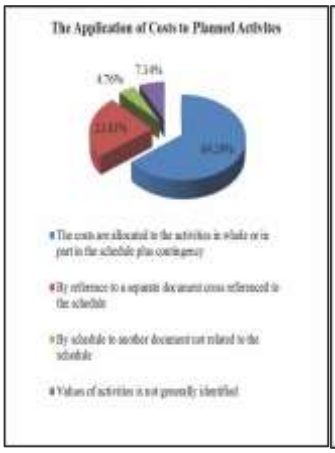

Fig 4.The application of costs to planned activities

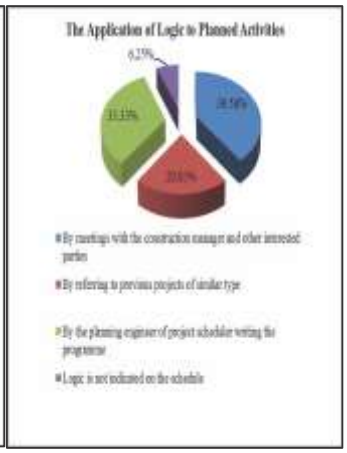

Fig 5. The application of logic to planned activities

Additionally, Fig 5, the larger part of respondents (64.29%) had encountered that the cost were designated in isolated reports with possibility while just 7.14% of respondents had not involvement in evaluating the estimations of exercises. In distinguishing rationale in development plans (Figure 5), the vast majority of them recognized the rationale by having gatherings with development director and other invested individuals.

The majority of respondents utilized date requirements to limitation the execution to dates given in the agreement records while the greater part of the respondents said as far as they can tell these float constraints were utilized to control fundamentally. Date requirements are utilized to overtake the rationale of a timetable (assuming any) and to constrain an action to begin by, on or after a predetermined date. Around 60.53% said that they had encountered date requirements to limitation the execution to dates given in the agreement archives.

The impact of utilizing date imperatives to requirement the execution dates is hold those points of reference to the expressed dates on the calendar, regardless of whether the movement lengths, combined with the rationale of the timetable (assuming any) would anticipate that the dates could be met. 26.32% of respondents had encounter that date requirements were to be controlled basically. Just 2.63% of respondents said that it was left totally to the task scheduler in the matter of whether and assuming this is the case, how date limitations were utilized. Float requirements are utilized to overtake the rationale of a calendar (assuming any) and to drive the expulsion of free or aggregate float from a way where the rationale of the timetable would direct something else. Around 17.95% knew that the utilization of buoy limitations was prohibited. Just around 5.13% said that as far as they can tell it was left to the task scheduler to decide how skim limitations were utilized. 53.85% of respondents said as far as they can tell these imperatives were utilized to control fundamentally. There were 23.08% of respondents

who knew about float imperatives being utilized to distinguish dependent predecessors.

When it came to relating the asset used to the work done and in which area, it was the experience of just 34.43% of respondents to this study the undertaking description was distinguished. 26.23% of respondents announced that the region description was recorded similarly as that on the development timetable to which the work has been connected. In the experience of 16.39% of the respondents the work asset records were identified with an undertaking description held in an alternate report while 14.75% said that a work region description was contained in an alternate archive. In the experience of 6.56% of respondents the points of interest of the zone being taken a shot at were distinguished in the record while just 1.64% detailed a work region description having no association with anything held in an alternate report while 14.75% said that a work territory depiction was contained in an alternate archive in the experience of 6.56% of respondents.

Around 26.74% revealed that the points of interest of the date were kept in plant and machinery records while 20.93% announced that subtle elements of the day of the week to which the record related were recorded. 29.07% revealed that subtle elements of the name of the sort of plant were kept, with 23.26% announcing that points of interest of the exchange to which it related were kept. With respect to plant and gear work information, both of 13.33% of cases were identified with an undertaking depiction and zone description on another report. In 6.67% of reactions, the plant and gear assets were identified with an task description. In any case, just 3.33% respondents to this inquiry had involvement of a work depiction with no relationship to anything.

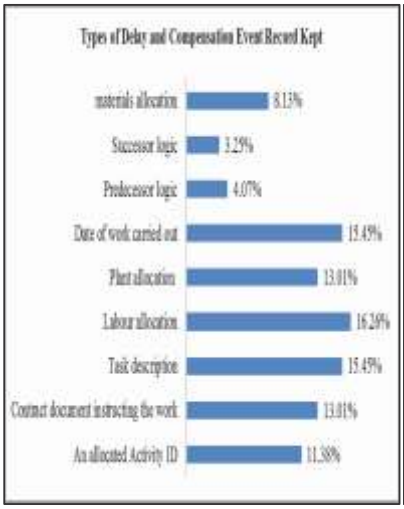

Fig 6. Type of the progress report kept in the company

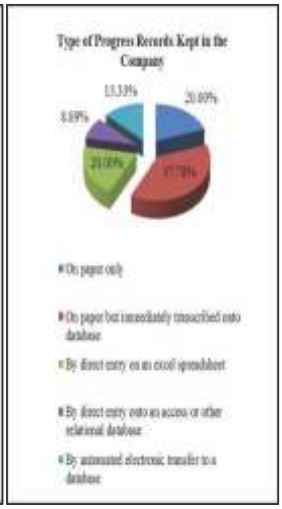

Fig 7. Type of delay and compensation event record kept

3.2 To identify the process of monitoring the progress of work on Construction industry

Objective 3 was to distinguish the way toward observing the advance of work on development industry. Just 8.16% had involvement in the utilization of earned an incentive as a measure of advance in the plan organize. 20.41% revealed that the level of advance made was evaluated by reference to identifiable phases of outline and 51.02% of configuration work to be finished. The larger part of respondents (37.50%) did not have involvement of the announcing of the advance of the undertaking all in all. 41.67% of those demonstrated that advance was either announced against the primary calendar or the last changed timetable. Just 6.25% knew about advance being accounted for in the period since the last report.

4. RESULTS

This study was conducted to examine the practice of time management on construction projects. Thus 30 questionnaires sets were distributed to the construction companies where three companies responded. The results from the questionnaires obtained was analyzed and discussed based on the three objectives of the study. Thus;

1. Time management is all about planning, scheduling, monitoring, control, and reporting as well as making decisions.

2. It will easily affect the cost, time to use, workers attitude and other activities in a construction project.

5. CONCLUSIONS

1. It abridges the causes that make subconsciously waste of time during a work process and at the same time suggests solutions to save time.

2. It will let the construction project to be carried out smoothly, finish on the targeted dates and saves cost to achieve cost and time optimization.

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