



BUDGET MONITORING OF RESIDENTIAL BUILDING

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Abstract

Financial planning is base for survival of any construction industry. It is essential as it identified as the common cause of business failure, and can lead to the failure of profitable and growing firms as well as those declining. As such, there is a need for adequate timing of fund availability in construction and deployment of excess fund to more productive use. Accurate cash flow projections are important to both an owner and a contractor. A corporation's business plan generally includes multi-year cash flow and expenditure forecasts and continuous budget monitoring should be done. Inaccurate cash flow projection of a large project can lead to take wrong decision which may not be in favor of company. Budget helps to aid the planning of actual operations by forcing managers to consider how the conditions might change and what steps should be taken now and by encouraging managers to consider problems before they arise.

Keywords *financial planning, cost control*

Introduction

As many of large scale project gets delay due to funds which is indirectly related to continuous budget monitoring. The project cash flow projection is derived from an execution plan and estimated expenditure. Many projects treat estimated expenditures as cash flow projections. A planned project cash flow is the baseline for comparison with the actual project expenditure. The purpose of budgeting is to

- 1) To provide forecast detail report on expenditure and revenues.
- 2) Whether actual budget and planned budget are implemented.
- 3) Establish cost constraint for project.

We consider the problems associated with resource utilization, accounting, monitoring and control during a project. Interpretation of project accounts is generally not straightforward until a project is completed, and then it is too late to influence project management. There are various problems associated with resource utilization, accounting, monitoring and control during a project. Even after completion of a project, the accounting results may be confusing. Hence, managers need to know how to interpret accounting information for the purpose of project management. A project typically goes through multiple phases till it gets final. Cost estimates, schedule and an execution plan are developed at each phase. Cash flow projection is also prepared to support funding decision at each stage. The time at which major cost savings can be achieved is during planning and design for the project. During the actual construction, changes are likely to delay the project and lead to inordinate cost increases. As a result, the focus of project control is on fulfilling the original design plans or indicating deviations from these plans, rather than on searching for significant improvements and cost savings. The detailed cost estimate provides a baseline for the assessment of financial performance during the project. Project budget is used as a guide for management. As a result, cost overruns or savings on particular items can be identified as due to changes in unit prices, labor productivity or in the amount of material consumer. Good managers should focus upon future revenues, future costs and technical problem

3. Make a comparative study of actual with the total project duration is estimated as 480 working days.

plan
Using MSP we can Track the Gantt this gives comparison of actual duration and planned duration of project.

4. Develop s curve using MSP tool

S curve is the s shaped graph produced by the sigmoid formula which calculates the cumulative expenditure of certain parameters (man-hours, cost) against time and it is the representation of project path.

5. Applying the monitor tool to other project

There are various tools which we use in project. we find cash flow which is very important to monitor budget. Cash flow means the amount of cash being received and spent during a defined period of time.

In this Project Budget monitoring and various constraints are focused which are important.

Name of Site: Shriniwas Rainbow Developers

Location: Bavdhan Pune.

Type of Project: Residential Building

Slab area: 429392sqm

Salable built up: 317185sqm

The quantities required for man power study are calculated from the drawings

Estimation of quantity.

Sr No.	Item Of Work	Amount
1	Civil Cost	389305080.35
2	Development Cost	52283464.78
3	Podium Cost	59794169.09
4	Landscaping & Hardscaping & Lighting	8700000.00
5	Overheads	29800000.00
6	Other Expenses	40131788.67
	Total	580014502.89

Rate analysis

It is calculated with help of amount of quantity and rates for them.

Linking in MSP

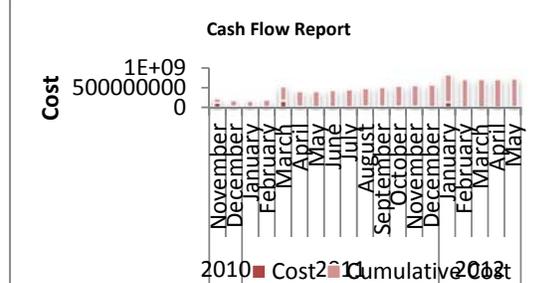
Linking is done for all activity. Critical path is determined so that we understand longest route. After preparing the schedule in MSP software

Resource sheet

After linking activity we assign resources. Resource can be labor, material, and equipments. In resource sheet all standard rates are considered.

Comparison of actual and planned duration of projects.

Comparison of actual and planned duration of projects is done with help of tracking. Tracking means recording project details such as who did what work, when the work was done, at what cost. These details are often called as actual. Tracking is required to know the status of project, is too essential to track the project and to record the schedule of progress of work being performed. The total project cost is Rs 726964820.02 we have got cash flow. The total cost of the project has been divided into two types namely, direct cost and indirect cost. Direct project costs are those expenditures, which are directly chargeable to and can be identified specifically with the activities of the project. These include labor cost, equipment cost, transportation cost etc. cash outflow is not that more in the beginning later it goes on increasing and finally becomes very less. In initial stages of project the cash flow is not that much it constantly gets increased and later gets decreased. We also calculate resource cost summary. As we know 70 to 80 percent cost should be of material.



S curve

The start up phase includes planning and mobilisation phase in which we need to take care about resource allocation. At start it picks up rapidly and towards end it decelerates again as multiple loose end. S curve is a visual representation of progress path. S curve is the s shaped graph produced by the sigmoid formula which calculates the cumulative expenditure of certain parameter

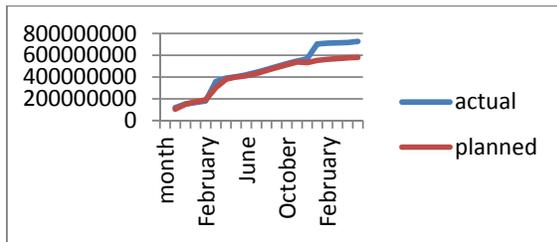


Fig 2. S Curve Analysis for Planned and Actual

Limitation Of study

The limited objective of budget monitoring is to control deserves emphasis. Budget control procedures are primarily intended to identify deviations from the project plan rather than to suggest possible areas for cost savings.

Conclusion

The total Budget cost estimates for project consists of actual cost of project increased by 153 million which was planned as 580 million and the actual cost of project is 73 million within period of 2012-2013. The Following parameters are responsible for increasing amount within one year.

Sr. No.	Delay	Duration(mon th)	Reason
1	Environment clearances	6	Due to no environment clearances all work got stop.
2	Permission	3	The permission was not sanctioned by town planning department up to G+12
3	Building Finishes	8	In proper planning

Sr. No.	Parameter	Percent
1.	Internal plastering of 12 th floor	86%
2.	External painting(left side)	52%
3	External painting(front side)	15%
4.	External painting(right side)	47%
5.	Aluminum window grills	65%
6.	Internal painting 10 th floor	9%
7.	Building finishes	55%
8.	Garbage chute	1%
9.	Landscape	60%
10.	Sanitary fitting	75%

• **S curve analysis.**

The main highlights are in month of November, March and January due to which project got delayed. S curve is plotted in which we clearly get idea in month of November Rs119620313 was needed as it was initial stage of project so cost got increase. In month of March usage was Rs 35911873.19 at this time podium construction was there which requires huge investment and there was material shortage so money usage was more. In month of January investment was Rs703765331.9 the activities like external painting and external plastering was being there. Due to insufficient labor the cost got increase. From s curve it states that there is smooth flow of cash throughout the period with deviation in project.

- Excavation cost has provided with high rate by 15 to 20 Rs per cum rate as there was no space nearby to dump the material. The lead was not in region of 1km so they had to pay more for it.
- Cash inflow is calculated which came Rs. 2297018147.
- The profit margin was reduced by Rs. 153,022,021.

Future Scope:

The MSP software is the first source in conducting this study. This software will be used to develop a budget monitoring for the building construction project.

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