



COST FORECASTING FOR EARLY PROJECT PHASES

Introduction

Financial resources, particularly early in the business plan development and validation of a project, need to be carefully monitored and prudently applied. The Burn Rate—the speed at which pooled resources are being used—is a critical factor in a plan’s success or failure and must be managed in a meaningful way.

Rather than fix the cost for a preconceived deliverable, it is more prudent to integrate a team of experts to identify areas of uncertainty and continue to develop those to minimize cost risk.

Integrated projects challenge the team to define the best use of this fixed resource pool to resolve outstanding questions, rather than assign fixed contract values to individual providers. The reason? Optimizing value. As work progresses, particularly in its early stages, individuals typically proceed independently toward their own interpretation of the project goals. This can lead to re-work and the unnecessary expenditure of funds, resulting in Waste. The preferred outcome is to increase confidence and clarity toward the Conditions of Satisfaction with the least amount of investment. This approach implies a high level of financial transparency and integration.

Historically, those involved in a project share little meaningful financial information. The individual accounts might be reconciled and balanced, but the actual financial outlook of each is usually unknown to the team as a whole. Shared financial transparency of actual and projected project expenditures during the scope and value proposition phase becomes increasingly important. There are tremendous opportunities within the industry for improving the ability to forecast the cost of a project, particularly during its early stages.

1.0 Why

One of the most important factors when deciding to embark on a building project is the completed cost because the financial success of a project is likely determined by the project team's ability to predict cost accurately and deliver at or below that cost.

Ideally, a team should have a high level of confidence in cost at various decision points in order to make the best informed decisions. This effort requires various levels of input from multiple subject matter experts to inform the development criteria, which in turn informs the size, shape, quality and cost of the program.

Rather than fix the cost for a preconceived deliverable, it is more prudent to integrate a team of experts to identify areas of uncertainty continue to develop those to minimize cost risk. Questions must be asked about operations, such as whether a company could manage with less staff or deliver more value while doing less.

Since funds typically are limited in the early development phases, the focus should be placed upon understanding the project's overall direction in order to decide where funds should be spent. In the early stages, it is important to understand the total funds expended and the percentage of completion so projections can be readjusted. Subsequently, the Burn Rate must be managed from the beginning using monthly projections and actual data.

Participants must immediately recognize waste, be alert to the value of what they are receiving, and take immediate action. To do this, the team must be aware of

each participant's cost forecast to allow the shifting of work to the appropriate party. Additionally, participants should provide adequate insight into how much effort is required for each option, so that value is optimized.

Also necessary when forecasting cost in the early stages are:

- Financial transparency;
- An understanding of how others forecast and account for those costs;
- Immediate awareness of the actual cost to develop; and,
- An understanding of whether value is being delivered proportionately.

2.0 How

Teams should establish a method for tracking expenditures of all participants. Actual labor rate projections for each team member and/or individual effort should be predicted in advance and measured to track performance.

Frequent meetings with monthly invoice reconciliation must be scheduled, with all financial information available in one area for everyone to examine.


Additionally:

- Designate one point of invoice collation each month.
- Display financial and other information in a room for all collaborators to view and match with occasional delivery milestones.
- Show value created through Plan Do Check Adjust (PDCA).
- Emphasize whether the project is ahead of schedule or behind. No news is not necessarily good news.
- Schedule monthly budget cluster discussions. The public presentation of updates helps drive accountability and monitoring of the plan.

3.0 What

While most companies involved in a project have independent tracking systems that produce internal data, such information should be shared. A core group of companies should be formed early to share information and monitor the rate cash is being consumed. This should take the shape of one consolidated budget vs. actual document for all to inform, understand, react to and manage.

Participants must continually consider the cost of each opportunity and make a value decision before spending limited funds.



Quick Reference

Learning to See Waste	23
Conditions of Satisfaction	133
Continuous Improvement	179

For additional readings and information, please see the below information.

CHAPTER 9 – COST FORECASTING FOR EARLY PROJECT PHASES

Additional Readings

[2 Update on Target Value Design 2 TVD Update ppt](#)

[5.3 Model Based Estimating for Target Value Design](#)

[5.4 Case Studies of VDC for Lean Project Delivery](#)

[9-15-08 Lean Construction Opportunites Ideas Practices](#)

[Analyzing User Costs in a Hospital Methodological Implication of Space Syntax to Support Whole-Life Target Value](#)

[Case Study of Using an Integrated 5D System in a Large Hospital Construction Project](#)

[Competition and Collaboration are not mutually exclusive](#)

[Contract Or Co-Operation Insights From Beyond Construction Collaboration - The Honda Experience](#)

[Editorial Lean and Integrated Project Delivery](#)

[Historical Context of Lean Construction](#)

[Interaction in the construction process-System effects for a joinery-products supplier](#)

[Jackson Federal Building Case Study](#)

[Making Data and Decisions Flow in a Big Room - John Mack and Robert Mauck](#)

[Owner Perspectives-UCSF](#)

[Owner Perspectives-UHS](#)

[Project Definition](#)

[Psychological foundations for incentives](#)

[Target Costing - Glenn Ballard](#)

[Target Value Design Case Study - Patrick Vasicek](#)

[Target Value Design AIA Practice Digest](#)

[Target Value Design Current Benchmark](#)

[The Lean Project Delivery System An Update](#)