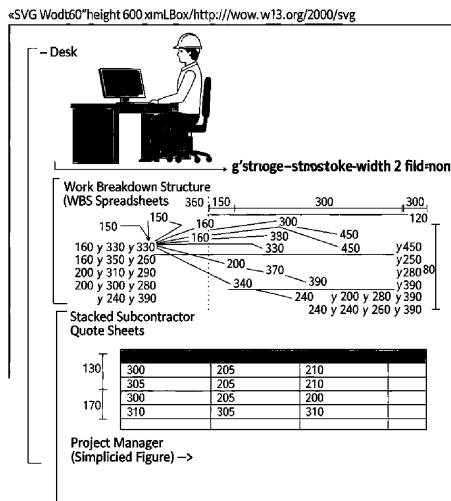


SPECIFIC - CASE

WORKSHEET 9 OF 9

Tender Requires Bid Submission Within 72 Hours

Scenario: a direct invitation arrives on Monday morning for a project valued at approximately \$185,000 to \$250,000. Scope documents include drawings and specifications. The tender closes Wednesday afternoon -- 72 hours from document receipt. The owner must decide within 4 hours whether to bid.



Complementary worksheet for
Project Cost Estimation

by Ibrahim Anwar

READ ON GOOGLE PLAY BOOKS >

What This Is For

A 72-hour tender window compresses two decisions into one: whether to bid, and how to estimate accurately enough under time pressure that a winning bid does not produce a losing project. The most common failure mode is bidding on instinct -- submitting a figure based on a quick scan of the scope documents and a margin that "feels right" -- and winning a project where the actual cost, calculated properly, exceeds the bid price. The second most common failure mode is refusing to bid because the scope feels uncertain, when a disciplined triage of the five highest-value work packages would reveal that parametric estimates from existing data can cover 65-70% of total cost in under 3 hours.

This worksheet structures both decisions. The bid/no-bid assessment comes first -- if three or more red flags appear, the risk profile of bidding in 72 hours is quantified before the decision is made. If the decision is to bid, the triage-based estimating approach produces a defensible Class 3 estimate in 8 hours, with every assumption documented so that the estimate file becomes the risk register for the first month of the project.

Benefits

What you get when you actually run this worksheet on a real situation:

- Forces the bid/no-bid decision to be made on identified factors rather than on the owner's appetite for the contract at the moment.
- Quantifies the risk profile of a 72-hour estimate before committing, so the contingency category is set before the estimate is produced.
- Triage-based approach -- five highest-value packages first -- produces 65-70% of the total cost estimate in under 3 hours, leaving time for the remaining packages.
- Documents every assumption made under time pressure, converting the estimate file into a risk register for the early project phase.
- Provides the post-project comparison point: if the bid is won, the 72-hour estimate is compared against actuals in the retrospective to calibrate how accurate triage-based estimating is for this project type.

Framework To Use

— Triage-Based Rapid Estimate -- Five Highest-Value Packages First

Identify the five packages that represent 60-70% of total cost. Estimate those from parametric data. Apply a documented buffer to the rest. That is a defensible estimate in 8 hours.

| | | |
|--|--|--|
| <p>HOURS 0-1: BID/NO-BID</p> <hr/> <p>Complete the decision table. Count red flags. If 3 or more; calculate what a 20% contingency does to the bid price before deciding. If the risk-adjusted price is still competitive, proceed.</p> | <p>HOURS 1-5: TRIAGE ESTIMATE</p> <hr/> <p>Identify the five highest-value work packages from the scope documents. Estimate each from internal parametric data or fresh subcontractor quotes. These cover 60-70% of total cost.</p> | <p>HOURS 5-8: COMPLETE AND DOCUMENT</p> <hr/> <p>Apply 15-20% buffer to remaining packages combined. Apply overhead rate. Assign contingency category based on red flag count. Document every assumption. Submit.</p> |
|--|--|--|

How To Use

Follow these steps in order. Each one builds on the previous.

- 1 Within the first hour: complete the bid/no-bid decision table. Count the red flags. Three or more red flags means this bid carries Category C contingency risk minimum -- calculate the price impact before deciding.
- 2 If the decision is to bid: identify the five work packages that will represent the largest cost items from the scope documents.
- 3 Estimate the five highest-value packages first from the internal database or fresh quotes. Record the source of every figure.
- 4 For all remaining packages combined: apply a 15-20% buffer above the average unit cost from the internal database. Document this explicitly -- it is a cost estimate for packages not individually priced, not the same as contingency.
- 5 Apply overhead rate. Assign contingency: Category A if zero red flags, Category B if one to two, Category C if three or more. Add profit markup.
- 6 Document every assumption made in the estimate file: which parametric rates were used, which packages received the combined buffer, what site information is missing, what the 3 highest-uncertainty components are.
- 7 If the bid is won: review the estimate file with its documented assumptions at week 2 of the project to identify which assumptions need immediate verification.

Example Use

An electrical contractor receives a direct invitation for a factory fit-out project. Estimated value \$215,000. Scope: architectural drawings, electrical load schedule, specifications. Tender closes in 55 hours. The owner must decide by noon whether to submit.

Hour 1 -- Bid/No-Bid decision table.

Green lights: work type familiar (industrial electrical), client is known (previous project 18 months ago), no performance bond required, retention capped at 5%.

Red flags: site not visited (factory is 3 hours away, no time before tender close); two key components are imported -- switchgear panels with 6-week delivery lead time and unclear exchange rate exposure; fire detection and alarm system (FAS) included in specification, work type the contractor has not done before; no FAS subcontractor quotes yet obtained.

Red flag count: 3. Category C contingency minimum. 20% contingency on \$215,000 = \$43,000. Adding to bid price pushes all-in above \$290,000. The contractor calls two known competitors -- neither gives a number, but one says "tight margin job." The owner decides to bid, accepting Category C risk, with FAS scoped as a specialist subcontract and quoted separately.

Hours 2-5 -- Triage estimate.

Package 1 -- Main distribution board and panel supply: distributor quote via WhatsApp. \$41,500 firm, 3-week delivery.

Package 2 -- Field labour (cable pulling, termination, conduit): 2,800 m x \$4.80/m from internal database (industrial electrical, same region, 18-month-old rate corrected +6% for inflation). Labour total: \$13,440.

Package 3 -- Motor control centres (8 units): distributor quote \$28,000. Delivery 4 weeks.

Package 4 -- Emergency lighting and exit signs: phone quote from regular subcontractor. \$12,500. To be confirmed in writing by Monday evening.

Package 5 -- FAS (new work type): specialist subcontractor contacted, quote promised by Tuesday noon. Using \$38,000 as M value based on industry reference per point. Confidence: Medium.

Five packages total: \$133,440. Estimated 62% of total project cost.

Hours 5-7 -- Remaining packages: buffer applied at 18% above parametric average. Total: approx \$22,100.

Total direct cost: \$155,540. Overhead at 11%: \$17,109. Category C contingency at 20%: \$31,108. Profit at 12%: \$24,429. Bid price: \$228,186.

Assumption log filed: FAS quote not yet confirmed (confirm before kick-off), site not visited (visit week 1, flag access or clearance issues immediately), imported switchgear delivery risk documented (track from day of order, escalate if delivery slips past week 3).

Reflection Prompts

After filling in the worksheet on the previous page, work through these.

1. Complete the bid/no-bid decision table before opening the scope documents for detailed review. The decision to bid is a separate decision from how to estimate. Mixing them produces a bias toward bidding on every invitation, regardless of risk profile. Count the red flags. If 3 or more: calculate what Category C contingency (20%) does to the bid price. If the resulting price is clearly uncompetitive, the decision not to bid is a financial decision, not a capacity one.

2. After deciding to bid: identify the five highest-value work packages by scanning the scope documents for the largest material specifications and most labour-intensive activities. List them with estimated percentage of total cost. These five packages receive individual parametric or quoted estimates. All remaining packages receive a combined buffer of 15-20%. Document which packages received individual estimates and which received the buffer.

3. After every assumption written in the estimate file: note the verification action -- 'confirm FAS sub quote by Tuesday noon,' 'visit site week 1 to verify access,' 'lock switchgear delivery date within 5 days of contract signing.' The assumption log with verification actions is the risk management plan for the first 30 days. If the bid is won, schedule the verification actions on day one.

Tips and Traps

TIPS

- The five highest-value packages almost always represent 60-70% of total project cost. Getting those five right produces an estimate far more accurate than spreading 72 hours across all packages equally.
- Document the contingency category decision before the estimate is complete. Setting the category after the estimate is produced leads to reverse-engineering: the contingency is sized to hit a target price, not to reflect the risk profile.
- If a specialist trade is in the scope and no internal data exists: call a specialist subcontractor immediately, before the triage estimate. A phone quote received by Tuesday morning is far better than a parametric estimate for work you have never done.
- The assumption log is worth more after the bid than before. If the bid is won, the first project team meeting should review the assumption log line by line and assign verification owners and deadlines.

TRAPS

- Submitting a bid without a documented assumption log because there was no time to write one. Writing the assumptions takes 30 minutes and is done while the estimate is still fresh. Reconstructing assumptions three weeks into the project takes three times as long.
- Using the round-number range from the invitation as an anchor for the estimate. The invitation range is the client's expectation, not a cost estimate. A bid built to fit inside the client's range, rather than from first principles, is a price disguised as an estimate.
- Treating the 15-20% buffer on unpriced packages as a substitute for contingency. The buffer is a cost estimate for packages not individually priced. Contingency is a reserve for risk events on the packages that were individually priced. Both must appear separately.
- Proceeding to bid after counting three or more red flags without calculating the Category C contingency impact on price. The calculation itself sometimes produces the no-bid decision.

Appendixes

Appendix A -- Bid / No-Bid Decision Factors

Score each factor: Green (proceed), Caution (proceed with mitigation), Red (bid risk increases)

| Factor | Green | Caution | Red |
|-----------------------------------|------------------------------------|--------------------|-----------------------|
| ----- | | | |
| Work type familiarity | Done 5+ times | Done 2-4 times | First time |
| Site visited before bid close | Yes | Remote survey only | Not visited |
| Key materials price stability | Locked or stable | Some volatility | Imported / volatile |
| Subcontractor capacity confirmed | Yes | Partially | Not confirmed |
| Internal parametric data | Full | Partial | None |
| Client relationship | Known, paid well | Known, slow payer | Unknown |
| Contract terms | Standard | Minor restrictions | Unusual risk transfer |
| Schedule feasibility | Comfortable | Tight | Unrealistic |
| Scope document completeness | Full drawings + specs available | Drawings only | Drawings incomplete |
| Profit margin at Category C price | > 10% | 5-10% | < 5% |

Red flag count:

0 -> Category A contingency acceptable

1-2 -> Category B contingency

3+ -> Category C contingency minimum. Calculate price impact before deciding.

Appendix B -- Triage Estimate Assembly

Step 1: List top 5 work packages by estimated cost

Package 1: _____ Est. % of total: ____ Source: _____

Package 2: _____ Est. % of total: ____ Source: _____

Package 3: _____ Est. % of total: ____ Source: _____

Package 4: _____ Est. % of total: ____ Source: _____

Package 5: _____ Est. % of total: ____ Source: _____

Total for top 5 packages: ____% of total

Step 2: Estimate top 5 packages individually (parametric or fresh quote)

Sum of top 5: \$ _____

Step 3: Implied total direct cost

Top 5 sum / top-5 percentage = \$ _____

Step 4: Apply buffer to non-individually-priced portion

Remaining % = (100% - top 5%) = ____%

Buffer rate: 15% if top 5 are well-sourced; 20% if any are parametric

Remaining portion estimate: \$ _____

Step 5: BAC assembly

Total direct cost: \$ _____

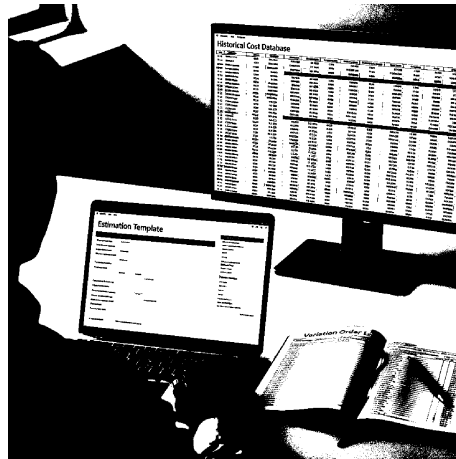
Overhead (____%) \$ _____

Contingency (Cat ____, ____%) \$ _____

BAC: \$ _____

Profit markup (____%) \$ _____

BID PRICE: \$ _____



WHERE THIS WORKSHEET COMES FROM

Project Cost Estimation

Calculate the Cost Before Signing, Not After the Work Has Started

by Ibrahim Anwar

This worksheet is one of nine in the *Project Cost Estimation* companion worksheet pack. The full pack is grouped into three categories: high-volume worksheets you can run weekly, niche-search worksheets for rare but high-value situations, and specific-case worksheets that walk you through a single concrete scenario.

Every framework, decision filter, and figure used in these worksheets is drawn from the chapters of the source book. The book sets the diagnosis, the worksheets give you the form to act on it.

Read the source book on Google Play Books:

<https://play.google.com/store/books/details?id=hIvXEQAAQBAJ>

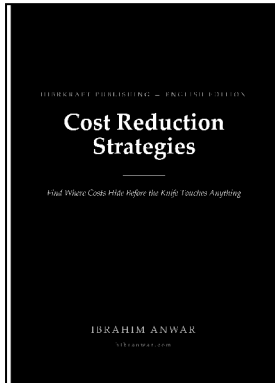
OPEN ON GOOGLE PLAY >

PT Hibrkraft Kreasi Indonesia · Cileungsi, Bogor · hibrantwar.com

CONTINUE THE SERIES

More from the Operator's Handbook

Each handbook is a 9-worksheet companion pack like this one. Tap any cover to open it on Google Play Books.

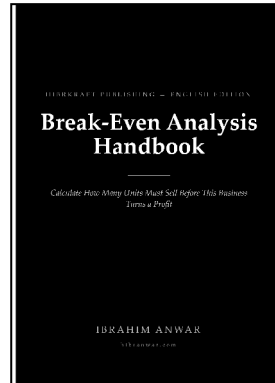


NO. 01 ·
OPERATOR'S
HANDBOOK

Cost Reduction Strategies

*Find Where Costs Hide
Before the Knife Touches
Anything*

OPEN ON GOOGLE
PLAY >

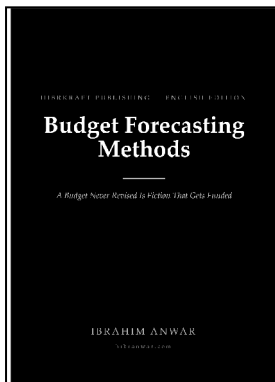


NO. 11 ·
OPERATOR'S
HANDBOOK

Break-Even Analysis Handbook

*Calculate How Many Units
Must Sell Before This
Business Turns a Profit*

OPEN ON GOOGLE
PLAY >

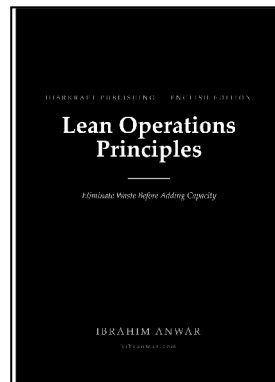


NO. 10 ·
OPERATOR'S
HANDBOOK

Budget Forecasting Methods

*A Budget Never Revised Is
Fiction That Gets Funded*

OPEN ON GOOGLE
PLAY >



NO. 12 ·
OPERATOR'S
HANDBOOK

Contract Negotiation Tactics

*A Clear Contract Is a
Healthy Relationship*

OPEN ON GOOGLE
PLAY >

Operator's Handbook · PT Hibrkraft Kreasi Indonesia · hibranwar.com