

Overview

SWAG*-Meister

Preliminary Budget Tool

*Software Assisted Guestimation



CVR/IT Consulting LLC

Introduction

SWAG-Meister may be used to develop a preliminary project budget early in the project lifecycle (e.g. during Initiation) when information about the project is scarce. It includes:

- Project implementation costs (Labor and non-Labor)
- Post-project costs, used to calculate Total Cost of Ownership
- Assignment of post-project cost responsibility

This tool is based on use of the PERT estimation technique

- Three point estimates are recorded as Minimum, Maximum and Most Likely cost
- Budget numbers are calculated on the basis of the degree of confidence required (i.e. 83% or 95%)
- Confidence limits are calculated automatically for all estimates



SWAG-Meister Features (1)

1. Spreadsheet format makes it quick and easy to use
2. Especially useful when the budget will be based on limited project information
3. Provides a quick estimate of both project implementation costs and Total Cost of Ownership over the life of the deliverables
4. Breaks project costs down into Labor and non-Labor
5. Categories of non-Labor cost are customizable
6. Breaks post-project costs down into:
 - Annual cost of post-implementation maintenance and support
 - Annual cost of enhancements
 - One-time costs



SWAG-Meister Features (2)

7. Cost estimates are entered as three point estimates
8. Budget figures include PERT Average plus 1 or 2 standard deviations (for 83% or 95% reliability)
9. All budget estimates are presented with confidence limits (e.g. \$100,000 +/- 20%)
10. Cost Responsibility page allows sources of project cost to be linked to funding centers
11. Tool generates a summary page suitable for use in a project charter.
12. All pages are pre-formatted for easy printing
13. Built-in help is provided through cell comments



Introductory Page

General Project Information	
Project Name:	Your Project
Project ID #:	1234
Project Manager:	Alice Project Manager
Anticipated life (in years) of deliverables:	5.0
Number Standard Deviations	1

Standard Deviation (SD) is added to your estimate of cost (PERT Average) to develop a maximum likely cost with a specified degree of certainty. For example: if the PERT Ave is \$27,000 and 1 SD is \$4,500:

- PERT Ave = \$27,000 (about 50% certainty that final project cost will not be higher)
- PERT Ave plus 1 SD = \$27,000 + \$4,500 = \$31,500 (83% certainty that final cost will not be higher)
- PERT Ave with 2 SD = \$27,000 + \$9,000 = \$36,000 (95% certainty that final cost will not be higher)

Formulas used are as follows:

- PERT Ave = $(\text{Min} + (4 * \text{Most Likely}) + \text{Max}) / 6$
- Standard Deviation = $(\text{Max} - \text{Min}) / 6$
- Confidence Limit = $\text{SD} / \text{PERT Ave} * 100$

The introductory page provides an opportunity to identify the project and enter two key parameters: expected life of the deliverable and degree of confidence required in the budget (i.e. number of standard deviations).

Labor Cost

Labor Cost		
New Contract Labor		
Three Point Estimates are entered here:	Lowest Likely Cost (Min) ==>	\$179,500.00
	Most Likely Cost ==>	\$192,350.00
	Highest Likely Cost (Max) ==>	\$567,260.00
Tool calculates the rest:	PERT Average ==>	\$252,693.33
	Confidence Limits (+/- xx%) ==>	26%
Budget Number for New Contract Labor ==>		\$317,320.00
<i>There is an 83% chance that costs will not exceed budget</i>		
Budget Number for all Contract Labor ==>		\$645,813.33
Budget Number for all Labor ==>		\$877,180.00
Number Standard Deviations ==>		1
<i>There is an 83% chance that costs will not exceed budget</i>		

Labor costs are divided into four categories: New and Existing Employee labor, and New and Existing Contract labor. The figure above shows detail for New Contract labor, and then the total for all of Contract labor, and then Budget Number for all of Labor. At one standard deviation, there is an 83% chance that final Labor cost will not exceed the Budget Number shown. Note that estimates can be based on highly uncertain information.

Non-Labor Cost

F.	Miscellaneous	Total cost of printing and copying, office supplies, training and other miscellaneous costs not categorized elsewhere	
		Lowest Likely Cost (Min) ==>	\$5,700.00
		Most Likely Cost ==>	\$7,300.00
		Highest Likely Cost (Max) ==>	\$14,000.00
	PERT Ave = (Min + Max + 4*ML)/6	PERT Average ==>	\$8,150.00
	Std Dev = (Max - Min)/6	Confidence Limits (+/- xx%) ==>	17%
	Conf Limit = Std Dev/PERT Ave* 100	Budget Number for Miscellaneous ==>	\$9,533.33
SUMMARY OF NON-LABOR COSTS			
		Budget Number for all Non-Labor Costs ==>	\$153,866.67
<i>There is an 83% chance that costs will not exceed budget</i>			

Non-Labor costs are can be divided into six categories, all of which are customizable. The figure above shows detail for Miscellaneous, and then the Budget Number for all six categories of non-Labor cost. At one standard deviation, there is an 83% chance that final non-Labor cost will not exceed the Budget Number shown. Note that when estimates are based on highly uncertain information, confidence limits can be very large.

Total Estimated Project Cost

Total Project Implementation / Development Cost

This worksheet automatically summarizes totals from the "Labor Cost" and "Non-Labor Costs" worksheets.

DO NOT ENTER DATA INTO THIS TABLE

Project Name: Your Project

Project Manager: Alice Project Manager

COST ESTIMATE COMPONENT		ESTIMATED COSTS <i>(from worksheets)</i>
EMPLOYEE LABOR		\$231,366.67
CONTRACT LABOR		\$645,813.33
NON-LABOR		\$153,866.67
Budget for TOTAL Project Development & Implementation:		\$1,031,046.67
<i>There is an 83% chance that costs will not exceed budget</i>		

The summary page shown above is generated automatically. No data entry is required. It is preformatted for easy printing.

Post-Project Costs

Post-Implementation Costs	
ONE-TIME COSTS	Total Cost
Lowest Likely Cost (Min) ==>	\$18,000.00
Most Likely Cost ==>	\$23,400.00
Highest Likely Cost (Max) ==>	\$33,700.00
PERT Average ==>	\$24,216.67
Confidence Limits (+/- xx%) ==>	11%
Budget Number for One-Time Costs ==>	\$26,833.33
Summary of Post-Implementation Costs	
Budget Number for Post-Implementation Annual Cost ==>	\$78,600.00
Budget Number for Post-Implementation Lifetime Cost ==>	\$285,666.67
<i>There is an 83% chance that costs will not exceed budget</i>	

Annual maintenance & support costs and enhancement costs (not shown above) are multiplied by the expected life of the deliverable to yield life-time cost for each category. One time costs (shown above) are added to this to produce total Post-Implementation Lifetime Cost. Summary of Post-Implementation Costs are calculated automatically.

Cost Responsibility

<i>There is an 83% chance that costs will not exceed budget</i>		Percent of Costs per Cost Center					
Source of Cost		Annual Expense	IT Dept	Finance	HR	Cost Center / Internal Order4	Cost Center / Internal Order5
Annual Maintenance Costs	\$29,333.33	40%	35%	25%	0%	0%	
Maintenance \$ per Cost Center	====>	\$11,733	\$10,267	\$7,333	\$0	\$0	
Annual Enhancement Costs	\$22,433.33	50%	50%	0%	0%	0%	
Enhancement \$ per Cost Center	====>	\$11,217	\$11,217	\$0	\$0	\$0	
Annualized One-Time Costs	\$5,366.67	100%	0%	0%	0%	0%	
One-Time \$ per Cost Center	====>	\$5,367	\$0	\$0	\$0	\$0	
Summary		Total Annual Expense	IT Dept	Finance	HR	Cost Center / Internal Order4	Cost Center / Internal Order5
Total Annual Post-Implementation Costs	\$57,133.33						
Annual Post-Implementation \$ per Cost Center	====>	\$28,317	\$21,483	\$7,333	\$0	\$0	
Annual Post-Implementation % per Cost Center	====>	49.6%	37.6%	12.8%	0.0%	0.0%	

Categories of Post-Implementation cost can be spread across up to six cost centers (five shown). Enter the percent that each is responsible for and the tool calculates all the rest. In the example above, three departments will share post-project costs.

Data for Project Charter

Section n: Overall Budget	
Budget for TOTAL Project Development & Implementation:	\$1,031,046.67
Budget Number for Annual Maintenance & Support Cost ==>	\$29,333.33
Budget Number for Enhancement Costs ==>	\$22,433.33
Budget Number for One-Time Costs ==>	\$26,833.33
Section n: Labor Costs	
Budget Number for Existing Employee Labor ==>	\$92,180.00
Budget Number for New Employee Labor ==>	\$139,186.67
Budget Number for Existing Contract Labor ==>	\$328,493.33
Budget Number for New Contract Labor ==>	\$317,320.00
Budget Number for all Non-Labor Costs ==>	\$153,866.67
Section n: Post-Implementation Costs by Cost Center	
IT Dept ==>	\$28,316.67
Finance ==>	\$21,483.33
HR ==>	\$7,333.33

The summary shown above is automatically generated. It can be copied as-is to a project charter. "Section n" refers to the section in the charter document.



Summary

SWAG-Meister is excellent for development of preliminary project cost estimates when information about a proposed project is uncertain or sparse. This tool helps to eliminate unrealistic expectations about project cost

SWAG-Meister is part of a powerful Project Initiation template set available at very low cost from this source:

http://www.cvr-it.com/PM_Templates/

Other templates in this set include:

- **Business and IT Project Charters**
- **Project Charter Lite**
- **Quick IT Project Risk Evaluator**
- **Flexibility Matrix Analysis**
- **And much more...**



About CVR/IT Consulting LLC

CVR/IT Consulting, established in 2002, provides guidance and support in the effective use of Project, Program, Portfolio Management and Business Analysis Technologies. The company provides professional consultation, training and tools in all matters related to Project Management and Business Analysis, such as:

- Implementation of governance structures and processes essential to effective Portfolio Management
- Establishment of a Project Management Office that finds its own success solely in the success of its customers
- Delivery of flexible, customized PM and BA Methodologies and tools
- Assessment of organizational project, program, portfolio management and business analysis practice
- Training (or re-training) of the project workforce
- Implementation of Organizational Change to make it all work



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