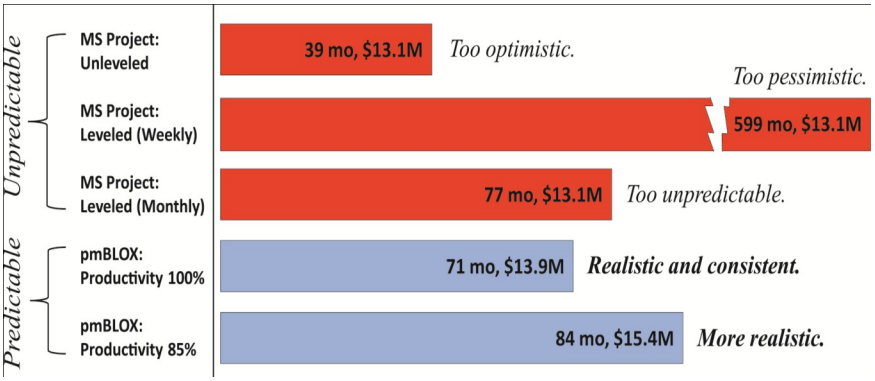
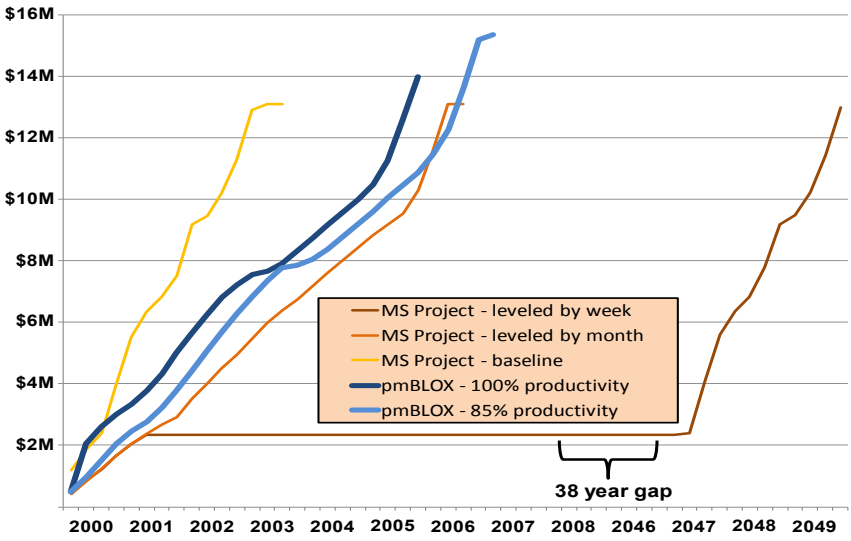
The power is in the proof.

A Case Study

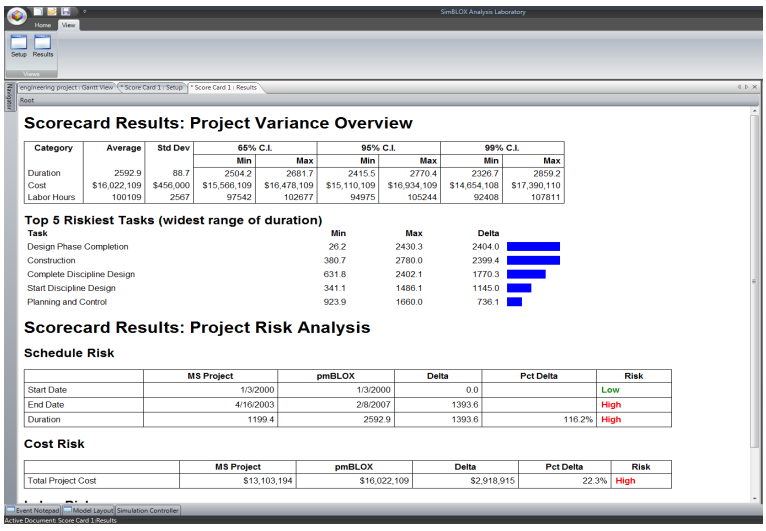
A project manager is leading a team to develop a prototype sensor system and is using Microsoft® Project. The baseline project plan (without leveling resources) shows a duration of 39 months at a total cost of $13.1M. The project plan was level-loaded to remove resource over-allocations. After resource leveling week-to-week, Microsoft Project shows a duration of 599 months! Clearly, this is not realistic. When the resources are leveled month-to-month, Microsoft Project shows a duration of 77 months. It is difficult to trust these results when there is such a huge variance from minor changes.



The same three plans were imported from Microsoft Project into pmBLOX with the assumption of 100% productivity for all resources. The results of all three simulations were identical: total duration 71 months with a total cost $13.9M. This appears to be a more consistent estimate. Standard PM tools tend to be either overly *optimistic* (when resources are not level-loaded) or overly *pessimistic* (when resources are level-loaded). pmBLOX is *realistic*.



With pmBLOX, the PM also has the choice of changing the productivity of assigned resources. An additional simulation was run using a resource productivity level of 85%. This is a commonly assumed productivity level for labor resources. The simulation results from pmBLOX for this scenario are a duration of 84 months and a total cost of $15.1M. The ability to bring simulation and productivity into the estimating process makes initial project budgets and timelines more realistic than those developed in other tools.



Scorecard Results: Project Variance Overview

Category	Average	Std Dev	65% C.I.		95% C.I.		99% C.I.	
			Min	Max	Min	Max	Min	Max
Duration	2592.9	88.7	2504.2	2681.7	2415.5	2770.4	2326.7	2859.2
Cost	$16,022,109	$456,000	$15,566,109	$16,478,109	$15,110,109	$16,934,109	$14,654,108	$17,390,110
Labor Hours	100109	2567	97542	102677	94975	105244	92408	107811

Top 5 Riskiest Tasks (widest range of duration)

Task	Min	Max	Delta
Design Phase Completion	26.2	2430.3	2404.0
Construction	380.7	2780.0	2399.4
Complete Discipline Design	631.8	2402.1	1770.3
Start Discipline Design	341.1	1486.1	1145.0
Planning and Control	923.9	1660.0	736.1

Scorecard Results: Project Risk Analysis

Schedule Risk

	MS Project	pmBLOX	Delta	Pct Delta	Risk
Start Date	1/3/2000	1/3/2000	0.0		Low
End Date	4/16/2003	2/8/2007	1393.6		High
Duration	1199.4	2592.9	1393.6	116.2%	High

Cost Risk

	MS Project	pmBLOX	Delta	Pct Delta	Risk
Total Project Cost	$13,103,194	$16,022,109	$2,918,915	22.3%	High

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