

Choosing the Project Assessing Lean Six Sigma Projects

Carefully Assess Candidate
Projects to Assure Success



Choosing the Right Projects

- Stakeholder impact
 - Customer Value Projects
 - Shareholder Value Projects
 - Employee Value Projects
 - Other Lean Six Sigma Projects



Benefit-cost analysis

- Should be only as elaborate as needed
 - Beware of overkill
- Finance experts should conduct the analysis
 - Review and validation at a minimum
- Costs are relatively easy to quantify
 - Claims on existing resources
- Quantifying benefits is difficult or problematic
 - Based on forecasts
 - Some units of measure must be converted to dollars
 - Often based on unproven relationships
- To deal with these issues, leaders often require a very high ROI

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1.0 Sponsorship

Score	Interpretation
9	Director-level sponsor identified, duties specified and sufficient time committed and scheduled
3	Director-level sponsor identified, duties specified and sufficient time committed but not scheduled
1	Willing Director-level sponsor who has accepted charter statement
0	Director-level sponsor not identified, or sponsor has not accepted the charter

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2.0 Stakeholder Benefits

Note: Several stakeholder benefit categories are shown in section 2. At least one stakeholder category is required. Show benefit scores for each category, then use your judgment to determine an overall benefit score for the project.

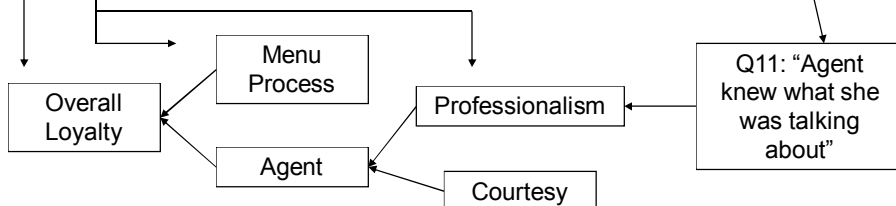
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2.1.1 Customer Satisfaction

Score	Interpretation
9	Substantial and statistically significant increase in <i>overall</i> customer satisfaction or loyalty
3	Substantial and statistically significant increase in a <i>major subcategory</i> of customer satisfaction
1	Substantial and significant increase in a <i>focused area</i> of customer satisfaction
0	Unclear or non-existent customer satisfaction impact



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2.1.2 Quality Improvement (CTQ)

Score	Interpretation
9	10X or greater improvement in critical to quality (CTQ) metric
3	5X to 10X improvement in CTQ metric
1	Statistically significant improvement in CTQ metric, but less than 2X magnitude
0	Project's impact on CTQ metrics undefined or unclear

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2.2.1 Financial Benefits

Score	Interpretation
9	Hard net savings (Budget or Bid Model change) greater than \$500K. Excellent ROI.
5	Hard net savings between \$150K and \$500K. Excellent ROI.
3	Hard net savings between \$50K and \$150K, or cost avoidance greater than \$500K. Good ROI.
1	Hard savings of at least \$50K, or cost avoidance of between \$150K and \$500K. Acceptable ROI.
0	Project claims a financial benefit but has hard savings less than \$50K, cost avoidance less than \$150K, or unclear financial benefit

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2.2.2 Cycle Time Reduction

Score	Interpretation
9	Cycle time reduction that improves revenue, Bid Model or Budget by more than \$500K. Excellent ROI.
5	Cycle time reduction that improves revenue, Bid Model or Budget by \$150K to \$500K. Excellent ROI.
3	Cycle time reduction that improves revenue, Bid Model or Budget by \$50K to \$150K, or creates a cost avoidance of more than \$500K. Good ROI.
1	Cycle time reduction that results in cost avoidance between \$150K and \$500K. Acceptable ROI.
0	Project claims a cycle time improvement but has hard savings less than \$50K, cost avoidance less than \$150K, or unclear financial benefit from the improvement in cycle time.

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2.2.3 Revenue Enhancement

Score	Interpretation
9	Significant increase in revenues, excellent ROI
3	Moderate increase in revenues, good ROI
1	Increase in revenues with minimally acceptable ROI
0	Unclear or non-existent revenue impact

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2.3.1 Employee Satisfaction

Score	Interpretation
9	Substantial and statistically significant increase in overall employee satisfaction or loyalty
3	Substantial and statistically significant increase in a major element of employee satisfaction or loyalty
1	Substantial and significant increase in a focused area of employee satisfaction or loyalty
0	Unclear or non-existent employee satisfaction or loyalty impact

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2.4 Stakeholder: Other

- 2.4.1 Specify Stakeholder: _____

Score	Interpretation
9	
5	
3	
1	
0	Unclear or non-existent benefit

Other stakeholder might be a regulatory agency, the community, etc.

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3.0 Availability of Resources Other Than Team

Score	Interpretation
9	Needed resources available when needed
3	Limited or low priority access to needed resources
0	Resources not available or excessive restrictions on access to resources

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4.0 Scope in Terms of Black Belt Effort

Score	Interpretation
9	Projected return substantially exceeds required return
3	Projected return exceeds required return
1	Projected return approximately equals required return
0	Projected return not commensurate with required return

Required return can be calculated as follows:

Length of project (months) = _____

Proportion of Black Belt's time required (between 0 and 1) = _____

Probability of success (between 0 and 1) = _____

Required return = $\$83,333 * (1) * (2) \div (3) = \$$ _____

Projected return: \$ _____

Based on expected Black Belt results of \$1MM/year.

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5.0 Deliverable

Score	Interpretation
9	New or improved process, product or service to be created is clearly and completely defined
3	New or improved process, product or service to be created is defined
0	Deliverable is poorly or incorrectly defined. For example, a "deliverable" that is really a tool such as a process map

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6.0 Time to Complete

Percent of Black Belt's project effort

Months to Complete	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1	0	0	0	0	0	0	1	1	1	3
2	0	0	0	1	3	3	3	9	9	9
3	0	0	1	3	3	9	9	9	9	3
4	0	1	3	9	9	9	9	3	3	3
5	0	3	3	9	9	3	3	3	1	1
6	0	3	9	9	3	3	3	1	1	0
7	1	3	9	9	3	3	1	1	0	0
8	1	9	9	3	3	1	1	0	0	0
9	3	9	9	3	1	1	0	0	0	0
10	3	9	3	3	1	0	0	0	0	0
11	3	9	3	3	1	0	0	0	0	0
12	3	9	3	1	0	0	0	0	0	0

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7.0 Team Membership

Score	Interpretation
9	Correct team members recruited and time commitments scheduled
3	Correct team members recruited, time committed but not scheduled
1	Correct team members recruited
0	Team members not recruited or not available

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8.0 Project Charter

Score	Interpretation
9	All elements of the project charter are complete and acceptable. Linkage between project and deliverable is clear
3	Project charter acceptable with minor modifications
0	Project charter requires major revisions

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9.0 Value of Lean Six Sigma Approach DMAIC or equivalent

Score	Interpretation
9	Lean Six Sigma approach essential to the success of the project. Black Belt/Green Belt skill set required for success
3	Lean Six Sigma approach helpful but not essential. Black Belt/Green Belt skill set can be applied
0	Usefulness of Lean Six Sigma approach not apparent. Specific Black Belt or Green Belt skills are not necessary

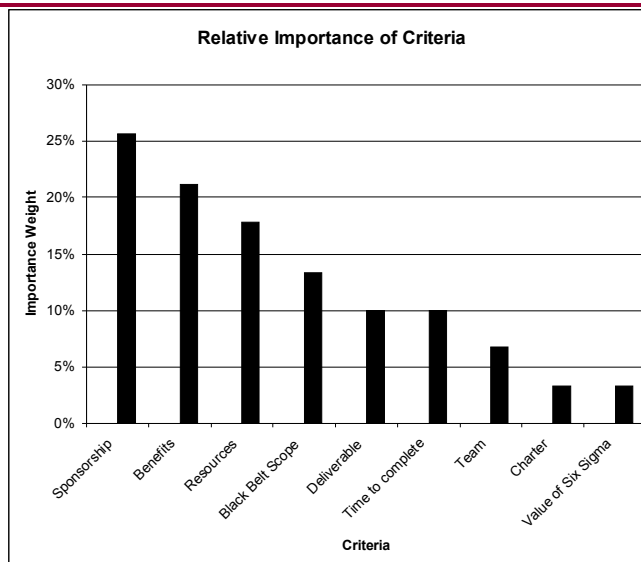
There are many great projects that are *not* Lean Six Sigma projects

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Importance Weighting



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Assessment Summary Sheet

Project Name:	Date of Assessment:		
Black Belt:	Master Black Belt:		
Weighted Overall Project Score:	Project Number:		
Criteria	Score	Weight	Weighted Score
1. Sponsorship		0.23	0.00
2. Benefits (specify main beneficiary)	Overall Benefit Score <input type="text"/>	0.19	0.00
<input type="checkbox"/> 2.1 External Customer:			
<input type="checkbox"/> 2.2 Shareholder:			
<input type="checkbox"/> 2.3 Employee or internal customer:			
<input type="checkbox"/> 2.4 Other (e.g., supplier, environment):			
3. Availability of resources other than team		0.16	0.00
4. Scope in terms of Black Belt Effort		0.12	0.00
5. Deliverable		0.09	0.00
6. Time to complete		0.09	0.00
7. Team		0.07	0.00
8. Project Charter		0.03	0.00
9. Value of Six Sigma Approach		0.02	0.00
TOTAL (sum of weighted score column)		1.00	

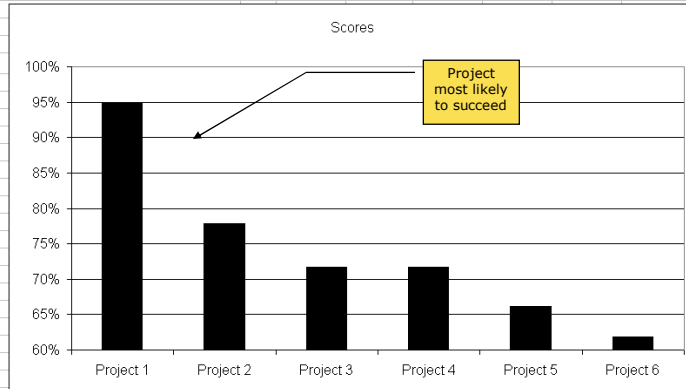
Note: Any criterion score of zero must be addressed before project is approved

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Example of Project Assessment

	A	B	C	D	E	F	G	H
		wt	Coater	conformal	PWB	MMC	switches	panels
Criteria			Project 1	Project 2	Project 3	Project 4	Project 5	Project 6
Active sponsorship	23%		9	9	9	9	9	1
Benefits (specify main beneficiary)	19%		9	5	3	3	3	3
Availability of resources other than team	16%		9	9	3	3	1	9
Scope	12%		9	9	9	9	9	9
Deliverable	9%		9	9	9	9	9	9
Time frame	9%		3	1	3	3	1	3
Team	7%		9	3	9	9	9	9
Project Charter	3%		9	9	9	9	9	9
Value of Six Sigma Approach	3%		9	3	9	9	9	9
PROJECT SCORE			8.55	7.01	6.45	6.45	5.95	5.57
			95%	78%	72%	72%	66%	62%





Q&A and Exercise

- Any questions before we give it a try on a hypothetical project?