Project Identification and Definition

The key to getting fast results ...
Key Elements of Success for Projects

$Y = f(\text{Success}_x)$

$x_{s1} = \text{Management support including Process Owner}$

$x_{s2} = \text{Proper resources}$

$x_{s3} = \text{Clearly defined metrics to track success}$

$x_{s4} = \text{Project ties directly to a business objective}$

$x_{s5} = \text{Team involvement}$

$x_{s6} = \text{Clear Implementation Plan and Control Plan}$

$x_{s7} = \text{Financial impact}$

$x_{s8} = \text{Communication}$

What Are The Key Factors That Lead To Successful Projects?
Factors that can Lead to Project Failure

\[ Y = f (\text{Failure}_x) \]

- \( x_{f1} \): Generic rather than specific problem statements
- \( x_{f2} \): Unclear goals
- \( x_{f3} \): Project not consistent with business objectives
- \( x_{f4} \): Insufficient and/or inaccurate data
- \( x_{f5} \): Poorly defined plan for execution
- \( x_{f6} \): No one individual accountable for implementation and sustainability of solutions and results
Why Is Project Selection And Alignment To Business Objectives So Critical?

• Management support, personnel allocation, and capital expenditure are more readily available if projects are consistent with, and are clearly aligned to business objectives. This support will result in successful projects.

• Those that don’t align well with critical success factors have a high likelihood of failure.

Be Very Sure Your Project Matters And Matches Improvement Strategy Being Applied.
1. Consider list of improvement opportunities
2. Prioritize opportunities with respect to Critical Business Objectives
3. Select Opportunity to be taken on by an improvement team – becomes a “Project” at this stage
4. Determine appropriate improvement methodology to apply
5. Develop Draft Charter:
   - Clarify Business Case
   - Establish Primary and Secondary metrics
   - Determine Objectives and Milestone Dates
   - Determine Project Leadership (Project Leader, Process Owner, Belt)
   - Select team
6. Launch Project
### Step 1: List Potential Projects

Create a list of potential projects (very high level) based on known performance gaps. Scorecards and dashboards, if available, can provide clear guidance areas and focus.

**List of Potential Projects**

*Use data when available*

<table>
<thead>
<tr>
<th>Potential Projects</th>
<th>Type of Problem</th>
<th>Definition of project / issue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(cost reduction, defect reduction, cycle time reduction … )</td>
<td></td>
</tr>
</tbody>
</table>

|                |                    |                               |
|                |                    |                               |
|                |                    |                               |
|                |                    |                               |

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Step 2: Ensure project is consistent with organizational Goals and Objectives

<table>
<thead>
<tr>
<th>Potential Projects</th>
<th>Operational Constraint</th>
<th>Reduce Lead Time</th>
<th>Reduce Materials Cost</th>
<th>+/- target indicators</th>
<th>Improve Customer Satisfaction</th>
<th>Reduce Errors</th>
<th>Overall Impact Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document design</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>48</td>
</tr>
<tr>
<td>Loan lead time</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>324</td>
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<tr>
<td>Job scheduling</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>108</td>
</tr>
<tr>
<td>Work order cycle time</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>216</td>
</tr>
<tr>
<td>Marketing materials</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>
Select the Specific Project

- Select the highest potential impact project that is consistent with organizational objectives. This logic provides for the greatest ROI for the organization.
- Other factors may come to play in final selection of project
  - Available resources
    - Are the other projects currently active in area of highest priority project?
    - Are/would team members or leadership be available?
  - Urgency
    - Is there a time critical aspect that one project has over another?
Lean can be applied to all processes as a first improvement effort. Especially effective for processes that have opportunities to reduce waste or are focused on cycle time reduction.
## High Level Methodology Comparison

<table>
<thead>
<tr>
<th></th>
<th>Quick Win / Just Do It!</th>
<th>Lean</th>
<th>Six Sigma</th>
<th>Design for Six Sigma</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Objective</strong></td>
<td>REDUCE WASTE</td>
<td>REDUCE WASTE &amp; IMPROVE FLOW</td>
<td>REDUCE VARIATION &amp; DEFECTS</td>
<td>PREVENT DEFECTS &amp; WASTE IN NEW PROCESS</td>
</tr>
<tr>
<td><strong>Methodology</strong></td>
<td>PDCA</td>
<td>DAISA</td>
<td>DCAFC</td>
<td>DMAIC</td>
</tr>
<tr>
<td></td>
<td>Plan</td>
<td>Define</td>
<td>Define</td>
<td>Define</td>
</tr>
<tr>
<td></td>
<td>Do</td>
<td>Analyze</td>
<td>Current State</td>
<td>Measure</td>
</tr>
<tr>
<td></td>
<td>Check</td>
<td>Improve</td>
<td>Analyze</td>
<td>Analyze</td>
</tr>
<tr>
<td></td>
<td>Act</td>
<td>Standardize</td>
<td>Future State</td>
<td>Improve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assess</td>
<td>Control</td>
<td>Control</td>
</tr>
<tr>
<td><strong>Team Composition</strong></td>
<td>One or more Employees</td>
<td>Multi Level/ Function:</td>
<td>Led by Certified Belt</td>
<td>Black Belt Driven Cross Functional Team</td>
</tr>
<tr>
<td><strong>Project Duration</strong></td>
<td>Hours - Days</td>
<td>Days - Weeks</td>
<td>3 – 6 Months</td>
<td>4 – 12+ months</td>
</tr>
<tr>
<td><strong>Impact to Culture</strong></td>
<td>High – Universal</td>
<td>High – Widespread</td>
<td>Medium – Focused</td>
<td>Low – Strategic</td>
</tr>
<tr>
<td><strong>Cost in $'s</strong></td>
<td>Hundreds</td>
<td>Hundreds</td>
<td>Thousands</td>
<td>Hundreds of Thousands</td>
</tr>
<tr>
<td><strong>Risk to Company</strong></td>
<td>Low</td>
<td>Low - Medium</td>
<td>High</td>
<td>Highest</td>
</tr>
<tr>
<td><strong>Complexity of Change</strong></td>
<td>Low</td>
<td>Medium</td>
<td>Medium - High</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Return</strong></td>
<td>Thousands</td>
<td>Tens of Thousands</td>
<td>30 – 100k+</td>
<td>100k – 1MM+</td>
</tr>
</tbody>
</table>
Step 5: Develop a Draft Project Charter

- Project Charter
  - Problem Statement
  - Primary and Secondary Metrics
    - Understand current baseline performance
  - Objectives (project goals)
  - Timeframe (milestones)
  - Define Scope
  - Team and Project Leadership

Team Alignment To The Project Charter Is Critical For Project Success
Problem Statement:
During <the period of time for the baseline performance>, the <primary process measure> for <primary output measure> was <baseline performance>. There is a gap of <difference between baseline and historic best or desired performance> from <historic best or desired performance>, representing <cost or revenue impact of filling gap> of benefit.

Problem Example: During the '05/'06 Fiscal Year, the estimated processing time from receipt of commodity vendor cost increases to notification of price increases to customers averages 122 days. The best single price change notification cycle time achieved was 3 days. The gap between 122 and 3 days represents an estimated cost of lost profit of $281,000 based on the last fiscal year.

Goal Statement:
Improve the <primary business measure> for <primary output measure> to <goal> by <date>. This improvement represents <some fraction of> the gap of <difference between baseline and historic best or desired performance> from <historic best or desired performance>, representing <cost or revenue impact of filling gap> of benefit. The process improvement will be implemented by <Identify the expected timing of the improved process achieving the desired performance >

Goal Example: Reduce processing time for notification of price increases to customers from an average of 122 days to 30 days. This would result in a savings of $118,000 gross profit per fiscal year. This project will be implemented by September 30, 2006.

Start / Stop Points for Project:
<What are the boundaries for the project?>
Example: Start at 8/21, stop no more than 4 – 6 weeks out for implementation.

In Scope:
<What processes, systems, products, services, channels, etc. will you consider in this project?>
Example:
- Cost increase notifications received by the commodities team.
- All or nothing bids (8 bids and 75% of total commodity sales)

Out of Scope:
<What processes, systems, products, services, channels, etc. will you NOT consider in this project? If any of these will be addressed in a later project, mention it here.>
Example:
- Price increase notifications that never reach the commodity team.
- Price changes that are not communicated by the vendor.
- Line item bids.

Project Team:
Champion: Paul Simone
Team Leader: Howard James
Team Member: Donna Smith
Team Member: Tina Begouis
Team Member: George Tinsel
Team Member: Warren Bloom
Team Member: Tim Mortenson
During FY06, 28% of the invoices were paid more than 15-days earlier than terms resulting in a time-value of money cost to the company of $120k

During FY06, 37% of the payments were made later than terms resulting in $235k in penalties being paid.

**Project #5:** During FY06 839 (55% of total late payments) did not contain complete vendor information on Vendor Master.
A “Good” Problem Statement

The problem statement should include:

1. Link. Establishes a clear link to a business performance goal in the business case.
2. Timeframe. What is the timeframe being referenced in the statement of the pain, i.e., how long has this been occurring.
3. Baseline Performance. Current performance level – measured, reported in clear numerical terms
4. The GAP. Clarifies the difference between current performance and the targeted level of performance – clearly define the gap at a detailed process level. Expressed in the output unit of measure.

The elements of a Problem Statement are the SAME as for a Business Case – Just written at a different level.
The issue should always be stated as a Problem. It must quantify the impact to the organization (annualized). Do Not attempt to solve the problem at this stage or explain why the problem exists.

"Just The Facts"
• The single measure (the Y) that identifies the success of the Project
  – Multiple Primary Metrics usually implies multiple Projects
• Specific Measure of the primary result of a Process
• Must be consistent with the problem statement and objective
• Should be plotted on a time series graph

Only 1 Primary Metric Per Project Allowed
Baseline Data

Why Is This An Important Step?

- Decreases the temptation of team members to assume current performance level. No more “ought,” “should,” and “I think” notions around performance.
- These refer to guesswork and not fact. Despite the chance that educated guesses may have a high probability of being correct, that doesn’t make them fact.
- When making changes, deal in facts, not what “ought” to happen.
- As you improve your process you will have a quantitative measure of the improved performance.

Some Lean And Six Sigma People May Say “In God We Trust – All Others – Bring Data”
Primary Metric
Flocculant Reduction Project

- G/Tonne
- Baseline
- Project Target
- Business Target

September 29, 2005 Rev 1

Primary Metric.xls
Secondary Metric(s)

- A measure(s) that will “keep you honest”
- Tracks potential negative consequences
- More than one may be required
- For example: A Primary Metric for a Lean project may be Cycle Time of the process. A secondary metric may be maintaining the quality of the process output. It would not be ok to reduce the cycle time of the process and increase the defects or reduce product quality.

There Are No Improvement Goals Implied Or Stated For Secondary Metrics – Only That It Won’t Get Worse.
Elements of a Charter Objectives

- The Objectives should be established for the primary metric that follows the SMART criteria.
  - **Specific**
  - **Measurable**
  - **Attainable**
  - **Relevant**
  - **Time-bound**
- Often necessary to have interim goals
Role of Team Members

A Subject Matter Expert in project process area
- Represents a faction of the stakeholders
- Clarifies charter
- Recommends solutions
- Helps to implement approved solutions
- Generates buy-in
- Learn problem solving tools and methodology and build into workplace culture

Process Level Team Member

Interested Supervisor or Manager

Project Team Roles

**Champion**
- Defines scope
- Approves solutions
- Rewards progress
- Accountable for results

**Deployment Leader/Business Leader**
- Select Projects
- Project Reviews
- Program Administration

**Project Leader/Process Owner**
- Leads the Team
- Assigns project resources
- Active in ALL Team Meetings
- Communicates Team results
- Accountable for Sustaining Results

**SS Belt**
- A Resource to the team with data collection and analysis and Team facilitation
- A Resource to team to assist with tool usage

**Significant impacted Stakeholder from Value Stream**
# Example - Team Make-up Template

## Team Composition - Payroll process defects reduction

<table>
<thead>
<tr>
<th>Name</th>
<th>Team Role</th>
<th>Expertise</th>
<th>Time Commitment</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blair Jones</td>
<td>Champion</td>
<td>Manager</td>
<td>Wkly meeting/update</td>
<td>Attend 30% team meetings</td>
</tr>
<tr>
<td>Sara Evans</td>
<td>Project Leader/Process Owner</td>
<td>In-depth knowledge of process</td>
<td>Attend all meetings</td>
<td>Review meeting after each session</td>
</tr>
<tr>
<td>Earl Pierce</td>
<td>Belt</td>
<td>Process</td>
<td>1 of 2 project.</td>
<td>Payroll verification duty given to Rose during project life</td>
</tr>
<tr>
<td>Lisa Smart</td>
<td>Member</td>
<td>Process Expert Comms. skills</td>
<td>30% of time</td>
<td>Time sheet verification given to Eric during project life</td>
</tr>
<tr>
<td>Brent Jacobs</td>
<td>Member</td>
<td>Process Expert Data analysis</td>
<td>30% of time</td>
<td>Wants to be advised with respect to anything on benefits</td>
</tr>
<tr>
<td>Norman Reams</td>
<td>Interested party</td>
<td>Account / Benefits manager</td>
<td></td>
<td>Offered to help if requested. Leonix is industry leading practice</td>
</tr>
<tr>
<td>Leonard Spoon</td>
<td>Resource</td>
<td>Payroll process manager at Leonix</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 6: Launch Project

- Advise Project Leadership
- Set expectations:
  - Determine any immediate action items necessary to complete the project
  - Assign responsibilities
  - Review metrics and any other applicable data
  - Determine interim dates for team meetings, task completions, etc
  - Determine project completion date
  - Determine Report Out date