



Avoiding Process Improvement Pitfalls (What NOT to Do!)

Steve Huck, PMP
Quality Improvement and Optimization Lead

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A Definition...

pit·fall (pĭt'fôl')
n.

1. An unapparent source of trouble or danger; a hidden hazard:
"potential pitfalls stemming from their optimistic inflation assumptions" New York Times.
2. A concealed hole in the ground that serves as a trap.

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Why Understand Process Improvement Pitfalls?

- Wealth of information on the “ideal” state for an organization, but very minimal information of what NOT to do in getting there
- High Reward, but also High Risk when implementing Process Improvement
- Not Everyone knows what you know about Process Improvement
- Process Improvement is commonly viewed as a Technical Topic, not a Management Topic
- You want to be successful in delivering Process Improvement and value-added change
- Most organizations fail at Process Improvement

Failure rate of Software Process Improvement efforts is approximately 70% (SEI, 2002b)

Objectives for Today

Based on our “Lessons Learned” from the field...

- Discuss the Top 8 Process Improvement Pitfalls (ordered by “impact” value)
- Discuss “What can Happen” and “Financial Impacts”
- Provide Recommendations to Avoid
- Learn Something Interesting and of Value

Now on to the Pitfalls...

Pitfall #8

Not treating your Process Improvement Effort as a Project

Behaviors Include:

- Implement Process Change without a Project Plan and Workplan
- Lack of Scope Definition, Requirements Management and Development
- Lack of Project Monitoring and Control activities (i.e. Status, Issue, Risk Tracking and Management)
- Allow the Process Team to operate without good Project Management disciplines and accountability
- “We are performing Process Improvement, we are not a Project”



Pitfall #8

Not treating your Process Improvement Effort as a Project

What can Happen?

- PM 101 - “You fail to plan, you plan to fail”
- Loss of Sponsorship and Commitment
- Negative Organizational Sentiment and Credibility
- Budget Cut (what is your value?)



Financial Impacts...

- Unable to justify ROI and Value Creation
- Cost Over-Runs



Pitfall #8

Not treating your Process Improvement Effort as a Project

Recommendations to Avoid this Pitfall...

- Put a Project Manager in charge of the Process Improvement Effort
- Get the Process Improvement Effort classified as a “Project” in the IT Portfolio, not just a general discretionary spend activity
- Ensure the Process Improvement Team activities are QA’d against the organization’s Project Management standards (Remember GP 2.9 for PPQA, OPF, and OPD)
- Produce a project Charter and Plan with tangible objectives
- Produce a team Status Report showing progress, issues and risks



Pitfall #7

Leading Process Change with a Tool

Behaviors Include:

- Buying a Tool as a “Silver Bullet” solution to improve processes and practices
- Expecting instant Organizational Improvement and Perfection
- Buyers not including all stakeholders (i.e. Process Improvement Team, tool users, etc.) in the business case and procurement process
- Senior Management hyping Tool over People and Capability (i.e. The “Tool” will deliver X, versus “our team” will deliver X)
- Provide limited or no funds for Performance Support



Pitfall #7

Leading Process Change with a Tool

What can Happen?

- Tool Backlash
- Decrease Process Performance - adding more complexity to “as-is” processes
- Attrition - IT’s natural focus is in on creativity and innovation; top talent will leave your organization if they cannot do their job



Financial Impacts...

- License and Maintenance Fees
- Difficult to justify ROI
- Cost of lost Productivity



Pitfall #7

Leading Process Change with a Tool



Recommendations to Avoid this Pitfall...

- Define your Process first, and have a clear understanding of which Process you plan to improve with the Tool
- Do a detailed Alternative Analysis and Business Case before procuring Tool
 - Ask Yourself -> Do you really need the Tool? What is the value add?
- Challenge your vendors to provide you with a clear implementation plan and roadmap
- Provide enough budget to handle Performance Support (Training and Communications)

Pitfall #6

Not Understanding your “Starting Point”

Behaviors Include:

- Begin a Process Improvement Effort without an Assessment to understand “current state”
- Move ahead with a Process Change without understanding the Practice or Capability you are improving
- Start Process Improvements without a Business Case



Pitfall #6

Not Understanding your “Starting Point”

What can Happen?

- Destroy Processes and Tools which have been working well
- Lack of focus for Process Improvement Effort
- Rework
- Frequent Scope Changes from Sponsor



Financial Impacts...

- Loss of prior Process Improvement Investments
- Cost of Rework and cyclical “Burn and Churn”
- Cost of Lost Productivity



Pitfall #6

Not Understanding your “Starting Point”



Recommendations to Avoid this Pitfall...

- Always conduct an Assessment of “current state” before beginning any Process Improvement Effort
 - Plenty of good models available to use as a benchmark reference
- If tasked with moving ahead without an Assessment, put the Assessment into your Planning phase
- Do not set finite cost/schedule expectations (or a “guarantee”) of a an “end-state” before an assessment is conducted

Pitfall #5

Staff your Process Improvement Team with the Wrong People

Behaviors Include:

- Assign people brand new to your organization to the Process Improvement Team
- Staff your Process Improvement Team with only external consultants/contractors
- Not staffing “A” players on the team (refuge for weak performers)
- Assign multiple people a part-time role on the Process Improvement Team



Pitfall #5

Staff your Process Improvement Team with the Wrong People

What can Happen?

- Poor Quality
- Lost Knowledge Capital
- Unsustainable Improvements



Financial Impacts...

- Process Improvement Effort does not Deliver Value
- Cost of Poor Quality on the Process Improvement Team (the Team intended to fix problem for the organization)
- Lost Investment (when Contractors leave)



Pitfall #5

Staff your Process Improvement Team with the Wrong People

Recommendations to Avoid this Pitfall...

- Assign a limited number of people who can assume full-time, but temporary roles (6-12 months) on the Process Improvement Team
- Use Consultants for their “knowledge” capital:
 - Leverage Consultants to help launch and enable your Process Improvement Team
 - **Ideal balance:** <50% external staffing is healthy for initial launch, and <25% external for ongoing operations
- Provide incentives and make roles on the Process Improvement Team attractive
- Ensure People on the Process Improvement Team have used your Organization’s processes in practice



Pitfall #4

Impose Unrealistic Expectations for Change

Behaviors Include:

- Declare a top down mandate to achieve “Perfection” within a very short window (i.e. few weeks or 1-2 months)
- Use of the terms “Rapid” or “Accelerated” to describe the Process Improvement Effort
- Mandate “Rapid” achievement of a maturity target (i.e. CMMI L3) within a relatively immature organization
- Make threats (i.e. financial/loss of job) to managers as a means to achieve this maturity target



Pitfall #4

Impose Unrealistic Expectations for Change

What can Happen?

- Significant waste of effort on Non-Value Added Activities in attempting to achieve target
- Signals Desperation from Senior Leadership (i.e. What is the issue with business? Why do we need this rapid improvement?)
- Loss of Top Talent
- Failure will make any future efforts more challenging



Financial Impacts...

- Lost Productivity from working on Non-Value Added Activities
- Productivity Lower than when the “Accelerated” improvement effort began



Pitfall #4

Impose Unrealistic Expectations for Change

Recommendations to Avoid this Pitfall...

- Educate the leadership on Organizational Transformation and Change Management fundamentals (Change Curve)
- Ensure an Assessment is conducted (see Pitfall #6)
- Get Realistic estimates for the improvements desired
- If you can't get Leadership to change course, move to the "sidelines"
(Realize this effort will be short-lived)



Pitfall #3

Weak Leadership and Sponsorship

Behaviors Include:

- Delegate ownership of the Process Improvement Effort to Middle Management
- Sponsor of Process Improvement Program not eating their own dog food
- Process Improvement Team does not have the authority to implement improvements
- Minimal funding or investment -> “I want quality and improvement, but I don’t want to pay for it.”



Pitfall #3

Weak Leadership and Sponsorship

What can Happen?

- Lack of advocacy
- Challenges getting organizational buy-in
- Challenges in justifying value
- Team works in a silo



Financial Impacts...

- Minimize the ROI for the Process Improvement Investment
- Sunk Costs from ineffectiveness



Pitfall #3

Weak Leadership and Sponsorship

Recommendations to Avoid this Pitfall...

- Ensure leadership clearly understands the value proposition for investing in the Process Improvement Effort
- Clarify the role and responsibilities of the Process Improvement Sponsor
- Produce simple metrics that a sponsor can understand
- (Fight to) Align the Process Improvement Team to report to a Senior Executive with power and influence
- Ensure your sponsor is visible (i.e. add name to training and communications, make appearances, etc.)



Pitfall #2

Misuse Process Models (CMMI, eSCM, etc.)

Behaviors Include:

- View Process Model as the silver bullet “Process” or “Methodology”
- Achieve rating or certification for the “sake” of the rating or certification
- Implement Model like a Packaged Software Solution
- Deploy Model by training everyone in the organization on the entire Model
- Senior Leadership Implementing Model as a “Status Symbol”



Pitfall #2

Misuse Process Models (CMMI, eSCM, etc.)

What can Happen?

- Miscommunications and Misunderstandings
- Unrealistic Expectations
- Blame the Model when Expectations are not met
- Diminishes Credibility of Model



Financial Impacts...

- Lost Investment in Model Education
- Lost Investment in Assessment Planning and Execution
- Lost Productivity from attendance of ineffective training



Pitfall #2

Misuse Process Models (CMMI, eSCM, etc.)

Recommended Approach to Avoid this Pitfall...

1. Education, Education, Education on the Model you plan to use
2. Get educated on how to implement the Model
3. Consolidate your knowledge into a simple executive summary to leadership on the Model and implementation best practices.
(Expect to present to leadership at least 3-5 times)
4. Develop Business Case which clearly details implementation approach along with simple ROI/Success Metrics
5. Use Consultants (or another third party) to QA the Business Case
6. Get Sponsor Approval and Organizational Buy-In



Pitfall #1

What is Wrong with this Plan?

Magic Widgets - IT Process Improvement Plan			
Activity	Duration	Avg. FTEs	Approx. Cost*
Assessment	2-3 Months	3	\$150K-\$300K
Business Case	1 Month	2	\$50K
Build Improvements	3-4 Months	6-8	\$400-\$700K
Pilot Improvements	1-2 Months	6-8	\$130-\$350K
Deploy Improvements - Post Improvements on Intranet and Send Email	2 Days	1	\$2K
Project Closeout	2 Weeks	6	\$70K
Total	9-12 Months		\$750K-\$1.5MM

* Costs are representative

Pitfall #1

Forget Training and Communications

What is Wrong with this Plan?

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Is an email all you really need?

With all this money spent improving processes, how will anybody know how to use them?

* Costs are representative

Pitfall #1

Forget Training and Communications

What can Happen?

- Resistance to Process Adoption
- Lack of End-User Awareness
- No Improvement Results



Financial Impacts...

- Lost Investment in the Process Improvement Effort
- Organizational Costs from Poor Change Management



Pitfall #1

Forget Training and Communications

Recommendations to Avoid this Pitfall...

- Training Materials should be considered a Process Asset
- Every \$1 spent to improve a Process should have \$1 invested in improving the associated Training and Communication
- Ensure the Process Improvement Team has a Training and Communications Sub-Team
- Develop and Execute a Training and Communications Plan
- Ensure a Team (i.e. Process or Training Group) is available to provide ongoing Process Training (good ole “OT” from CMMI)



In Summary...

- If you hit a Pitfall, the situation is recoverable
- Education and Awareness are your best defenses against Pitfalls
- Avoiding Pitfalls will dramatically increase the chances of a successful Process Improvement Effort



Questions and Discussion



Steve Huck, PMP

Quality Improvement and Optimization Lead

steveh@slalom.com • 312-593-0994

Thank You for Attending!

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