A Project Manager’s Practical Guide to Lessons Learned

Timothy P Brandon
PhD, PMP, PMI-ACP
Northcentral University and North Star Pathfinder LLC

PMIW Lunch and Learn
February 19, 2021
Background

• BS Mathematics with Computer Science (1972)
• MS Information Systems and Technology Management with Project Management (2014)
• PhD Business Administration with Project Management (2019)
• Project Management Institute PMP and PMI-ACP certifications
• Lean Six Sigma Green Belt
• 45 years managing projects, programs, and portfolios at the manager, director, and vice president levels
Why are we here? Audience Feedback

PMI Westchester Chapter Meeting Jan 14, 2020
“Do Project Organizations Learn from Lessons Learned”

• Add the steps of a good lessons learned session(s)
• Some people, because of various reasons, may not know what good lessons-learned sessions look like
• Weave in stories describing best practices
• Discuss the topic of “lessons learned” and how to approach, apply, and practice
• How to get information and lessons learned from experts who are reluctant to share
Theoretical Framework

Topics

1) Basics 9) Format 17) Dissemination
2) Strategy 10) Repository 18) Sharing
3) Executive 11) Experts 19) Governance
4) Ownership 12) Identification 20) Maintenance
5) Team 13) Capture 21) Improvement
6) Scope 14) Validation 22) Implementation
7) Charter 15) Action 23) Questions
8) Taxonomy 16) Search 24) Appendix
Basics

- Lesson – knowledge positive or negative experience
- Learning – changing behavior or developing a new approach or skill
- Lesson Learned – when something changes as a result of learning from experience
- Steps in learning a lesson
  - Identifying issues
  - Assigning action
  - Implementing the change
Define the strategy before doing anything
• Organization-led
• Target critical knowledge & high-value decisions
• Behavior change program
• Change management framework
• Embed into organization structure
• Include governance to be successful
• Staged process, regular decision processes
• Include a piloting stage
• Run as a project with cross-functional steering

Copyright 2021 Timothy P Brandon, PhD
Executive

Get leadership buy-in and sponsorship

• Demonstrate commitment to learning
• Set and promote clear knowledge-sharing strategy and goals
• Prioritize and support learning from projects
• Overcome time and resource barriers
• Reduce heavy workload to make time available
• Foster project learning environments
Ownership

Define the roles, accountabilities, and relationships

- **Learning Owner** – Single person accountable for LL success and LL team performance
- **Facilitators** – Skilled at leading LL sessions
- **Editors** – Skilled at consolidating best practices
- **Trainer** – Skilled at educating person and group
- **Process Owner** – Accountable for performance and improvement
- **Community of Practice Owners** – Lead discussions
Team

Build the team for positive outcomes
• Constructive learning culture
• Trust, openness, cooperation, and engagement
• Accept both success and errors
• Safe, sharing, blame-free process
• Cooperative, knowledge-centered, participative
• Friendly, networked, social relationships
• Involve the right stakeholders and super users, focusing on what’s in it for me (WIIFM).
Scope

Determine the level in the organization where LL will operate

- Individual – Zero-loop level
- Project – Single-loop level
- Organization – Double-loop level
- Global – Triple-loop level

Determine whether to Make or Buy

- Technology, Process, and Support consulting
  - Bloomfire, CornerThought, Knoco Ltd, LessonFlow, Secutor Solutions, SolarWinds, Zendesk, etc.
Charter and Authorize the LL Project

Implement LL in an organized manner

• State the mission scope, objectives, people, roles, time, budget, and desired outcomes of the LL implementation project

• Identify the sponsor and cross-functional steering team

• Authorize and empower the project manager to lead the project and authorized funds to secure resources
Taxonomy

Define a top-down, two-level classification scheme for coding, storing, retrieving, disseminating, and sharing lessons and best practices

• Use the business functions and processes for Organization level LL taxonomy

• Use the PMI PMBOK knowledge areas and process groups for the Project Management level LL taxonomy
Format

Define a single easy standard format for lessons identification

• Context
• Description
• Cause
• Recommendation
• Suggested Action
• Metadata
<table>
<thead>
<tr>
<th>Field</th>
<th>What to input</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson title</td>
<td>Short sentence</td>
<td>Obtain Project Team Buy-In at the Project Kickoff Session</td>
</tr>
<tr>
<td>Lesson ID number</td>
<td>Automatically assigned by the capture system</td>
<td>LL 0001</td>
</tr>
<tr>
<td>Submitted by Name</td>
<td>Name of the originator</td>
<td>Brandon, Timothy</td>
</tr>
<tr>
<td>Submitted by Role</td>
<td>Name, role, department of the originator</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Submitted by Department</td>
<td>Name, role, department of the originator</td>
<td>Project Management Office</td>
</tr>
<tr>
<td>Date submitted by</td>
<td>yyyy-mm-dd</td>
<td>2020-02-14</td>
</tr>
<tr>
<td>Status</td>
<td>Submitted, Validated, Approved, Implemented, Rejected, Closed, Archived</td>
<td>Submitted</td>
</tr>
<tr>
<td>Topic</td>
<td>Taxonomy level-one e.g. (PMBOK Knowledge Area) OR (Business Functional Area)</td>
<td>9. Project Resource Management</td>
</tr>
<tr>
<td>Sub-topic</td>
<td>Taxonomy level-two e.g. (PMBOK Process Group) OR (Business Process)</td>
<td>9.4 Develop Team</td>
</tr>
<tr>
<td>Project name</td>
<td>Project name</td>
<td>SAP Rollout - Life Safety SBU</td>
</tr>
<tr>
<td>Field</td>
<td>What to input</td>
<td>Example</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Context</td>
<td>The context in which this learning happened - any relevant background</td>
<td>The goal of the project was to</td>
</tr>
<tr>
<td></td>
<td>What was expected?</td>
<td>&gt; Assess the current business operating environment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Educate the business unit on the feature and function of SAP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Migrate the legacy data to the enterprise SAP instance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Configure the SAP instance for the Life Safety SBU organization structure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Define roles and security authorization for Life Safety SBU employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&gt; Test, Train, Go Live, and Support the Life Safety SBU post -Go-Live</td>
</tr>
<tr>
<td>Description of the event or issue</td>
<td>What actually happened?</td>
<td>1. The project manager (PM) expected the SAP team business process owners (SBPO) to communicate the objectives of the project and the expectation of time commitment of the business super users newly assigned to the project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The SBPOs complained to the project manager that they were falling behind schedule because the super users were still performing their old duties instead of joining SPBOs at the to work on their project tasks.</td>
</tr>
<tr>
<td>Field</td>
<td>What to input</td>
<td>Example</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Root cause    | What were the root causes? Why was there a difference between what happened an what was expected? | 1. The PM assumed the SBPOs would fully brief the business super users assigned to them  
2. The PM should have included ALL team members in the project kickoff meeting and explained the goals of the project and the expectation of their involvement in the project effort |
| Lesson identified | The recommendations for the future - specific accountable improvement actions  
What would you do differently? What advice would you give to the next team? | Always make sure the PM holds a project team kickoff where the PM actively involves each project team member and stakeholder in clearly defining the objectives, reasons, benefits, risks, and behavioral norms to assure that every member has contributed, build team spirit, and achieve consensual buy-in. Address all of the following change management questions posed by Peter de Jager: Why, WIIFM, Monday, Won’t, Will, Might, Signposts. |
| Suggested action | How can these recommendations be institutionalized?  
(e.g. Update a process, write a new process, fix a problem, notify a person) | 1. Update the SAP Rollout documentation and PM Checklist to include an all-hands kickoff meeting where ALL project team members sign a commitment document that describes their role and expected time commitment of them selves and their direct reports. |
<table>
<thead>
<tr>
<th>Field</th>
<th>What to input</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accountable person Name</td>
<td>Name of the person assigned the action</td>
<td>Jane Smith</td>
</tr>
<tr>
<td>Accountable person Role</td>
<td>Role of the person assigned the action</td>
<td>SAP Program Manager</td>
</tr>
<tr>
<td>Accountable person Department</td>
<td>Department of the person assigned the action</td>
<td>SAP Program Management Office</td>
</tr>
<tr>
<td>Action approval date</td>
<td>yyyy-mm-dd</td>
<td>null</td>
</tr>
<tr>
<td>Action closure date</td>
<td>yyyy-mm-dd</td>
<td>null</td>
</tr>
<tr>
<td>Lesson value</td>
<td>Estimate of one-year dollar savings from the improvement</td>
<td>100,000 USD</td>
</tr>
<tr>
<td>Lesson importance code</td>
<td>Select a predetermined subjective value (e.g. 1-High, 2-Medium, 3-Low)</td>
<td>1-High</td>
</tr>
<tr>
<td>Other comments</td>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Attachments</td>
<td>Document, Diagram, Flowchart, Picture, Story, Audio, Video</td>
<td>None</td>
</tr>
<tr>
<td>Keyword tags</td>
<td></td>
<td>project, team, kickoff, stakeholder, buy-in</td>
</tr>
</tbody>
</table>
Repository

Store both Lessons and Best Practices
• Keep everything in one place
• Easily accessible, user friendly
• Intelligently organized, context oriented
• Provide unified groupware services
• Web 2.0 and database technology
• Allow users to work in groups

Examples of technology:
• Database, shared file system, SharePoint list, intranet, wiki
• Commercial off the shelf software (COTS)
Experts

• Recognize experts to stimulate willingness to share valuable knowledge with others
• Publish a directory of experts with their areas of expertise like LinkedIn endorsements
• Allow them to be contacted to provide their insight on project team issues on a scheduled basis
• Have them lead communities of practice (COP) or give “TED” talks to the community
• Address the fear of loss of power by sharing
1 Identification of Lessons (Principles)

- Grounded in performance data
- Positive as well as negative experience
- Refer to the objectives of the experience
- Separate experience from opinion
- Unique and distinct lessons for others to learn from and take action
- Imagine moving from the trunk of a tree, to the branches, and then on to the fruit

This Photo by Unknown Author is licensed under CC BY
Identification of Lessons (Approach/Process)

Approaches:
• Informal vs. Formal – Level of effort & structure
• Connect vs. Collect – Intent & Type of knowledge

Collection methods:
• Retrospective reviews at stage and/or project exit
• After action reviews of incidents and events
• Individual (ad hoc) submissions
• External reviews
• External articles, books, blogs, videos
Identification of Lessons (Steps)

- Introduction
- Project objective
- Project accomplishments
- Identify issues
- Discuss issues to identify learning points
- Close with satisfaction rating
Identification of Lessons (9 Questions)

• What was supposed to happen?
• What actually happened, achieved vs planned?
• Why was there a difference?
• What were the root causes? (5 Whys)
• What have we learned?
• How to avoid problems or repeat successes?
• What advice to give to the next project team?
• What action is recommended to be taken?
• Who is to take the action?
2 Capture

• Capture collected experiences and lessons learned regularly.
  • Throughout the project life cycle – not at closing
  • At the point of discovery – not later
• Each lesson stands alone
• Need to be easy to follow & well structured
• Just enough content to support the insight
• Consider the audience while writing
• Include clarifying attachments
3 Validation

• Project manager checks the lesson identified for wording, clarity, action, validity and uniqueness
• Lesson editors validate that the lesson is written clearly and is not redundant
• Process owner approves the lesson as an action to be taken and assigns it to a person or escalates it
• Process owner confirms that the action is closed
• Lesson editors cull out and archive old lessons that have been actioned and incorporated in best practices
Assign and track an action for each lesson
• Fix a problem
• Investigate further for root cause(s)
• Update or create policy, process, procedure
• Update training
• Circulate lesson for others to decide an action

Update the lesson with the closure date when the action has been taken
5 Search

• Use search software to pull (explore) by seeking new lessons and updated best practices
• Use publishing software to push (disseminate) new lessons and updated best practices to those to be notified
• Allow both push (disseminate) and pull (search) on many fields and tags in the repository and free-text search across all data
• Allow filters to expand or limit the lessons or best practices that are returned
6 Dissemination

People need to apply improvements and reuse them as part of their normal working environment

• Broadcast new lessons and best practices via blogs, RSS feeds, tagging, videos, newsletters

• Feed best practices into formal training, coffee chats, brown bags, and lunch and learn sessions

• Include best practice review as standard project work during project team building

• Continuous project team training as needed
  • How to capture and share lessons learned
  • How to use the knowledge repository
  • Best practices and access to experts
7 Sharing

Learn from both failure and success
- Include Documents, Stories, Micro-articles, Learning histories, Procedures, Scripted videos
- Establish incentives to stimulate sharing.
- Build organizational commitment by sharing lessons and experiences.
- Share explicit (written) knowledge by collect & push
- Share tacit (verbal) knowledge by connect & pull
  - Communities of practice, peer assist, baton passing, knowledge handover, promoting conversation
8 Governance

Make the learning expectations clear to everyone

Embed the habit of learning & applying lessons and best practices into the culture & working practices of the organization in a way that is sustainable

Framework
• Clarity of what is to be done
• People have the tools and training to do it
• Check that people have done what is wanted
9 Maintenance

- Enforce an inhouse standard for every project
- Assign accountability for learning
- Assign support resources
- Monitor and report performance metrics
- Reinforce using rewards for participation and sanctions (rarely and quietly) for non-participation
- Staff a designated support organization
  - Keep system updated, people trained, clear roles
  - Run the monitoring, measurement, & reporting
  - Craft the long-term strategy
  - Make interventions to sustain lesson learning
10 Improvement

Measure and report metrics and adjust to correct

• Compliance
  • Degrees of compliance with standard
  • By business, projects, process owners

• Activity
  • Lessons entered, lessons closed, questions asked & answered by forum, frequency of best practices updates and creations, total value of lessons closed

• Output
  • Are costs decreasing, are projects performing better to time, cost, scope, and satisfaction goals
Implementation

- Trial run pilot 1
- Make adjustments based on feedback
- Iterate trial run pilots until stable
- Confirm ready for roll out
- Train project teams
- Rollout to project teams
Recap

1) Basics
2) Strategy
3) Executive
4) Ownership
5) Team
6) Scope
7) Charter
8) Taxonomy
9) Format
10) Repository
11) Experts
12) Identification
13) Capture
14) Validation
15) Action
16) Search
17) Dissemination
18) Sharing
19) Governance
20) Maintenance
21) Improvement
22) Implementation
23) Questions
24) Appendix

Copyright 2021 Timothy P Brandon, PhD
Contact and Questions

Timothy P. Brandon, Ph.D., PMP, PMI-ACP
NCU Email: t.brandon8837@o365.ncu.edu
NSP Email: brandotp@aol.com

Please send me feedback at
https://www.surveymonkey.com/r/6LJMBZYZ

Thank you for your attention.
Are there any questions?
Appendix
References


References


References


References


<table>
<thead>
<tr>
<th>Product name:</th>
<th>Category:</th>
<th>Smart Score:</th>
<th>Price:</th>
<th>User Satisf.:</th>
<th>User reviews:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ServiceNow Knowledge Management</td>
<td>Knowledge Management Software</td>
<td>9.8</td>
<td>By quote</td>
<td>100%</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>Inkling Knowledge</td>
<td>Knowledge Management Software</td>
<td>9.7</td>
<td>By quote</td>
<td>91%</td>
<td>11 user reviews</td>
</tr>
<tr>
<td>Remedy Knowledge Management</td>
<td>Knowledge Management Software</td>
<td>9.7</td>
<td>By quote</td>
<td>67%</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>Zendesk</td>
<td>Knowledge Management Software</td>
<td>9.6</td>
<td>$3</td>
<td>98%</td>
<td>32 user reviews</td>
</tr>
<tr>
<td>GURU</td>
<td>Knowledge Management Software</td>
<td>9.5</td>
<td>$5</td>
<td>98%</td>
<td>14 user reviews</td>
</tr>
<tr>
<td>Inbenta Knowledge Management</td>
<td>Knowledge Management Software</td>
<td>9.2</td>
<td>By quote</td>
<td>92%</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>Atlassian Confluence</td>
<td>Knowledge Management Software</td>
<td>9.1</td>
<td>$5</td>
<td>98%</td>
<td>32 user reviews</td>
</tr>
<tr>
<td>RightAnswers</td>
<td>Knowledge Management Software</td>
<td>9.0</td>
<td>By quote</td>
<td>100%</td>
<td>16 user reviews</td>
</tr>
<tr>
<td>Document360</td>
<td>Knowledge Management Software</td>
<td>9.0</td>
<td>$49</td>
<td>97%</td>
<td>21 user reviews</td>
</tr>
<tr>
<td>Bloomfire</td>
<td>Knowledge Management Software</td>
<td>9.0</td>
<td>$899</td>
<td>100%</td>
<td>12 user reviews</td>
</tr>
<tr>
<td>Bitrix24</td>
<td>Knowledge Management Software</td>
<td>9.0</td>
<td>Free</td>
<td>98%</td>
<td>19 user reviews</td>
</tr>
<tr>
<td>ComAround Knowledge</td>
<td>Knowledge Management Software</td>
<td>8.9</td>
<td>By quote</td>
<td>100%</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>Salesforce Knowledge</td>
<td>Knowledge Management Software</td>
<td>8.8</td>
<td>$75</td>
<td>100%</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>diigo</td>
<td>Knowledge Management Software</td>
<td>8.8</td>
<td>$10</td>
<td>-</td>
<td>0 user reviews</td>
</tr>
<tr>
<td>Astute Knowledge</td>
<td>Knowledge Management Software</td>
<td>8.7</td>
<td>By quote</td>
<td>92%</td>
<td>0 user reviews</td>
</tr>
</tbody>
</table>