

# Growing Knowledge

*Making sense of lessons learned generated in projects*

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# AGENDA

Potential impact of PMI®'s new Version 6 of the *PMBOK® Guide* in this area



Status of Lessons Learned as we know them

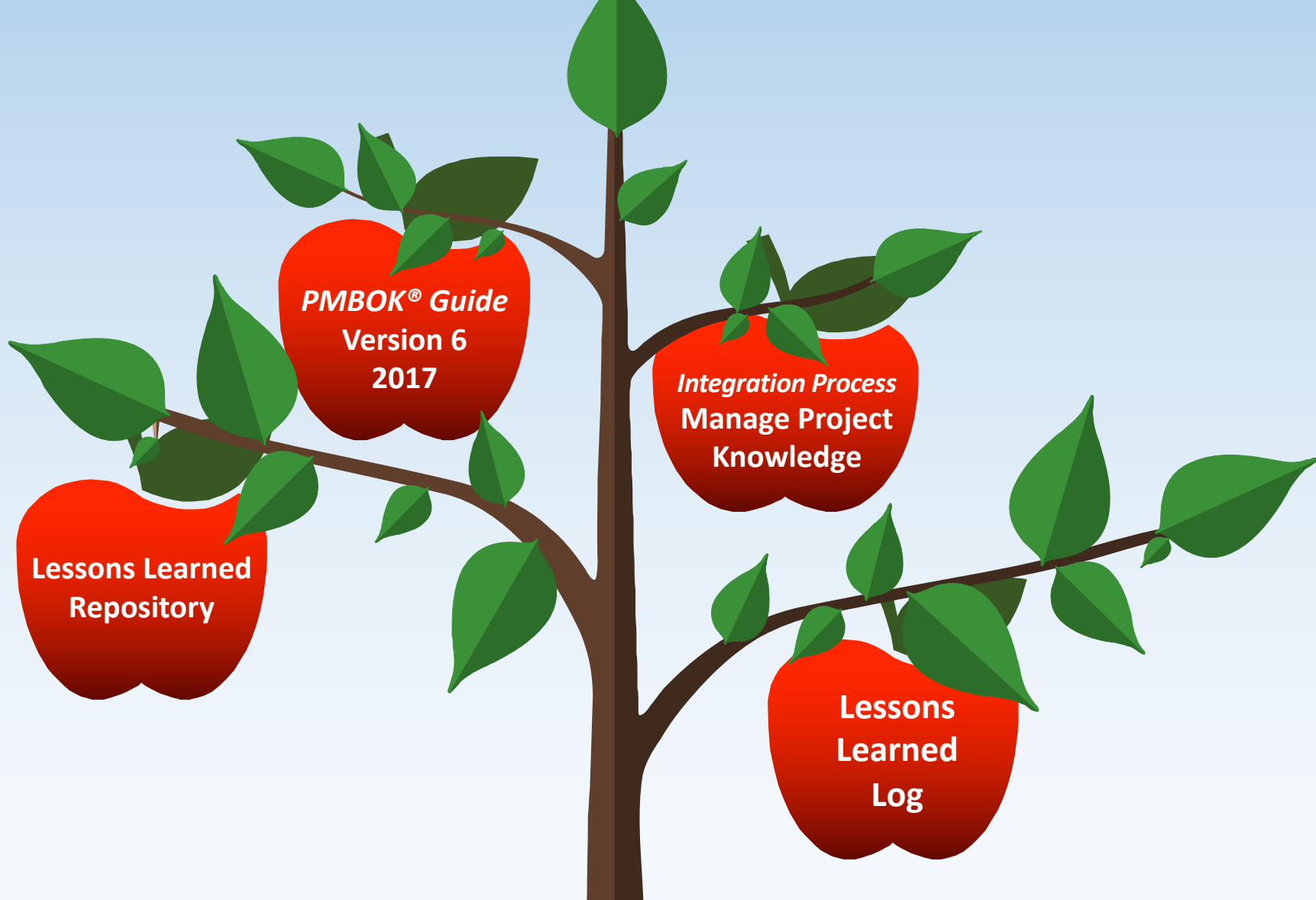


Lessons Learned: Defining What and How



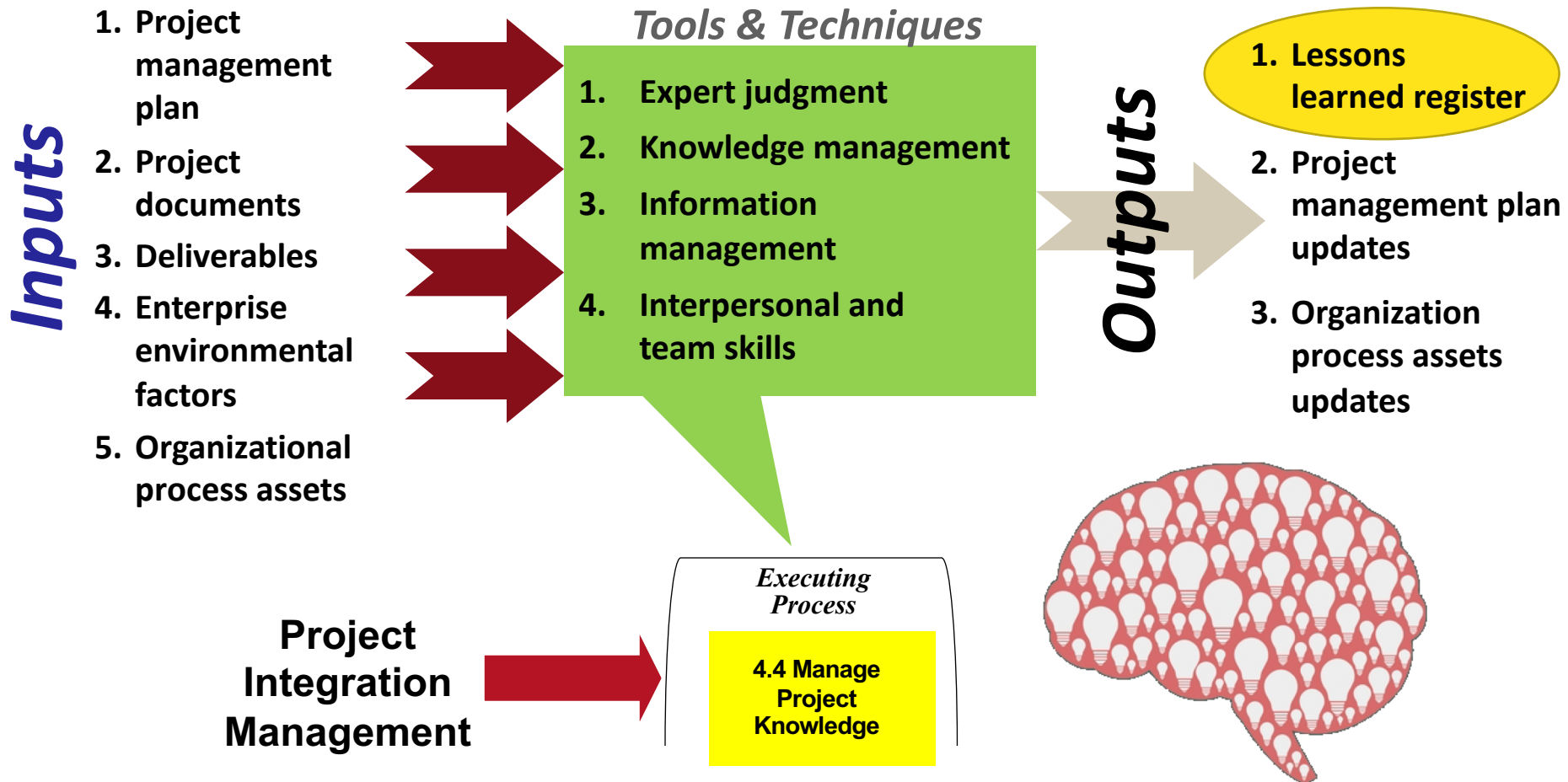
Conclusion





**What does PMI® propose for lessons learned out of the new Version 6?**

# Manage Project Knowledge





## Inputs

Project documents:  
Lessons learned register



Used as an input and updated as an output  
in many processes throughout the project

## Outputs

Project documents updates:  
Lessons learned register



## Organizational Process Assets

Historical Information /  
Lessons learned  
repository



At the end of the project or phase, the register is finalized  
to include final information on phase or project closure.  
The information is transferred to an organizational process  
asset called a lessons learned repository

# How do we do it now?

**One way:**



**We collect a whole bunch of data on our project when it ends, clean up the nasty stuff and publish to management.**

**We then store it somewhere  
Who knows where it ends up?**

**Another way:**



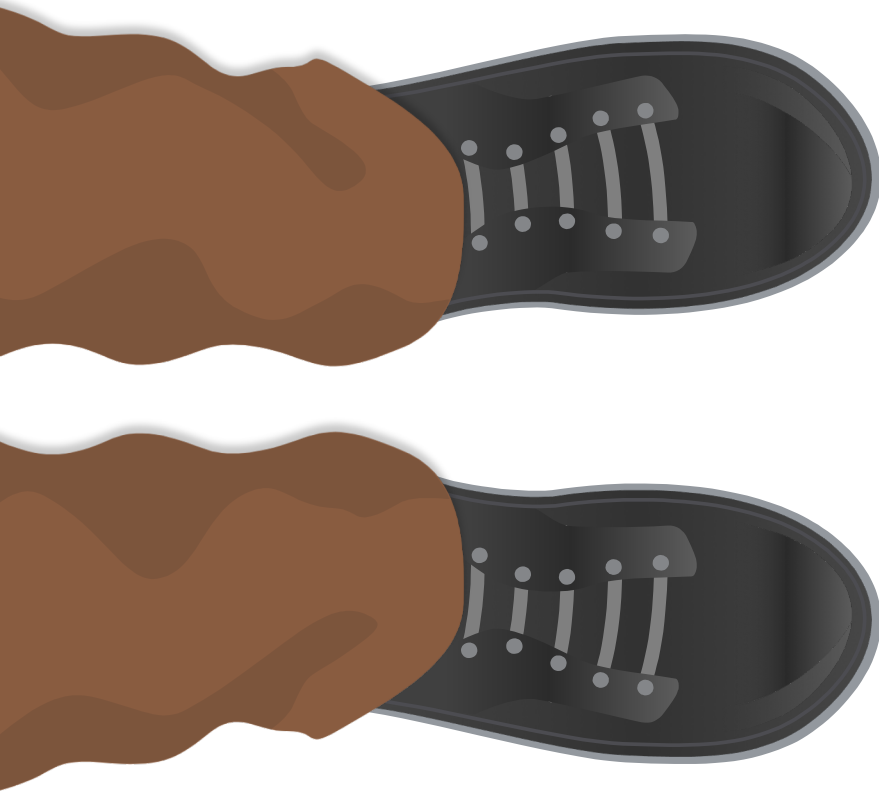
**We have a set iterative process with specific steps in order to collect, disseminate and utilize the lessons learned from our projects.**

**We have a lessons learned repository**



## How do you do it?

# What is the issue?

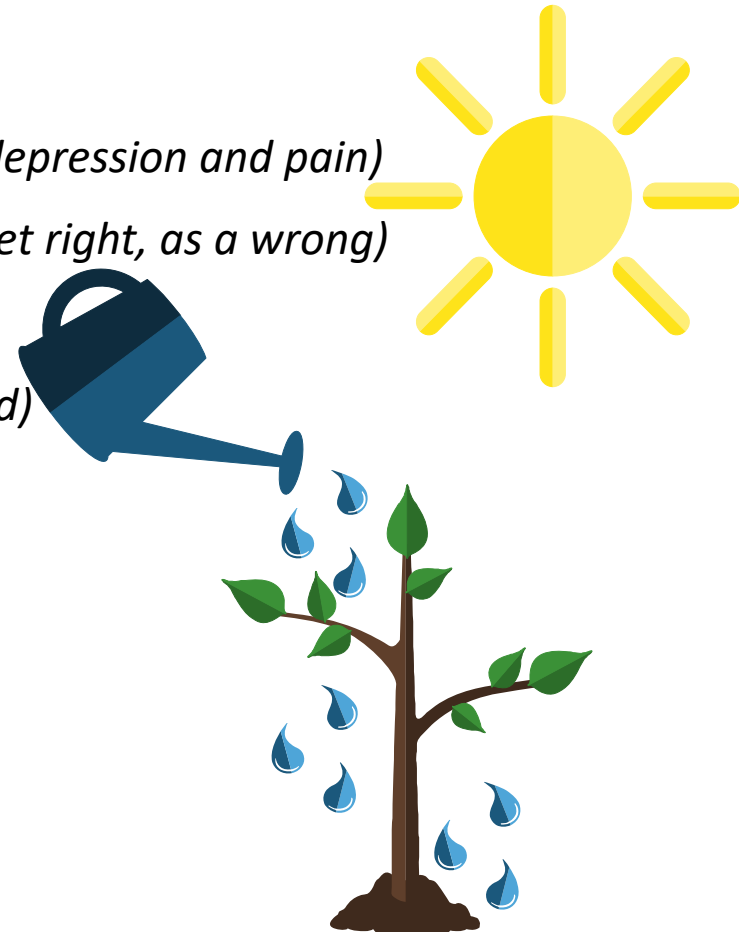


- Not every Organization has found a way. A large majority still don't have a **system** or see the **value**
- Most Stakeholders believe that it is a **waste of time**
- Focus is too often on trying to find a "**guilty**" party, someone to blame
- Biggest issue: Once done, **they disappear...**

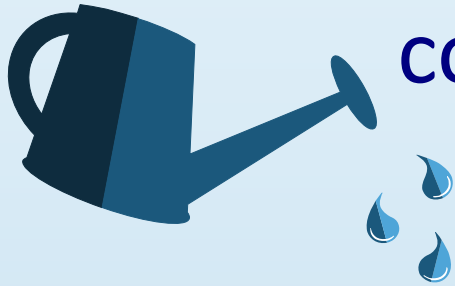
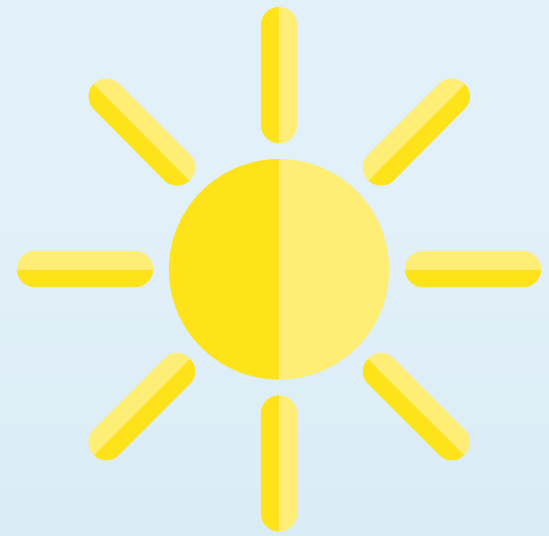
# Perception... all in terms

Lessons learned have been labeled in several ways by different people, groups and industries. Sometimes the name gives it a bad rap:

- **Postmortem** (*after death*)
- Postpartum (*after birth, associated with depression and pain*)
- Post engagement redress (PER) (*to set right, as a wrong*)
- After action review (AAR)
- C-GULL (*Cost Guard uniform lessons learned*)
- Debriefing
- Post implementation audit
- Post implementation review
- Project retrospectives

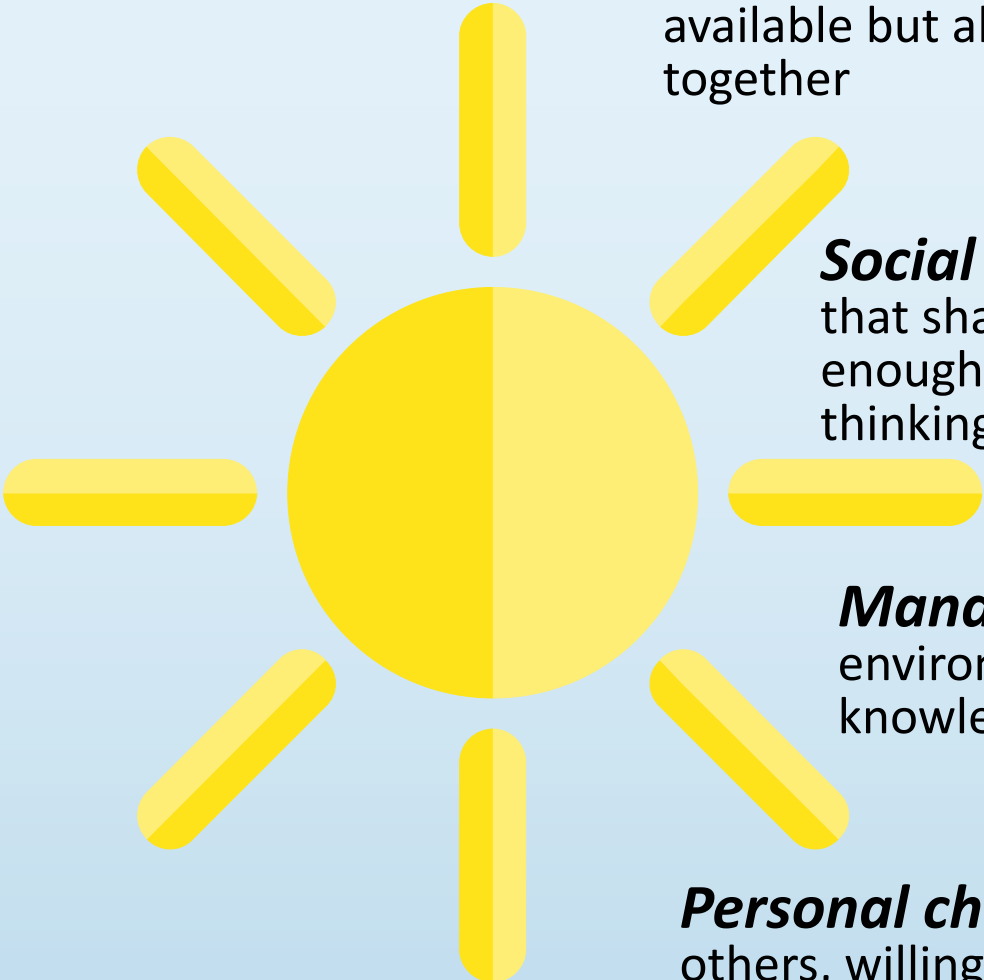


Knowledge is different from information and sharing it requires a different set of concepts and tools



***Six characteristics of knowledge distinguishing it from information:***

- Knowing is a human act
- Knowledge is the residue of thinking
- Knowledge is created in the present moment
- Knowledge belongs to communities
- Knowledge circulates through communities in many ways
- New knowledge is created at the boundaries of old



**Technical challenge** to design human and information systems that not only make information available but also help community members think together

**Social challenge** to develop communities that share knowledge and still maintain enough diversity of thought to encourage thinking rather than sophisticated copying

**Management challenge** to create an environment that truly values sharing knowledge

**Personal challenge** to be open to the ideas of others, willing to share ideas, and maintain a thirst for new knowledge

Four (4) Major Challenges can be identified

# Defining What and How

I have identified a process that seems to fit a good lessons learned experience:

- Understand / map your participating stakeholders (**PEOPLE**)
- Define, document and review the objectives and structure (**GOALS**)
- Undertake capture, research, analysis and organization of the performance data (**CAPTURE** and **ORGANIZE**)
- Choosing time and location that is appropriate (**LOCATION**)
- Provide feedback (**COMMUNICATE**)
- Find the best place to store the data (**STORE**)
- Apply consistently to new projects (**TRANSFER**)



**Let us have a look at each individual step of this process**

# First Step...

## *People*

This first step is crucial to the entire process. Know who is to participate and more importantly when they are expected to do so.

In a good lessons learned process, we gather as we go and we capture information upon our stakeholders exiting the project.

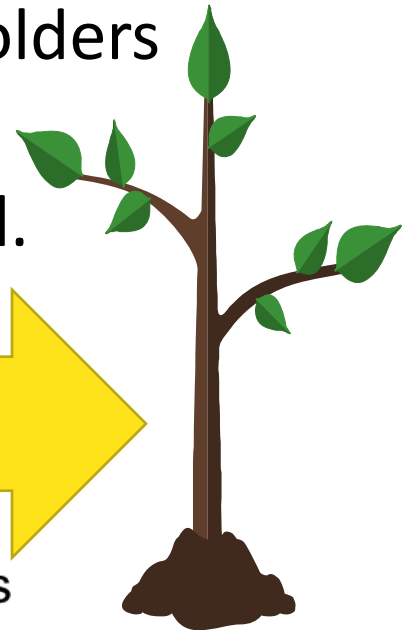
This makes the information recent and factual.



### **Project Life Cycle**

#### **The “on-off the bus” principle**

Knowing when you take on new stakeholders or stakeholders leave your project is key to success.





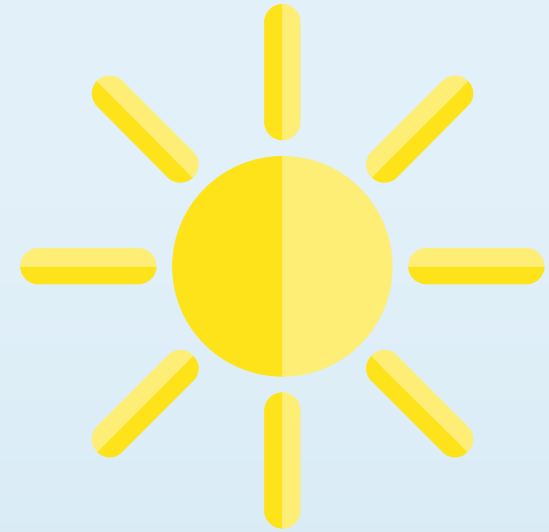
# Knowledge sharing requires everyone's commitment



# GOALS

Success will depend on:

- Accurate translation of data
- Accurate linkage of lessons learned to **objectives**
- Effective data management to enable the team to receive and manage the information
- Coordination between the stakeholders
- Communication of the objectives to all participants

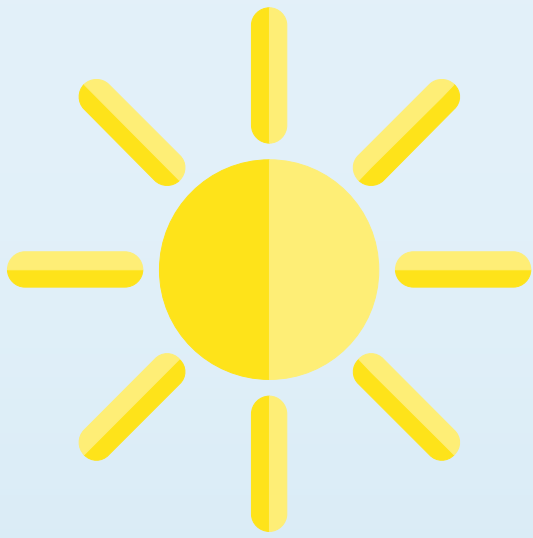


Several subjects should be addressed:

- Project performance (*planned vs actual*)
- Administrative performance
- Organizational structure
- Project and administrative teams
- Our approach used for project management



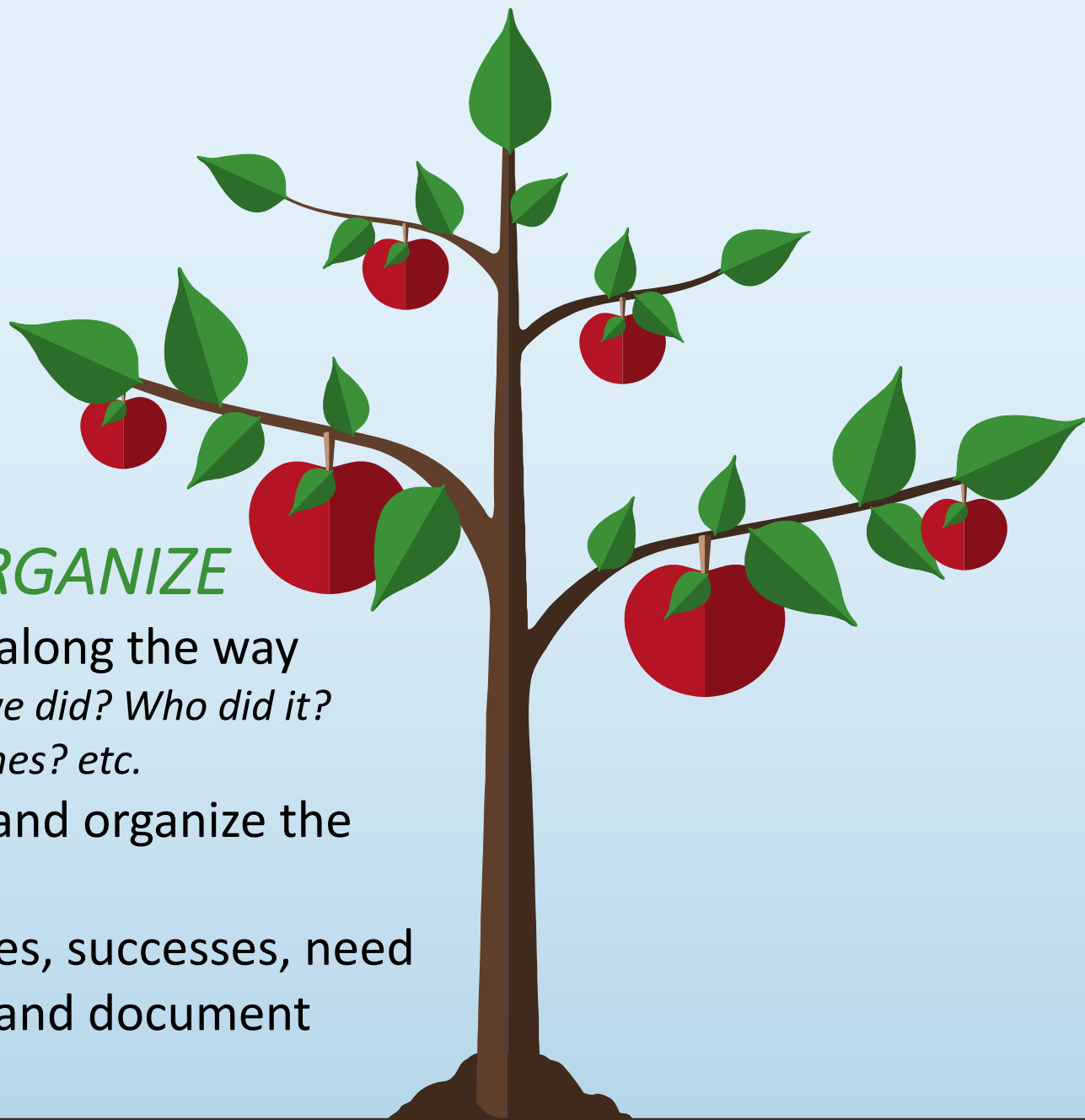
Second Step:  
*Define, document and review goals*



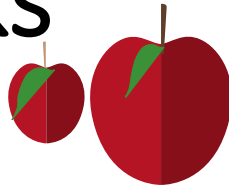
## Third Step:

### *CAPTURE and ORGANIZE*

- Collect effort data along the way  
*How did we do what we did? Who did it?  
What were the outcomes? etc.*
- Analyze, compare and organize the data
- Identify major issues, successes, need for improvements and document findings



# Tips and Tricks



For best results...

- Maintain a **lessons learned log** **THROUGHOUT** the life of the project, DO NOT WAIT at the end. If you cannot do this, at least capture lessons learned at every phase end
- Capture lessons learned **as close as possible to the learning opportunity** (*e.g. after an issue has been resolved, change in scope has occurred, or a risk had been mitigated*)
- Identify project management processes which can be improved as a result of lessons learned and make **plans for improvement**
- **Re-evaluate** lessons learned after some time has passed
- Use and experiment with **different ways** of gathering lessons learned. Not all methods will work all the time with all teams

# Fourth Step:

## Preparing yourself and your team

### *Location*

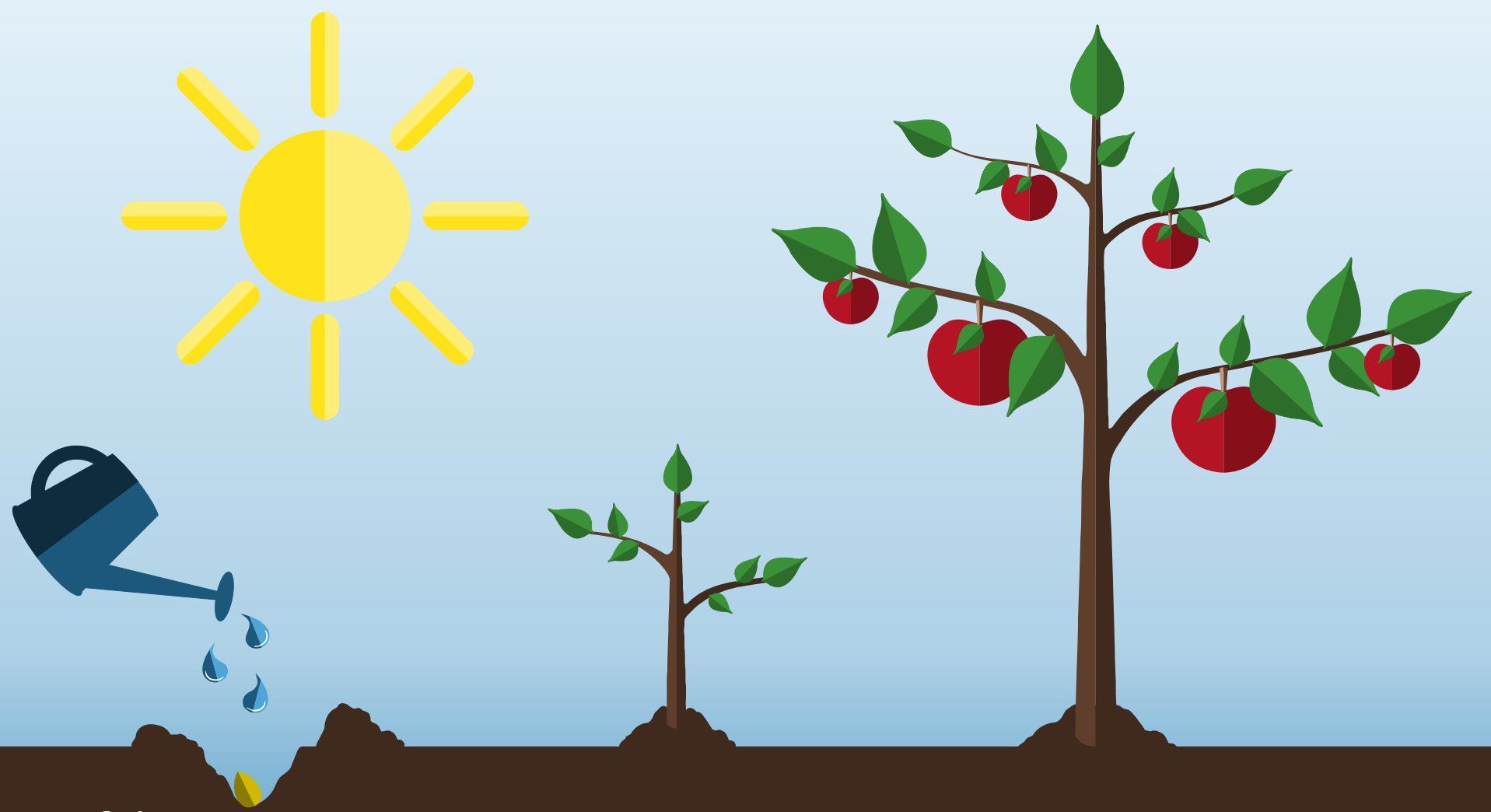
A location should be comfortable and isolated from distractions. You'll need:

- At least an hour, probably two
- Paper
- Sharpies
- Post It Notes
- Tape
- White board or dry erase boards

*Sugar and caffeine never hurts.  
Don't underestimate the power of donuts!*



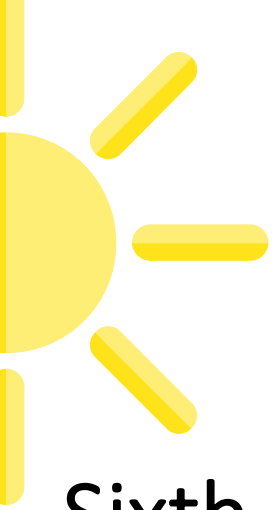
No  
electronic  
devices!



## Fifth Step:

### *Communicate*

- Compile the feedback, share findings and conclusions with stakeholders and organization



## Sixth Step:

### *STORE*

Ideally feedback (*and its supporting data*) gained in a lessons learned session should be accessible to the widest audience

- The issues arising from storage, retrieval and administration of lessons learned documentation is a major deterrent to stakeholder participation.
- The credibility of the process rests on the way results are handled. Production of a report to sit on an unknown shelf is not satisfactory or productive.





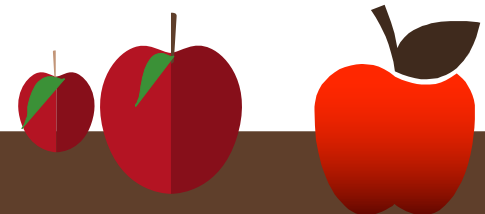
# Final Step:

## *TRANSFER*

Introduce lessons learned from past projects and transfer knowledge to future projects.

Good use of lessons learned on project and how a company adheres to the process by having the information flow back into its process improvement, risk management and new projects, is a sure sign of maturity.

Remember that your ability to more effectively manage a project will be greatly increased through the use of this invaluable resource.





# Supporting it all...



## Establish a knowledge sharing culture

- This sounds simple... but according to research this is much more difficult to do in a project team than in a permanent organizational unit. Pressures of time, conflicts of interest, and hierarchical project structures can limit knowledge sharing.
- PMs need to become mentors in learning and knowledge sharing for their projects.

## Establish and maintain knowledge levels

This is done in 3 distinct phases on projects:

- At the **onset of the project**, the PM will establish a set of skills and experience that will be needed on the team or available to it.
- **When the team is finalized**, the remaining knowledge gaps need to be filled by make project methodology and domain knowledge available to the team. Lessons learned logs and journals are key to this.
- Finally **when team members leave the project**, the PM will need to fill the knowledge gaps left behind. A process to bring replacements up to speed should be established.

# Supporting it all...

(continued)



## Create channels for knowledge flow

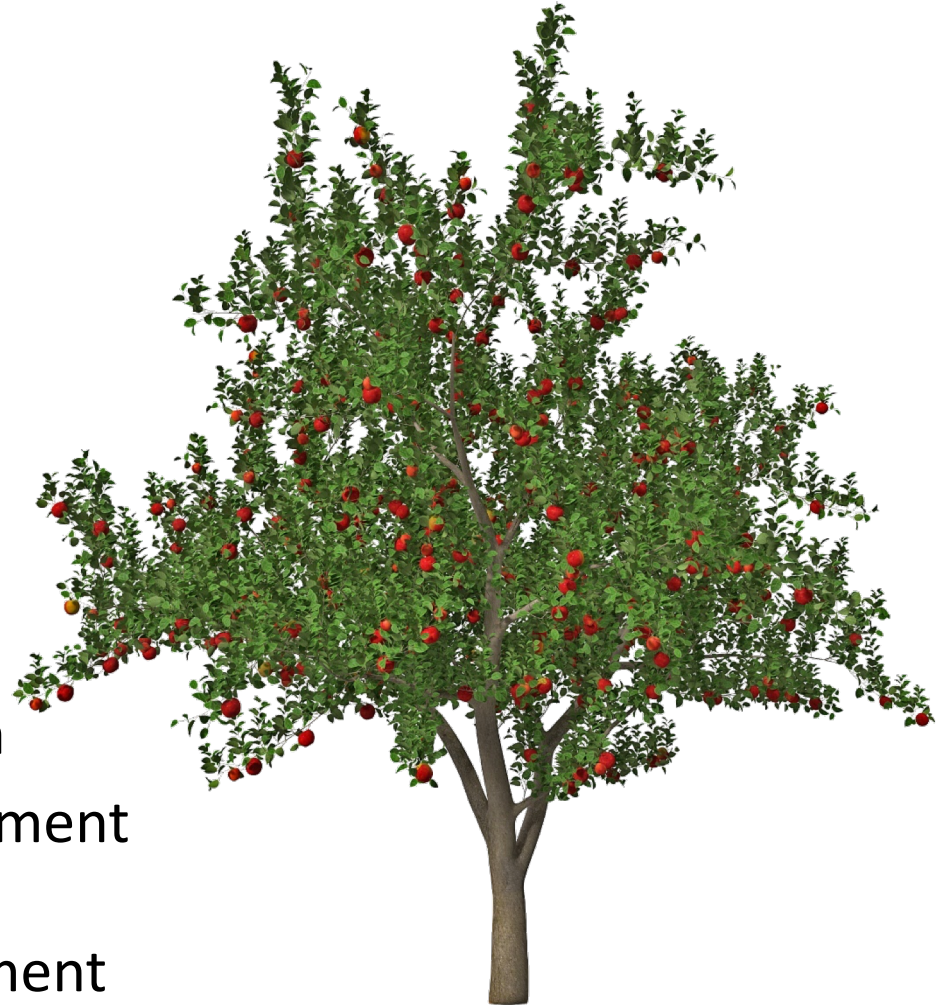
- The PM needs to establish channels through which knowledge can be shared within the project and knowledge can be brought in from the outside. Research shows that team members who have a “map” of where knowledge resides and have the ability to access that knowledge are more effective than those who rely on a more hierarchical or positional approach.
- The important point to creating knowledge channels is that they are interactive, reflective easy to activate and effective.

## Develop team memory

- One of the most important resources a team has is the contents of its collective memory.
- At the beginning of the project, lessons learned from similar projects should be gathered and discussed. During the project, as key decisions are made, team members need to be updated on the progress and outstanding problems.
- Creating lessons learned has two (2) purposes: reflection and progress.

# Good lessons learned are...

- Shared
- Safe
- Assist in the development of future processes
- Attended
- Seen as a good thing
- Part of every project
- Easily accessible
- A growth exercise for a team
- Tied to the benefits management process
- Fully sponsored by management



# Bad lessons learned are...



- Painful
- Misunderstood
- Never completed
- Never found
- In search of the “guilty”
- A blame game
- Not used for process improvement
- Not part of the project management process elaboration
- Done in secret
- Not shared
- Discarded

# Conclusion

Based on our discussion, I have highlighted below some of the key points to keep in mind to help for your next lessons learned session:

- If nothing else... **just do it** *(Yes Nike, does it too!)*
- PM know your **stakeholders**... all of them
- Learn to become a good lessons learned **facilitator**
- Start early, gather **as you go along**
- Develop ways to **gather, store and utilize** lessons learned
- Foster an environment that **supports knowledge transfer** without the feeling of punishment or retribution
- Lessons learned are the **collective memory** of your team



# Thank you!

This presentation will be provided to PMI-DHC in a PDF format so that members can access it at their leisure.

All that I ask is, that while sharing this information, you quote me or the work of my references.



Contact information

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Find me on **LinkedIn**



# Additional References

There are literally hundreds of project management related books on the market, most discuss lessons learned in a small or detailed manner. Here are some that I refer to frequently:

- Project retrospectives (Norman L. Kerth)
- Post-project reviews to gain effective lessons learned (Terry Williams)
- Project evaluation and lessons learned (Willis H. Thomas)
- *PMBOK® Guide* 6<sup>th</sup> Edition, 2017 (Project Management Institute, PMI®)

