Learning from Projects – Before, During and After

We know we need to learn – what stops us?

We know that we should be constantly learning, as individuals and as organisations, from every activity we undertake. Continuously building our skills and knowledge to improve our performance.

We know that we should be doing it, but somehow it doesn't happen. We don't organise things so that the next project benefits from our experience on the last project. We carry a lot of what we have learned as individuals in our heads, and don't necessarily pass it on to those it would help. And as we move from organisation to organisation and job to job, a lot of that experience is lost to those we used to work with.

Corporate amnesia is a serious problem, and one that is growing as dwell times in a specific role decrease, and more jobs that used to be permanent become part of the gig economy.

If we know that we should be doing it, why aren't we?

The main problem is the perceived lack of value, and the pressure of time. At the start of a project we are keen to get on with it. Dive in and get our hands dirty. As the project progresses, we never have enough time to explore and implement all our ideas. And at the end of the project everyone is celebrating whatever success they have had in this project, and looking forward to starting the next. There never seems to be a convenient time to capture the learning, and it becomes an additional task that nobody really wants to take responsibility for. It adds no value to the people who were in the project, and the people to whom it will add value don't know about it.

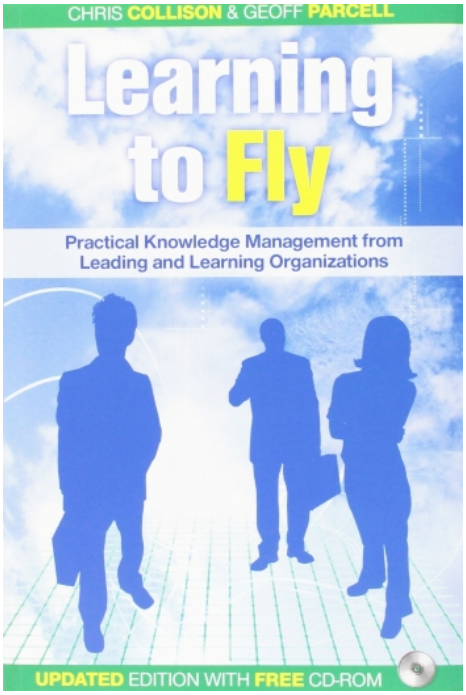
There are people with a 'completer-finisher' personality [1] who hate to leave any loose ends, but in my experience, they are relatively rare, particularly in innovation teams.

What we need is a quick and simple process for capturing learning that can be embedded in project planning and operations. It should not interfere with the flow of a project, and ideally add value to the individuals in the team.

A simple solution

Fortunately, an excellent set of tools has been developed over the years which even those who hate dealing with 'lessons learned' can tolerate.

[1] http://www.belbin.com/about/belbin-team-roles/



The tools were developed by BP for their specific situation. I was introduced to them by Chris Collison and Geoff Parcell, the leading practitioners within BP at the time. Their methods, along with many other tools for organisational knowledge management are described in their book "Learning to Fly"[2]. The notes that follow are based on the book and my own experiences using the tools.

BP is a global company that works through projects. Completed projects are constantly being wrapped up, and new ones started. As people move from project to project knowledge is constantly being exchanged, but is that enough? How does a project team make sure that it is making effective use of BP's experience?

BP has developed a simple and easy-to-use set of processes that make sure that the organisation learns constantly. They call it learning before, during and after. Although most of the projects in BP are complex engineering tasks, the same sort of approach has been exploited by many other organisations and businesses, from manufacturing to professional services.

There are three basic processes:

- Learning before – the Peer Assist

  Making sure the project team takes full advantage of existing knowledge when starting a project. Using all available experience. Not reinventing the wheel.

- Learning during – the After Action Review

  Helping the team to solve problems and improve performance during the project. Embedding new learning in the organisational network.

- Learning after – the Project Retrospect

  Capturing the key lessons from a project and passing them on to future teams.

Each tool can be used very quickly and simply, or can go into greater depth if there is additional value and sufficient time and resource. The most useful feature is that they can be embedded in the routine operation of a project with very low overhead. They can just be part of routine meetings, reducing the pressure from team members to ignore these steps and to get on with the exciting parts of the project.

Although the tools are different for the different stages of a project, they share some common questions:

[2] "Learning to Fly: practical knowledge management from leading and learning organizations – 2nd Ed", Chris Collison and Geoff Parcell, Capstone, 2004, ISBN 978-1-84112-509-1

- What did we set out to do?
- What actually happened?
- What do we learn from any differences?
- What would we do differently next time?

Learning before the project starts – the Peer Assist

The Peer Assist process is used at the beginning of all significant projects. It brings together a group of people from outside the core team in a meeting to help the core team set up the project. The purpose is to make sure that all the relevant experience in the organisation is mobilised to help a team get pointed in the right direction, and then get off to a good start.

Because you are bringing in people outside the team to help start the project, you need to do some preparatory work.

- Get a clear definition of the purpose of the project and what outcomes are required. You must be able to brief those assisting you clearly and concisely.
- Check that the challenge you face has not been solved already by people you know. If you can get what you need from a report, or a conversation with one person, you don't need a Peer Assist.

Having decided you are going to ask for a Peer Assist.

- Set up the meeting early enough to be useful. You want to be able to incorporate what you discover into your plan. After the project is up and running is really too late.
- Invite people who have the right skills and experience to contribute to the project. You don't want to have only people who are well versed in the problem and the common approaches; that can lead to groupthink. You don't want only people who know nothing about the problem under discussion; they may not be able to add any value. You need a mixture that will lead to an interesting conversation.
- The home team, who own the problem, describe the project and what they have found out so far to the visitors.
- The visitors ask questions for clarification and to probe things that are surprising, interesting or seem to be missing.
- The visitors then contribute their own experience, learning and ideas. They should suggest things that need to be done, and perhaps activities that should be stopped. The core team listens.
- The core team then decides what they are going to do in the project, thanks the visitors and gets on with it.

For a Peer Assist to work, everyone needs to keep focused on the objective. The home team must deliver the project, so they are the ones to take the final decisions about the approach. But they have invited the visitors to help so they should listen to them, not argue every comment. The visitors are not there to criticise, they are there to help. They should offer their knowledge freely, but it is up to the home team whether they use it.

Often you will be asking the visitors about similar projects that they were involved in. So, the standard questions are a good start. What was your approach? Did it work? What was unexpected or different? And what would you suggest this team focus on, do or not do?

Collinson and Parcell recommend that the peer assist lasts more than one day with time for the group to socialise to increase trust and improve knowledge transfer. They also recommend a facilitator. For large and complex projects this is good advice, but in keeping with the aim of keeping it simple, fast and low cost, you can make it a much faster process and be your own facilitator.

I have seen successful Peer Assists done in a couple of hours.

An advertising company I worked with kept a database of all campaigns it had worked on and who was involved. This allowed them to quickly identify people involved in campaigns for the same or similar clients, geographies, products, target market sectors and campaign type. A teleconference with a handful of people from different offices quickly gave them access to the best experience in the company.

Learning during the project

The after action review (AAR) is designed for team learning. It was originally developed by the US Army[3], and has found its way into many other types of organisation.[4]

AARs are used during a project to help the team improve, and they are private to the team. You conduct an AAR after every significant activity in the project. It might be after a key meeting, a test market, testing a prototype, or whatever the team thinks is important enough.

The process is very simple. The team gets together and asks four questions:

- What did we set out to do?
- What actually happened?
- What where the differences and why did they happen?
- What do we learn from this and what will we do differently next time?

AARs should be carried out immediately after the event so that everything is fresh in the team's minds. They can be built into team meetings as a routine review, and should not take more than 15 minutes maximum. Most of the ones I have taken part in lasted about 5 minutes.

AARs are not about blame or finger pointing, they are about problem solving and improving the performance of the team. They are also about hearing from everyone in an honest and open way. To quote the US Army guide:

"An AAR is not a critique. No one, regardless of rank, position, or strength of personality, has all of the information or answers. After-action reviews maximize training benefits by allowing soldiers, regardless of rank, to learn from each other."

You can summarise that point as – "everyone has a voice and everyone will be listened to".

[3] http://www.au.af.mil/au/awc/awcgate/army/tc_25-20/tc25-20.pdf - the US Army manual on After Action Reviews

[4] See www.wildfirelessons.net a repository of learning from disaster teams that makes extensive use of AARs.

You can use a facilitator for larger and more complex team AAR's, but for most of the projects I have worked on it wasn't necessary, and a team member can do the job effectively. The team leader is often the worst person to conduct the AAR as rank and hierarchy rear their ugly heads making it harder to be honest.

The easiest way to record an AAR is to use a single flipchart page and divide it into quarters; one for each question. If the team is big, or the action being reviewed very complicated, you can use four flipchart sheets.

The goal is not to do an exhaustive analysis, but to capture the team's immediate thoughts, focus on the key issues, record some key points and actions, and get on with the project.

The AAR should not get in the way of the project. It should visibly help the project to move faster and more effectively. If it is not adding value to the team, they will not take part.

Learning at the end of the project

A Project Retrospect is a way of wrapping up a completed project and capturing key learning.

It is like a larger scale After Action Review.

The key questions are now:

- What were the objectives of the project?
- What did we actually deliver?
- What went well – and why?
- What did not go so well – and why?
- What are the key messages that we would pass on to the next team to tackle something similar? What is our learning for the future?

In asking what went well and what went not so well, you can use the total quality technique of asking why five times to get down to root causes.

The Project Retrospect needs to be put together in a meeting. It is important that the contributors are face-to-face if at all possible. The dynamic of a physical meeting helps to gather the greatest amount of learning in the shortest possible time. As far as possible the meeting should include everyone who was involved in the project. A facilitator is very useful.

The output is a *short* document that covers:

- Guidelines for the future;
- Evidence from the history of the project that illustrates and explains the guidelines;

- Names and contact details of people involved in the project who can be contacted for further information;
- Any critical documents from the project.

The key word is short. Most project reports try to cover the complete history of the project and every action and decision. You might need to do that to meet various compliance needs, but it is unlikely to help another project team to be more successful. This is your chance to pass on some useful messages to future teams. What will those messages be?

Project Retrospects can be large and complex activities, but in my experience a couple of hours and a couple of pages of key messages with supporting information gives the best value for the time invested, and can be incorporated without strain into project wrap-up sessions.

The Project Retrospect is stored with other project documentation in a place where people can find it. It sounds obvious, but it is surprising how often organisations that have made real efforts to capture learning from projects cannot find what they captured a year or two later.

Pitfalls and traps

Although Peer Assists, After Action Reviews and Project Retrospects are excellent tools for learning before, during and after the project, there are still plenty of ways it can go badly wrong. Here are some of the main pitfalls and traps:

- **Poor timing**
  One of the commonest problems is getting the timing wrong.

  A Peer Assist is not there to confirm your view of the project, but to help you develop your ideas for the project. It is common to wait to call a Peer Assist, until you have a clear picture in your mind as to how the project will run. That may look like preparing yourself by getting your own thoughts in order before asking for help, but too much pre-planning makes it very difficult for others to help you.

  Call a Peer Assist when you have a clear problem statement, but before you have developed a project plan.

  Similarly, with an After Action Review, this needs to be held as soon after the action you are reviewing as possible. You need to get people while everything is still fresh in their mind, and before they have mentally moved onto the next action.

  If you delay holding a Project Retrospect, team members will disperse and move on to the next activity, and you will lose the immediate memory of what actually happened.

  Starting a learning activity too late significantly reduces its value.

- **Hierarchy**
  Organisational hierarchy can be a significant barrier to learning. The US Army has a phrase for their After Action Reviews; “rank gets left at the door”. The core of any of

these learning activities is honesty and openness. If the participants feel, for any reason, that they cannot say what they think, learning will be compromised or impossible.

This can be difficult for managers used to invoking the hierarchy to make progress. I once saw a senior manager bring a Project Retrospect to a complete standstill without saying a word. Just through body language they made it clear that there were certain topics they did not want to discuss, and certain messages they did not want to receive. Nobody would say anything that might be controversial, and the facilitator had to ask the senior manager to leave so that the meeting could continue.

- **Blame**
  Learning activities must not be about apportioning blame or punishing those considered to have failed. A Project Retrospect is not a court of enquiry.

  Unfortunately, if the project has not gone well, human nature seems to drive us to deciding who was at fault, rather than identifying factually what if anything went wrong, and what changes could be made to avoid that problem in the future.

  If participants fear that the process could be bad for them, then honesty and openness go out of the window.

- **Not listening**
  In any group discussion, the more dominant voices can hog the conversation. The purpose of these activities is to learn from everyone, and that means listening to everyone.

  If you are the leader of facilitator, you must take time to make sure that everyone gets a chance to speak. The reticent may have the best insights to contribute.

  It may be common sense, but it is surprising how often quieter people are ignored in the excitement of intellectual debate.

- **Not face-to-face**
  This is a slightly tricky one, as in our highly mobile world we may be frequently working in remote or distributed teams. But the best learning is done face-to-face.

  There is something about the social connection and non-verbal communication that enriches these group learning activities. The immediacy of a real conversation in which we can springboard off each other's comments helps to quickly and efficiently reach a consensus on the key points.

  At a pinch, videoconferencing can be used if the group know each other well, but don't try to do this after the event by email or trying to co-author a report in the cloud.