

Implementing Knowledge Management in BNFL - a Case Study

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In November 2002, BNFL Environmental Services'¹ executive signed off a two year programme of work to implement knowledge management within the business group. This was driven by the need for the business to be equipped to meet the challenges of the forthcoming commercialisation of the UK civil nuclear sector.

From the outset the vision for knowledge management was to develop a framework that was scaleable, repeatable and aligned with the business strategy, ensuring that knowledge management activities would be robust to internal and external changes.

It was also decided that knowledge management should be owned by the business, i.e. there would be no centralised knowledge management function. This ensures that the culture change is achieved and that best use is made of the knowledge within the business.

The knowledge management framework is based around the good practice that BP developed, documented in "Learning to Fly"². This approach can be best understood with reference to figures 1 and 2. Figure 1 shows the knowledge management framework when seen from the "business perspective". Whenever a task is undertaken there is an opportunity to learn before, during and after. This learning can be facilitated through the use of Peer Assists, After Action Reviews and Retrospects. The Knowledge Facilitators are responsible for ensuring that learning is applied to the right project at the right time and for the right reasons.

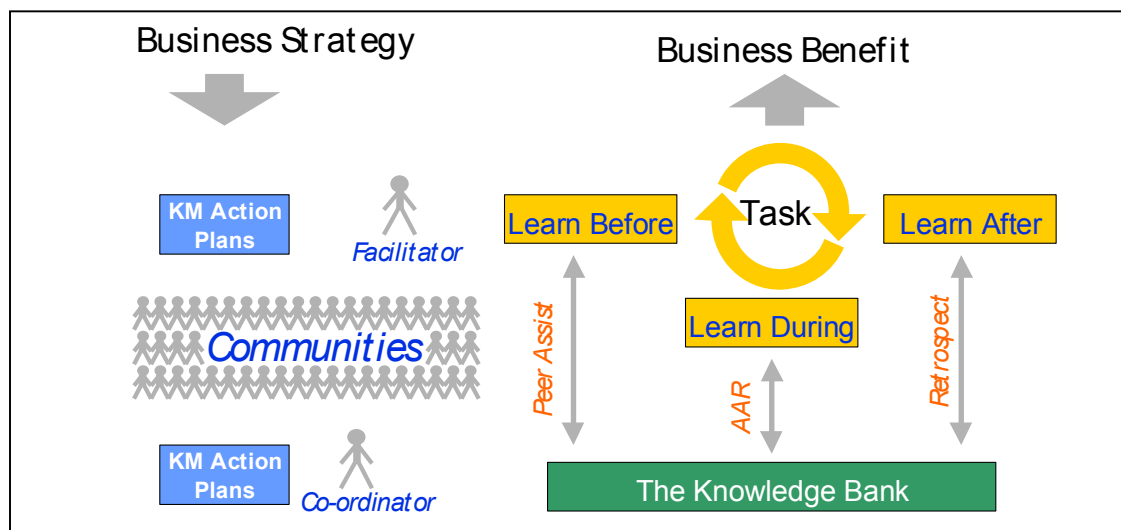


Figure 1

¹ BNFL Environmental Services is the waste management and decommissioning business within what used to be British Nuclear Fuels Ltd. (BNFL). BNFL went through significant reorganisation in 2004 what used to be BNFL Environmental Services is predominantly part of British Nuclear Group Project Services.

² Collison, Parcell, pub. Capstone 2001

Learning can be stored, retrieved and developed within the knowledge bank. One of the key features of the knowledge bank is that every area of it is owned by a Co-ordinator. The Co-ordinator is responsible for managing the knowledge through the lifecycle illustrated in figure 2. Both the Facilitators and Co-ordinators work to "KM Action Plans" which ensure the knowledge management activities focus on key areas relevant to business strategy.

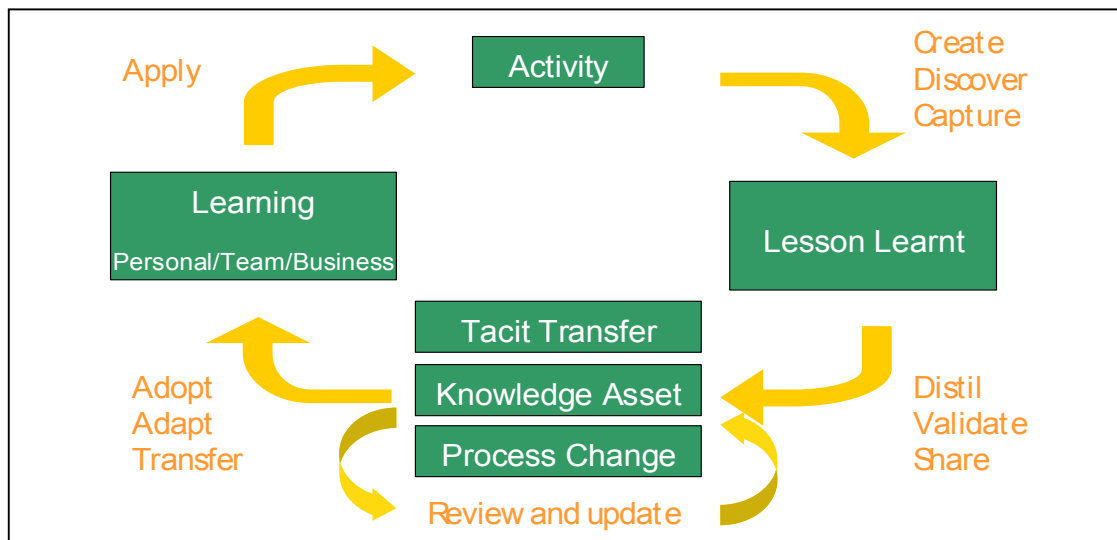


Figure 2

The knowledge management framework was first implemented around the Nuclear Waste Management capability. It took nine months to implement the framework, the key lessons learnt were:

- For business processes that are not well defined or are likely to change don't spend valuable time carrying out knowledge mapping exercises up front. The Nuclear Waste Management capability was not a well defined business process; each site and each waste stream had slightly different requirements and issues.
- Implementation needs to constantly refer to the knowledge lifecycle to ensure that knowledge is captured, developed and reapplied, Figure 2. We initially found that capturing learning was easy, however getting the business to apply it requires enthusiastic people, with clearly defined roles.
- Knowledge management is rarely a high priority for individuals and projects, you have to work out ways of implementing by fitting in with the daily work that must be carried out - do not convince yourself that people will be able to find the time if it is obvious that they are too busy
- Getting the right support is key - implementing knowledge management within BNFL requires the business to change the way it thinks and works, you need to get people at the highest level to give permission and provide the leadership and drive
- Having a robust knowledge management framework based on good practice, and making sure that you continually improve it means you can roll out into other business areas more quickly and easily over time.

Has it been worth it?

Over the past 18 months BNFL Environmental Services has gone from a position where knowledge management was at best ad-hoc and ill-defined and at worst non-existent. For Nuclear Waste Management knowledge management is now being pushed as one of the things that every engineer should be aware of, make use of and get involved in.

The benefits are starting to be realised. We have learnt many lessons on implementing a business change programme and we have managed to achieve our vision of a scaleable, repeatable framework aligned with business strategy.

The challenge now is to optimise ongoing management and driving the organisational and cultural change. This is a significant challenge, but one we are confident we can meet based on our experience to date and the sound foundation we have built.