Knowledge management is more than simply learning lessons

Lessons learned are explicit knowledge. Explicit knowledge can be readily articulated, codified, stored, accessed and transmitted to others. The process of transforming the 'lessons' recorded by a project team into explicit knowledge requires:

- The lesson to be recorded by the team. Ideally this is a contemporaneous process designed to capture current experiences and avoid retrospective bias.
- The data contained in the lesson to be validated and groomed by subject matter experts to ensure it is viable and accurate, to create useable information.
- The information then has to be codified against an understood taxonomy and stored in a retrieval system with appropriate cross referencing and indexing before it becomes usable.

This process is time consuming and difficult, particularly given the lack of a defined taxonomy of project management terms; for example, terms such as PERT are used and misused in a variety of ways[1].

Assuming all of the above is done well by an organisation all they will have is a knowledge repository, a component of the 'Organizational Knowledge Repositories' described in the *PMBOK® Guide* 6th Edition at 2.3.2, that **may** be used. None of the information has been transferred to a person who needs to know; and if that person does no know they need to know they are unlikely to look or learn!

"Those who don't study history are doomed to repeat it. Yet those who *do* study history are doomed to stand by helplessly while everyone else repeats it."
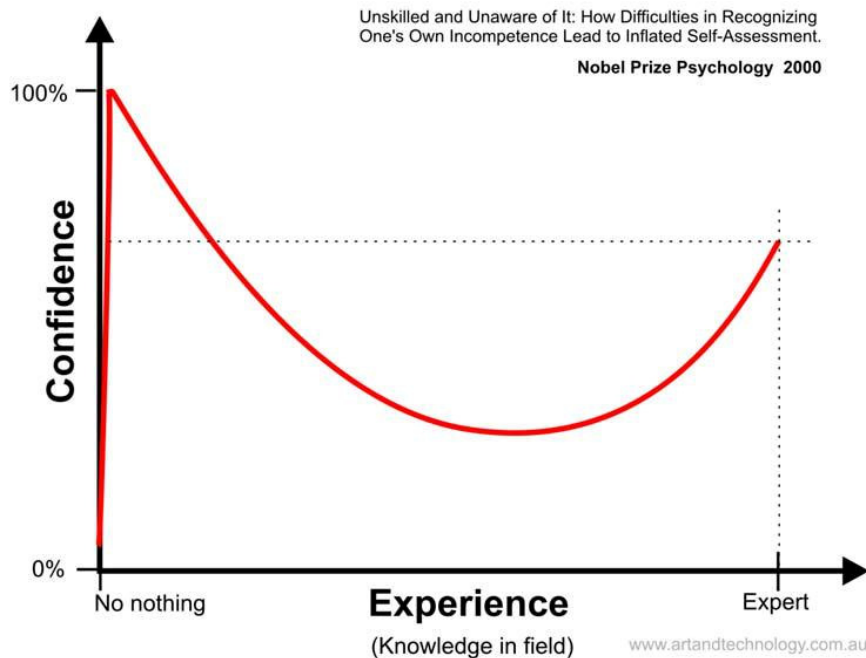
Organisations that collect lessons learned know that many lessons repeat from project to project. In the first instance there was new knowledge discovered (at least in the context of the organisation); each subsequent rediscovery of the knowledge (ie, the same or similar errors were repeated on later projects) indicates a failure in knowledge transfer.

Unfortunately, unskilled human beings are very good at overestimating their knowledge! In modern times this is referred to as the *Dunning–Kruger effect*; a cognitive bias where unskilled individuals suffer from illusory superiority, mistakenly rating their ability much higher than is accurate. Conversely, experts tend to underplay their expertise.

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[1]   For more on the **misuse of PERT** see:
https://www.mosaicprojects.com.au/PDF_Papers/P173_misuse-terms-gantt-PERT.pdf

Dunning-Kruger Effect

Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessment.

Nobel Prize Psychology 2000

100%

Confidence

0%

No nothing

Experience

(Knowledge in field)

Expert

www.artandtechnology.com.au

The Dunning–Kruger studies reinforce age old perceptions. Charles Darwin is quoted as saying: *"Ignorance more frequently begets confidence than does knowledge".* An even older Arabic proverb makes this even clearer:

> *He that knows not, and knows not that he knows not is a fool. Shun him*
> *He that knows not, and knows that he knows not is a pupil. Teach him.*
> *He that knows, and knows not that he knows is asleep. Wake him.*
> *He that knows, and knows that he knows is a teacher. Follow him.*

This ancient proverb neatly describes the learning journey[2]:

1. Don't know you don't know (ignorance is bliss)

2. Know you don't know (seeking knowledge)

3. Know that you know (marginally competent practitioner)

4. Don't know that you know (tacit expertise)

The learning journey needs to be understood and supported for an organisation to manage its knowledge and requires explicit understanding of both of yourself and the 'world' in which you are operating. The simple map below is also complicated by four additional factors:

- **Personal bias and prejudice**[3] (we are all biased and have preferences).

- **Errors in existing knowledge** - what you *know* to be correct is actually wrong.

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[2]   Based on *The four stages of competence* developed at Gordon Training International by its employee Noel Burch in the 1970s.

[3]   For more on **the effects of bias** see: https://www.mosaicprojects.com.au/WhitePapers/WP1069_Bias.pdf

- **Taboos** that forbid or prevent the seeking of specific new knowledge. Things you are not allowed to know. Many taboos are socially desirable and reflect ethical standards but others can be very limiting if the new knowledge contradicts current orthodoxy.

- **Denial** where seeking or accepting new knowledge is too painful to be contemplated; frequently aligned to deeply held beliefs.
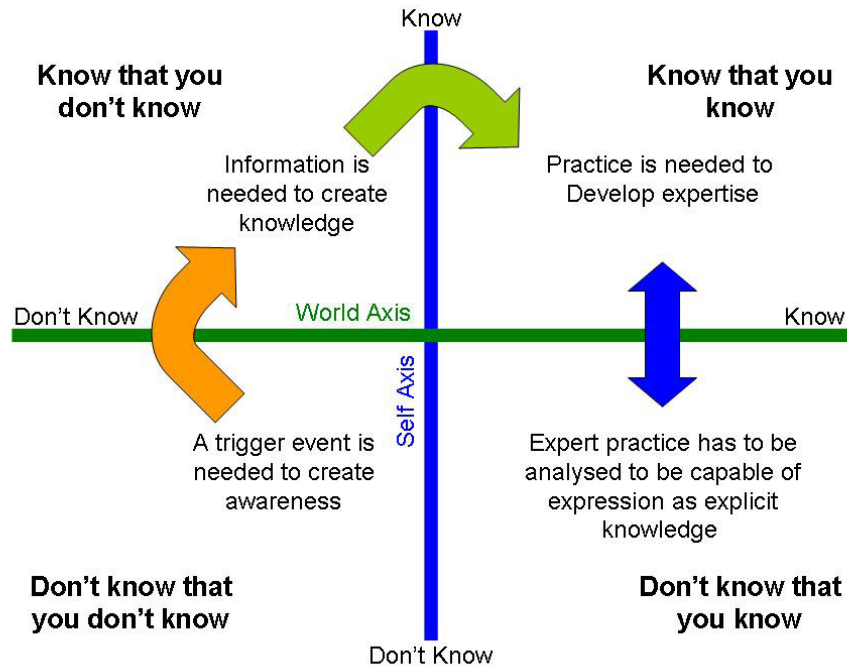
In addition, knowledge gained in a *'different world'* can easily cause problems in changed circumstances, particularly if you are unaware of the differences between the *'old world'* the knowledge was formulated in and the *'new world'* you are about to apply it in - your skills and knowledge may not be as relevant as you think (but you don't know this...).

Effective knowledge management requires three factors:

1. The availability of usable information.

2. Ways to trigger learning activity before problems occur. This may be as simple as a social media platform attached to the KM system designed to enable conversation about the content and generate debate. 'Real learning' is a social process and needs coaching, advice and debate to reinforce the learning process.

3. Ways to ensure tacit expertise is available to know what knowledge is applicable, and what knowledge needs to be adapted for use in the current situation (ie, in the *'new world'*).

Without the last two elements organisations are left with burgeoning lessons learned databases and hundreds of end-of-project reports but their people have no idea what to do differently to improve performance[4].

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[4] For more on **knowledge management see 'Data to Wisdom'**:
https://mosaicprojects.com.au/Mag_Articles/SA1054_Data_to_Wisdom.pdf

The problem is the tacit knowledge required to recognise the need and adapt existing knowledge to the current *'new world'* situation resides in peoples' minds, is contextual, and as a consequence is difficult to transfer to another person by means of writing it down or simply verbalising it. Improving organisational performance needs personal interaction:

- First subject matter experts need help to translate their tacit 'know how' gathered over years into usable explicit knowledge; this is very often a difficult process - the experts literally don't know all of the factors they use in formulating a course of action; much of their intuitive processing is subconscious.

- Second, less expert people need a friendly advisor oversighting their work to provide effective early warning of impending issues. Confucius is quoted as saying: "*By three methods we may learn wisdom: First, by reflection, which is noblest; second, by imitation, which is easiest; and third by experience, which is the bitterest.*" But imitation needs a helping hand…… the less experienced need to be made aware of the fact that they need to learn something new. 'Trigger events' don't have to be painful if the right advice is heeded at the right time.

- Third, learning is rarely accomplished simply by reading a 'lesson learned'. Access to effective coaching and mentoring is important to ensure the full richness of the lesson is passed on and the learning is adapted to the circumstances of the 'new world' in which it is to be applied. Every project is unique and consequently every 'lesson learned' will need to be nuanced or adapted to work optimally in the new situation. In addition, some aspects of 'knowing' can only be learned by doing. This requires trust and encouraging people through relationships and networks so they will share knowledge and help each other learn.

The steps from knowledge to experience ('joining the dots'), to creatively applying the knowledge to create something new cannot happen in a vacuum. Consistent performance needs an organisation that embraces and actively supports the social aspects of knowledge development and creativity:
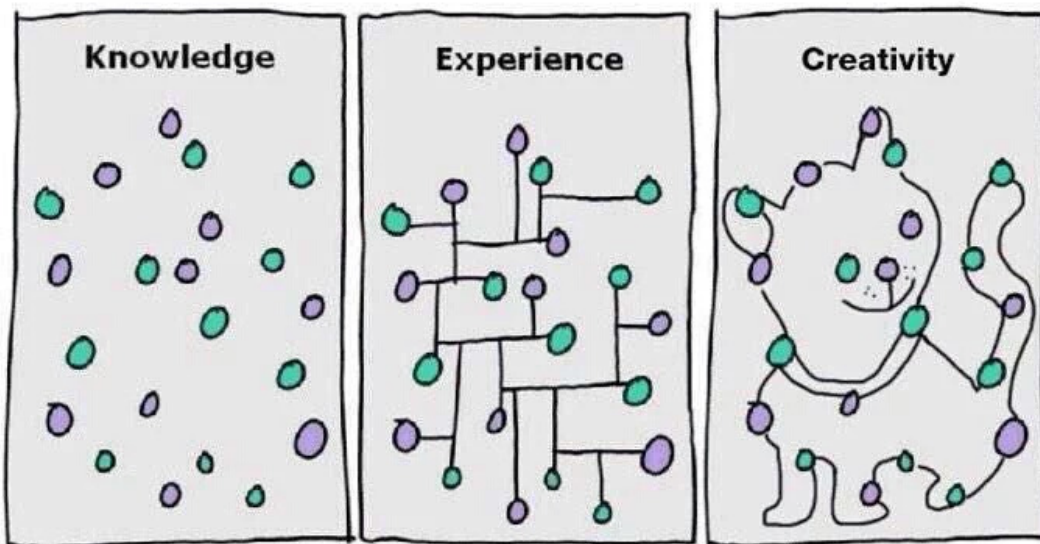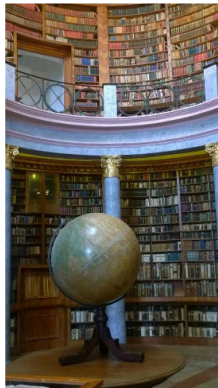

Far too many organisations believe knowledge management is an exercise in capturing and disseminating lessons learned; ignore personal know-how, experience and insights; and consequently, fail to develop the social framework needed to allow the full richness of knowledge to be available to their people.

To manage knowledge effectively, organisations need to redesign the way they work. Lean teams focused on a single project, temporary contractors, and competitive assessments; all actively work against the social

interaction needed to enable the sharing of corporate knowledge. Fortunately, social media and modern technologies offer a way forward – what's needed now is the creativity to make effective use of them to facilitate the personal interactions needed for effective knowledge management within an organisation.

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