Knowledge and Performance in an environment of continuous operational improvement

White Paper

Knowledge Management consists of making sure that the teams and individuals have the know-how they need, to make their task easier and to improve their performance. Knowledge therefore feeds performance, and knowledge is also derived from performance. Performance and Learning can form a closed loop.

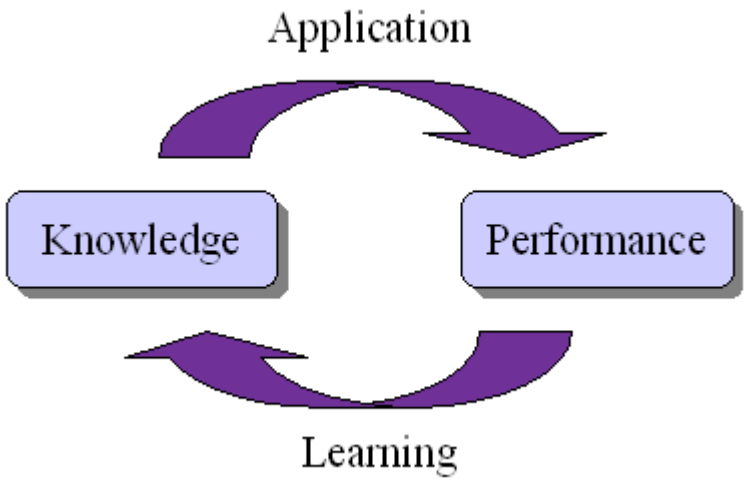


Figure 1. The knowledge/performance loop.

The knowledge/performance loop shown in figure 1 shows the close link between these two elements, and it is fairly obvious from this link that Knowledge Management and Performance Management will also be strongly linked. The more you know, the better you perform. If you learn from performance, you increase knowledge, if you increase knowledge, you improve performance. KM will be therefore be one of the engines that drives continuous performance improvement, and the Knowledge Management cycle should be embedded within the performance management cycle, whether this cycle is applied to a project, or to an operation.

This cycle, and this conclusion, apply to all forms of performance; operational

performance, sales performance, safety performance, and environmental; performance on issues such as water usage, energy use, and packaging.

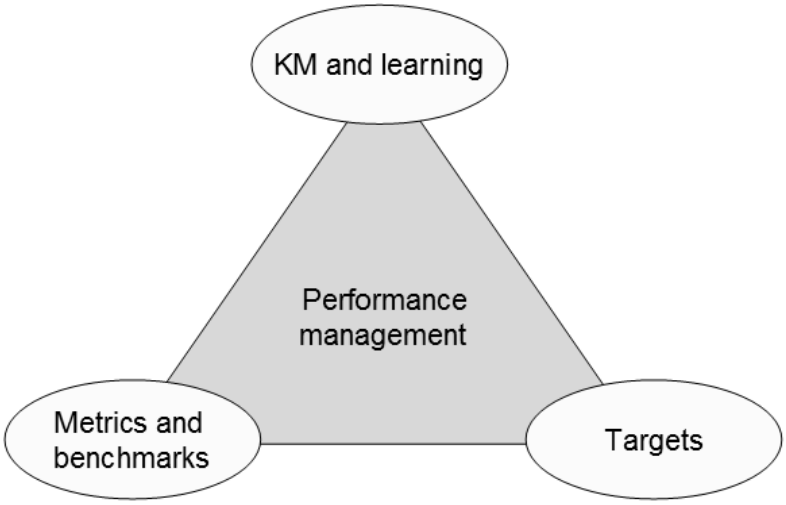
Performance management

Performance management consists of three elements, measurement (and benchmarking), target setting, and KM (see Figure 2).

- Measurement and benchmarking show where performance or a team or unit is weak or strong, and shows which other teams or units are stronger performers, and can be sources of knowledge, or weaker performers and therefore potential users of knowledge. The strong performers can help the weaker performers.

- Target setting is the driver for improvement. Without target setting, teams will do what they have always done and so will always "get what they have always got". Targets need to be achievable, but should be set beyond the knowledge of the team. If a team sets a goal which it knows how to meet, it will use only its own knowledge. If a team sets a goal which they know (through benchmarking) is achievable, but is outside their own performance, then they will seek the knowledge to deliver the goal. The targets can be driven by benchmarks – "Poland uses 20% less energy than you – I want you to close the gap halfway by year end". "Slough uses 80% of the packaging that you do – learn from them, and close the gap halfway by year end".

- KM is the enabler. Target setting creates the focus of knowledge sharing, while measurement and benchmarking define where that knowledge should come from. KM closes the gap, enabling the production units to learn from Slovenia, from Slough, from Syracuse. The mechanism of learning may be by site learning visits, by Peer Assist, by creating Learning Assets or training courses, or through the operation of Learning Communities.



Performance management in operations

Performance measurement and benchmarking, target setting and knowledge management can be closely linked in an operation, production or manufacturing environment, as part of a performance management system.

- Performance measurement allows an operation or production unit to track it's performance levels on key metrics (energy use per unit, water use per unit, packaging use, throughput, cost per unit, inventory, uptime, etc). Benchmarking those metrics allows it to
    - compare those levels with other units,
    - identify the areas where it needs to improve, or areas where it can help others improve
    - identify the business units from which it can learn, and those which it can help
- Target setting allows it to focus on areas for improvement, and motivate the teams to learn
- Knowledge management allows it to acquire or develop the knowledge it needs in order to meet its targets

For example, figure 3 shows the energy use performance for operations teams in six different locations.

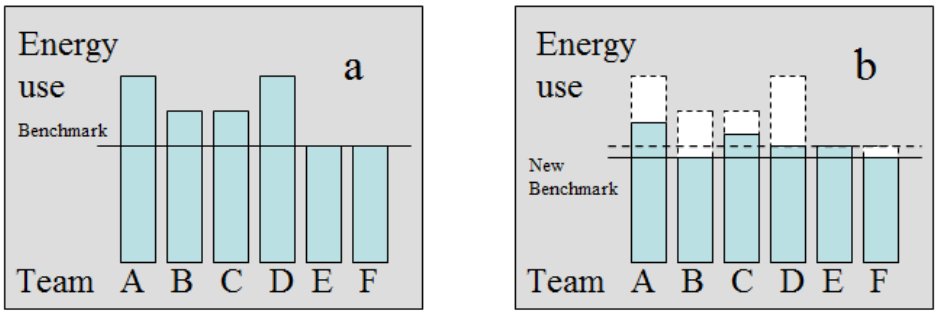


Figure 3 Energy use Performance Example

Teams E and F are the best performers, operating at benchmark energy use, and A and D are the worst. This benchmarking data allows teams A and D to realise they have room for improvement, and allows them to set improvement targets. If all of these locations exchange knowledge, and the poorer performers learn from the better performers, then the overall performance should improve, as shown in Figure 3b. All the teams except E have improved, and B and F have set a new benchmark. Considerable energy use has been cut out of the system.

What frequently happens is that the better performers find that even they have things to learn, and the collective benchmark performance often improves. The energy use improvement shown in figure 3b, over all 6 teams, is 22%.

Once an operational or production unit has established its current performance level, and found out how it benchmarks against other units, then they (or their management) need to set targets for improvement. Targets need to be achievable. The target will generally be set lower than the performance level already achieved elsewhere. In the example in Figure 3 above, team D would probably not set itself the target of exceeding the performance of team F, but might aim to get halfway towards team F's energy use though applying learning from team F.

Management Framework for continuous improvement

A management framework is a proven vehicle to drive the continuous improvement. There will need to be

A set of clear **corporate expectations for improvement** in areas such as energy efficiency or packaging. These will include a means of target setting based on benchmark data, clear accountabilities for delivery of the targets, and clear expectation that knowledge sharing, and learning from others, will be part of the delivery mechanism. It will include rewards and recognition, not just for meeting your own targets, but for helping other to deliver their targets (for example by incentivizing plant managers on the collective energy reduction, packaging reduction, etc).

- A supporting Knowledge Management system, providing the means by which knowledge can be exchanged in order for targets to be met. This is not just an IT system, but a holistic management system, which will include
    - **Roles** for Knowledge Management, including setting up communities

of practice to service the focus areas

  - **Processes** for capturing and sharing knowledge, tied into the performance management cycle

  - **Technologies** for capturing, organizing, accessing and communicating knowledge.

- A **Governance** mechanism to monitor and measure the application of KM, to make sure that people are delivering on their accountabilities, and applying the system in the way that they are expected to. **KM plans** can be key documents in defining this, and a plant could create a KM plan as a way of describing how it will use KM and learning to deliver against its targets.

Summary

Knowledge Management can drive continued performance improvement in terms of resource use and environmental impact, as well as financial performance. However it needs to be closely linked with performance management, and in particular with metrics and benchmarking, and with target setting. These three components for part of a management framework for enabling continuous improvement through KM.

Visit our website at www.knoco.com for ideas, resources, publications and free downloads such as newsletters, slide sets, white papers, self-assessment tools, and video

Contact us for a regular subscription to our newsletter

Subscribe to our blogs at www.nickmilton.com, www.tomyoungblog.com

View our YouTube video at http://www.youtube.com/miltonnick

Order free KM tools and templates

Communication Plan template

Knowledge Management Plan template

KM Self-assessment tool

KM risk evaluation template

Order free KM guidance notes

KM Assessment

After Action Review

Knowledge Harvesting Interview

Knowledge Asset creation

Knowledge Exchange

Learning History

Peer Assist

Retrospect

Knowledge Site Visit

Knowledge Management Plans

Email us

nick.milton@knoco.com	(Knoco UK)
tom.young@knoco.com	(Knoco UK)
ian.corbett@knoco.co.za	(Knoco South Africa)
siva@knoco.com	(Knoco India)
cgorelick@knocony.com	(Knoco New York)
j.gutierez@knoco.com	(Knoco's Spanish training partner)