

Topic	Webinar Question 1	<b>The ISO knowledge management standard explained webinar, Question and Answers, Wednesday 10 January 2018</b> <b>Response from Judy</b>	<b>Response from Martin</b>
<b>K and I/KM and IM</b>	Can you please clarify how is Knowledge management different from Information Management ?	<p>In KM, knowledge isn't managed directly - the focus is on managing the working environment so that people are motivated and enabled to contribute ideas, share what they know and learn from each other. In information management (IM), information is managed directly. KM includes codification of knowledge (usually writing it down) to make it easy to share. If we think of codified knowledge as information, codified knowledge is subject to information management processes such as storage, search and retrieval. In this way, information management is used to support KM. Knowledge that isn't codified (things like insights, ideas and experience) is also part of KM, but not part of IM.</p> <p><b>Response from Martin:</b> Part of what characterises 'knowledge' and distinguishes it from information is that knowledge is based in experience - especially when we are talking about 'know-how'. Many people go further to say that knowledge can only be fully or properly shared in the 'rich' communication of person-to-person exchange. That's why face-to-face is the ideal and (otherwise) person-to-person is demonstrably the best (and the only true) knowledge-sharing situation. Many of us work in ways that make it impractical always to be in a face-to-face situation, so as technology has developed, next-best forms of communication and sharing have come on, including skype, instant messaging and online Communities of Practice/ forums etc. etc. Knowledge Management is about working to achieve a sharing culture, creating and maintaining the right conditions, skills attitudes, opportunities, time and tools &amp; systems ... to do the best and 'richest' job you can of successfully sharing work-critical knowledge.</p>	<p><b>Martin response continued:</b>  <b>Information</b> (written down or otherwise 'codified') can be a good representation of someone's knowledge, but can never be more than it. It is critical to many work situations and managing it properly is therefore extremely important. But as an everyday example, what do you like to do -feel that you really <i>need</i> to do- if you can't find the right process map/ other document? You speak to somebody! Better still if you can actually walk over to them &amp; look them in the eye; whether that's simply about finding your way to the lost information, or to hear first hand from someone who has worked through that process &amp; can tell you all about it - more than you'll actually find on that lost map. After that, the map is a useful reference but the best of what you'll remember and use will be what that expert was able to tell you besides.</p>

<b>K and I/KM and IM</b>	There is a simple and effective way of differentiating knowledge from information. Use 'expertise' and 'Know how' instead of knowledge. These can't be confused with information.	Good point. 'Expertise' and 'know how' are often used to refer to tacit knowledge (things that are difficult to express and therefore difficult to codify and turn into information). In definitions of knowledge and information, the two common distinctions are: 1. Knowledge can't exist without people, whereas information can (once it is created) 2. Knowledge is a sound basis for making decisions and taking action. Information alone isn't.	
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<b>K and I/KM and IM</b>	<p>Can you define the difference between Knowledge, Information and Data. Would it be incorrect to define Knowledge as a precursor to Information, which is captured. And Data which is encapsulated but otherwise available. Would the DIKW model help organisations understand this standard and how can that be applied for projects?</p>	<p>I'm taking two questions together here. This topic is a bit of a minefield! See the answer to the previous question for common distinctions between knowledge and information. The usual distinctions between data and information are that information is 'organised' or 'structured' data that is 'useful' to someone in some situation. It's all rather subjective because of the word 'useful'.</p> <p>The DIKW (data, information, knowledge and wisdom) model can be misleading because it implies that data can be turned into information, information into knowledge and knowledge into wisdom (which is near impossible to define). And possibly vice versa. Yes, data can be analysed to produce information, and information can be understood (by people) to produce knowledge. In the other direction, knowledge can be codified to produce information and one person's information can be used as another's data. Two 'buts'.</p> <p>First, each of these transformations requires knowledge. For example, you can't turn data into information without knowledge of how to analyse data. Similarly, you can't turn information into knowledge just by reading something - you need some existing knowledge to make sense of the information. Second, advances in AI and machine learning mean that data can be used to generate insights, which are traditionally thought of as part of 'knowledge'.</p>	
	<p>If knowledge is captured (where possible) does it become information?</p>	<p>In my opinion, yes. I think it's a good pragmatic distinction.</p>	

K and I/KM and IM

Does Knowledge stop being knowledge if conveyed using technology or other means for future reference?

Yes, kind of. The knowledge originators still have the knowledge they have conveyed, but while it's between people it is an incomplete representation of knowledge (closer to information). It becomes knowledge again when people engage with it and attach meaning to it. Whether or not the new meaning matches the conveyer's intended meaning is another question!

You're right that this has little to do with technology - different meanings can be created between two people talking to each other face-to-face. Shared meaning depends on the quality of what is conveyed (e.g. the sharer's verbal or writing ability), complexity of the intended meaning, existence of a shared national or technical language, contextual information (e.g. you can dry tomatoes outside if you live in a hot sunny place but not if you're in the UK in January), existence and quality of interaction between sharer and recipient, and how much the recipient already knows about the subject. Technology does make it easy to broadcast and publish, which is less likely than dialogue to create shared meaning. If the 'future' in 'future reference' is a long way off, there's also the risk that the message will be out of date and/or more difficult to understand. Technology can also be used for dialogue, including which gives a better chance of intended messages getting across - largely because understanding, meaning and contextual information can be checked.

Storytelling is a possible exception - it can be used to convey complex, timeless messages. Sharing knowledge over long periods of time is a huge challenge for industries like nuclear - watch out for the K SIG's next Courageous Conversation video and the bit about the nuclear priesthood. Thank you for asking the question, it made me think!

<b>K and I/KM and IM</b>	<p>On the Boundaries between KM and other disciplines would it be useful to include the relationship of KM to the disciplines of Knowledge Organisation and Knowledge Transfer?</p>	<p>In the draft standard, we focus on boundaries that commonly cause problems or confusion. We haven't tried to include every possible boundary and every branch of related disciplines - or the different names of disciplines.</p> <p>If by 'knowledge organisation' you mean the library/information discipline, then I think the boundary with KM is covered in the standard (in the section about the differences between KM and information management).</p> <p>As far as I am aware, 'knowledge transfer' isn't a separate discipline - but you might know more. 'Transfer' is often used in KM as a synonym for 'sharing'. From the discussions we had in the working group, the two words have slightly different meanings in different countries. In the UK, 'sharing' implies that meaning has been created by the recipients, whereas 'transfer' implies that information has been transmitted and received.</p>	
<b>KM and technology</b>	<p>IT can facilitate KM, but totally agree - KM is not IT.</p>	<p>On the basis that the 'I' in 'IT' stands for information, this is clearly the case! IT used to be thought of as an 'enabler' of KM. It's much more than this now. Because IT has become more than 'information' technology, it can enhance as well as enable KM. I like the use of 'facilitate' to describe the relationship between KM and IT.</p>	
<p>Management Systems are important, but which IT Tools have been determined to be compliant?</p>	<p>There is no such thing as a 'compliant' IT tool for KM. Although technology is used in KM to connect people to people and people to information, it's the way it is used that is important - not the tool itself. KM is concerned with people, culture, leadership and processes as well as IT (and other) tools.</p>	<p>That's to say, if you take the Standard as a kind of 'checklist' of all of the different aspects of what can make for effective KM (which itself is risky - as discussed elsewhere, this is all very context- and culture- specific), then you will not find any single (or combined) IT system or IT tool that is able to meet all of those needs.</p>	
<p>Is predictive modelling also considered knowledge?</p>	<p>Interesting question. If predictive modelling creates understanding and insights, then I'd say that is knowledge. I guess it also depends on the quality of the inputs to the model and the algorithms used.</p>	<p>Certainly, for predictive modelling to be successful/valuable, it relies hugely on knowledge - it's a way of applying current, in-context knowledge.</p>	

KM and technology	What about knowledge generated by artificial intelligence?	<p>This is a hot topic in KM - thanks for asking the question. If knowledge is created by people, then it might be a stretch to say that anything generated by AI is knowledge. Some people talk about insights generated by AI, but insights are a human thing too. There's no doubt that AI is already useful in KM. My personal prediction is that we will soon have a new term for whatever it is that AI generates. AK, maybe. In the meantime here's a link to an article on this topic.</p> <p><a href="http://www.kmworld.com/Articles/Editorial/Features/KM-3.0-KM-AND-AI-118399.aspx">http://www.kmworld.com/Articles/Editorial/Features/KM-3.0-KM-AND-AI-118399.aspx</a></p>	
KM and projects	Can Knowledge management be part of the Project Management Cycle ?	<p>Great question. Yes, it can. KM should be included throughout the project lifecycle. It should be included in business cases/project plans.</p> <p>In waterfall projects, the assumption is that the knowledge needed for each phase exists in the team before the phase can start. Some KM activities can be scheduled - for example a 'peer assist' at the start of a project or phase. Some KM is more difficult to schedule - for example the need to get advice if an issue materialises in an unexpected way. But you can set up networks and communities so that people have access to advice when they need it. Or you can have specialists whose role it is to help out when issues arise.</p> <p>Agile projects have a different knowledge profile: knowledge is developed throughout the project through frequent interactions, so some KM is built in.</p>	<p>Definitely yes.</p> <p>And, talking of passing through successive project phases (stage gates), there can definitely be opportunities and requirements built in where teams are required to identify and review any new knowledge &amp; insights gained so far, agree what can be done with these - put in train continuous improvement activity? write and share a blog/ report/ case study..? - and use that fresh knowledge &amp; insight to consider a different approach to the coming phase; possibly save some time or non-critical step, 'learn a lesson' of investing some time &amp; effort in re-engaging with a group of disaffected stakeholders ... etc, etc.</p> <p>Use it before it gets lost in the rush and the fray of the next phase, or the next project, <b>especially</b> coming to the end of the current project, if e.g. the team is about to disband &amp; move on.</p>

<b>KM and projects</b>	<p>What are the APM going to do to change the perception of KM when the new PMBoK is released?</p>	<p>As with previous BoKs, there will be a period of consultation with the wider profession about their views of what needs to change in the next edition.</p> <p>The BoK provides a starting point on any subject, changing perceptions of a topic area is largely dependent on the activities that happen between BoK editions – for example, the articles, publications, events, case studies which challenge perceptions and alter practice.</p>	
	<p>Has anyone been tasked in APM to change the BOK statement?</p>	<p>BoK7 is a project for 2018/19. The consultation process is planned to start in February with the next edition due by early 2019.</p>	
	<p>How is knowledge management as it relates to project management any different than in operations or any other management method?</p>	<p>KM is KM, wherever it is applied. The eight principles of KM in the draft KM standard apply to all organisations and all contexts, including project environments.</p> <p>HOW you apply KM differs from one context to another, but project management is not a special case. Some project professionals think it is, because projects are temporary and people move on. This might have been true once, but people change jobs so frequently now that it no longer sets projects apart from business as usual.</p>	
	<p>Can a business become certified on a specific project basis rather than a business wide basis?</p>	<p>As far as I know, only organisations can become certified. Then again, I suppose it depends on how you define 'organisation'. Is High Speed Two an organisation? A project? A programme?</p>	

<b>KM and projects</b>	Is it worthwhile defining the term "Knowledge" with regards to project environment and for organisation?	I answered this question during the webinar. Here's a full, more considered response. The definition of knowledge is the same, whether you're working on a single project or across a whole organisation. Your priorities and goals, and therefore the knowledge you're concerned with will be different.	The nature of knowledge I see as constant & no different, but from a practical KM point of view in whatever your situation/ environment, you need to identify the most valuable/ critical knowledge, and so the scope is going to be different. This is a distinction between any 'entity' and another though, not a specific or unique distinction between projects and organisations.
	It is generally accepted that the lessons learned process at the end of the P2 lifecycle is by and large inefficient and ineffective. How will the standard improve the Lessons Learned process?	Lessons learned' means different things in different organisations. Sometimes 'lessons learned' is actually good KM, often it is a poor approximation to KM based on databases and end-of-project/programme processes. My hope is that the standard will raise awareness and understanding of KM amongst P3M professionals, so that KM replaces poor 'lessons learned' processes.	
<b>Draft standard</b>	Is consideration being given to how this standard will align with the KM related requirements added to ISO9001:2015?	The ISO working group for the KM standard is aware of the ISO 9001:2015 requirements. Although ISO 9001:2015 doesn't say a lot about KM, it clearly refers to 'real' KM (not the IM variety) and mentions some of the elements of a KM system. The draft KM standard expands on these elements, so the two standards are aligned.	
	What does this standard add to the existing 9001 KM paragraphs?	Please see the answer to the previous question.	

Draft standard	Does the ISO seek to identify and propose key roles within organisations to lead and manage KM?	Yes, kind of. The draft standard identifies the need for KM leadership and for defined KM roles and accountabilities. It gives some examples, such as Chief Knowledge Officer and Community of Practice Facilitator. The requirement is to have KM roles and accountabilities. The standard doesn't tell you exactly what the roles and accountabilities should be, because every organisation is different.	
	What sort of organisations do we anticipate will seek certification for this new standard?		Organisations that see it as being in their interests to be recognised as professionally highly competent where it comes to KM (probably not a very helpful answer!)
	Can you provide an example of what you mean by management system?	Management systems vary depending on the size and nature of organisations, so it's difficult to give relevant examples. Here's what ISO means by 'management system': <a href="https://www.iso.org/management-system-standards.html">https://www.iso.org/management-system-standards.html</a> There's also a link to a list of ISO management systems standards.	
	When is the standard expected to be published?	Not sure - it depends partly on the nature of the comments on the draft. My best guess is late 2018 or early 2019.	
General KM	Could you please describe concretely what is KM?	My favourite definition is the one in the Standards Australia's 2005 guide to KM: <i>A trans-disciplinary approach to improving organisational outcomes and learning, through maximising the use of knowledge. It involves the design, implementation and review of social and technological activities and processes to improve the creating, sharing and applying or using of knowledge.</i> A key point here is that KM doesn't involve managing knowledge directly.	

<b>General KM</b>	Is there a plan for creating a chartered institution for knowledge managers?	What a great question. Wouldn't it be fantastic if there was a single, respected, credible KM institution of some kind? There are no firm plans that I'm aware of, but there is growing frustration amongst some KM specialists because KM is so fragmented. There is talk (I'm one of the people doing the talking) of moving towards some kind of global institution, maybe by joining up some of the many existing networks and communities.	
	There are a couple of references to the role of KM outside of an organisation in the standard, but not many: can you expand on how KM can assist collaboration between organisations?	We had to sneak those references in! The focus of the standard is single organisations, but obviously KM can (and does) take place between organisations. Collaboration and KM support each other - a good 'KM culture' is a collaborative one, and part of collaboration is sharing knowledge and ideas. KM between organisations can be challenging because there will be at least two different cultures. There is also the question of what knowledge to share and what to protect. The principles of KM listed in the standard apply at all levels, including inter-organisational KM.	
	Can you advise on options to implement KM in an organisation that doesn't have a KM system? I mean improving the understanding of KM and how to improve KM.	<p>I answered this question during the webinar, but now I can see the bit about improving the understanding of KM I'll have another go.</p> <p>My big hope for the standard is that it will lead to improved understanding and practice of KM, just by explaining what KM is and how to approach it.</p> <p>More specifically, the principles in the introduction to the draft standard could be used as a starting point for discussion about what they mean for your organisation. I am sure that you already have some elements of a KM system - but you might call them something else. Another way of getting started is to identify some issues that could be resolved using KM.</p>	

General KM	<p>Are there any guides to identifying and gathering knowledge?</p>	<p>I'm finding this a difficult question to answer without understanding your context. The key thing is probably to identify the valuable knowledge so you know where to focus your KM - see <a href="https://s3-eu-west-1.amazonaws.com/assets.henley.ac.uk/legacyUploads/pdf/research/research-centres/Knowledge_in_Action_-_issue_6.pdf">https://s3-eu-west-1.amazonaws.com/assets.henley.ac.uk/legacyUploads/pdf/research/research-centres/Knowledge_in_Action_-_issue_6.pdf</a></p> <p>I don't know of any other specific guides, but Martin might!</p> <p>If by 'gathering' knowledge you mean codifying it in some form, it will depend on what the knowledge is and how you expect it to be used.</p> <p><b>Martins response:</b> I can't say that I have a particular guide to recommend, although some of the NHS (National Library for Health) general KM resources have been handy on a few occasions. Their ABC to Knowledge Management is very comprehensive. And I've tried and adapted several of the 'classic' KM tools - Peer Assist (more about sharing than 'gathering'), After Action Review (identifying and gathering points to learn - be sure to actually do something with them afterwards!) etc.</p> <p>I also found and adapted a framework for (1) a structured interview with a leaving/retiring colleague and (2) in a similar vein a structured set of questions to ask of the holder of a particular post, essentially to list all of the information assets and sources of advice &amp; knowledge that they used &amp; came across in the course of doing their job. So that kind of knowledge mapping and relationship &amp; network mapping can be effective in identifying what's crucial to particular (specialist) roles and so what is valuable to that team/ organisation.</p>	<p><b>Martin response continued:</b></p> <p>I've found a practical, 'bespoke' kind of approach like that bears more fruit than something 'off the shelf'.</p> <p>In terms of gathering - and communicating (about)-knowledge I'm someone who e.g. prefers mindmaps to spreadsheets; and that kind of aspect affects how colleagues can then access/ share/ understand and try to re-apply any gathered knowledge - again, this will depend on working culture and personal preferences.</p> <p>I've found a practical, 'bespoke' kind of approach like that bears more fruit than something 'off the shelf'.</p> <p>In terms of gathering - and communicating (about)-knowledge I'm someone who e.g. prefers mindmaps to spreadsheets; and that kind of aspect affects how colleagues can then access/ share/ understand and try to re-apply any gathered knowledge - again, this will depend on working culture and personal preferences. "</p>
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<b>General KM</b>	Who are the providers of KM Training and certification - who are the certifying bodies?	<p>As there is no official or recognised KM Association (note that anyone can call their company 'KM Association', 'KM Institute', or similar) there is no framework for accrediting KM training. There are some good training and education courses - and some bad ones. KM training for P3M professionals is sometimes included in project management courses, but is often based on material such as the KM entry in the APM BoK. Please get in touch if you would like further pointers to 'real' KM training or education that is aligned with the draft standard.</p> <p>There are various levels of certification against an ISO standard, from no certification (it isn't compulsory) through self-certification to accredited third party certification. In the UK, UKAS accredits organisations as auditors and certifiers of specific standards - but my understanding is that anyone can offer audit and certification services.</p>	
	What are good practices for knowledge retention when dealing with professionals leaving the business?	<p>It depends! A good overall strategy is to get professionals to share their knowledge (verbally, in writing, using video, etc.) right from the time they join an organisation. Communities of practice are often a good way of doing this. Another option is to keep in touch with people who leave - for example by keeping people on as consultants when they retire.</p> <p>It depends heavily on the kind of knowledge being shared and how 'portable' it is. Knowledge is sometimes too complex to capture effectively in writing, so trying to capture it can lead to misunderstandings. Sometimes knowledge is very specific to a particular situation, so is difficult to apply in another without the experience and insights of whoever has the knowledge. It also depends on the people who need the knowledge - if they are specialists themselves, they are more likely to understand what they read or are told.</p>	

General KM	<p>What tools for storing knowledge during a project to get the most out of it in the future?</p>	<p>I'm not sure I understand this question - sorry! If 'storing' you mean codifying, then it's the usual methods of writing, diagrams, pictures, audio recordings, videos etc. All of these are limited because something is always lost in the codification process. People and communities are often the best storage container for knowledge. Some combination of codification and communities works in a lot of situations.</p>	
	<p>What will be the benefits to UK economy / public projects of an international knowledge standard? I note the BSI report 'How standards benefit the UK economy. <a href="https://www.bsigroup.com/LocalFiles/en-GB/standards/BSI-standards-brochure-how-standards-benefit-businesses-and-the-UK-economy-UK-EN.pdf">https://www.bsigroup.com/LocalFiles/en-GB/standards/BSI-standards-brochure-how-standards-benefit-businesses-and-the-UK-economy-UK-EN.pdf</a></p>	<p>I think the benefits of ISO management systems standards are the most relevant here. As you might imagine, most of the published benefits are on the websites of organisations who perform audits and certification!</p> <p>For a KM standard, only time will tell. It depends on how people respond to the standard when it is published. If the response to the quality standard is anything to go by, there will be arguments, nay-sayers and box-ticking - then some serious discussions that lead to better understanding, better practice, and improved effectiveness and efficiency.</p> <p>The hope of the working group is that the standard will lead to improved awareness, understanding and practice of KM.</p> <p>There has been talk of a 'knowledge economy' for a long time. To operate in a knowledge economy we need better understanding of knowledge and KM. We also need some serious knowledge economics. The standard might just be a step in this direction.</p>	
KM culture	<p>Please could you expand on the "culture" meaning as it was defined as critical?</p>	<p>The draft standard has a whole appendix on 'Knowledge management culture'. Essentially a KM culture is one where people feel comfortable, empowered and accountable for seeking, sharing and using knowledge.</p>	

<b>KM culture</b>	Can you provide inputs on embedding KM Culture in the organisation?	The draft standard gives an approach to analysing and promoting a KM culture. It involves identifying what you have and what you want, then applying levers such as processes, policies, training and leadership behaviour to close the gaps.	
	What is best practice in terms of fostering a KM Culture?	Please see previous answer.	
	In the speakers opinion what is the usually the biggest obstacle to changing an organisation's culture so as to support KM?	<p>Difficult question. Probably the belief that culture can't be changed, or that it's too hard/takes too long to do it.</p> <p><b>Martins response:</b></p> <p>Also (conversely) a big obstacle/ weak point is underestimating the scale of change required and extent of time &amp; effort needed to achieve it. I've known senior managers who explicitly state that they 'want to change the culture' (which in fairness is very diifcult!) but don't appear to understand (a) what makes the culture - what are the hallmarks, what and who really makes it, influences it? or (b) think they can do that by investing in a 'KM System' or even (3) expect that simply by announcing an intention to change the culture, that people will do as they are bid and start behaving differently; the list goes on ....</p>	<p><b>Martin response continued:</b></p> <p>I agree - one thing that's for sure is that leadership must be instrumental in defining and changing culture &amp; on several occasions, I have had success in generating and harnessing 'grass roots' enthusiasm and day-to-day improvements in practical KM but have not been able to get engagement &amp; buy-in at a very senior level within an organisation. You need leaders who (excuse the phrase) 'walk the walk' or the 'talk' will remain just that; enthusiasm and successes will wither if people feel unsupported.</p>