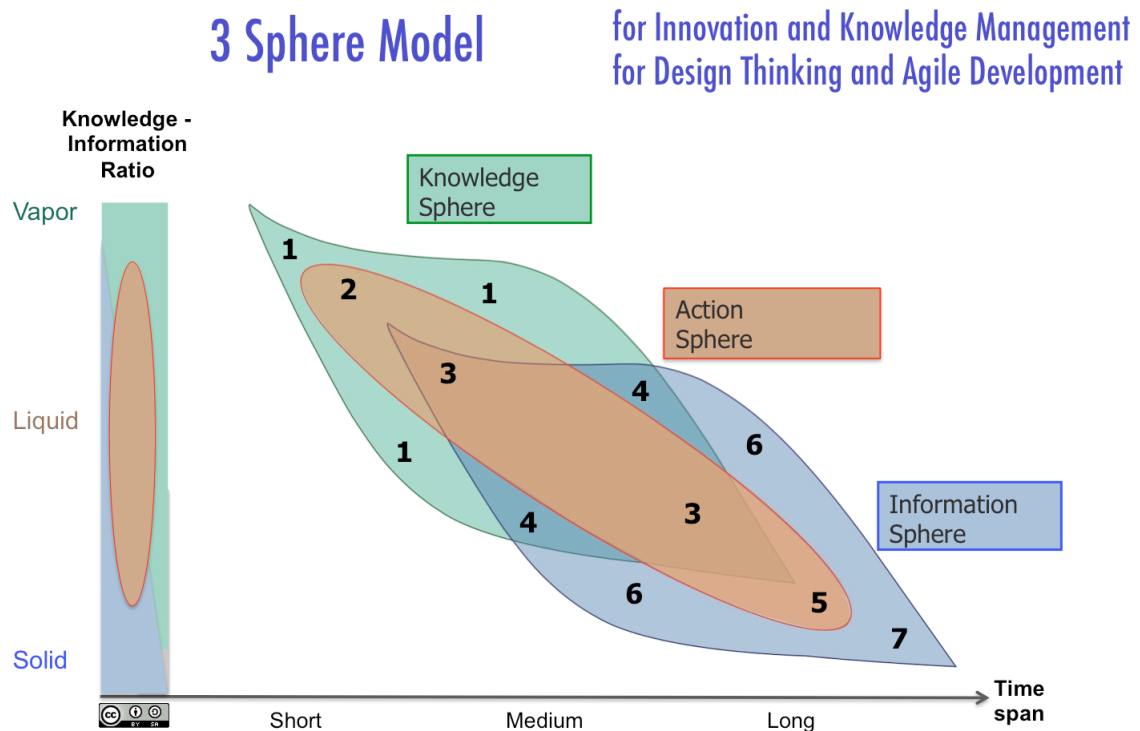


The 3 Sphere Model - Description and Usage

The model allows fast clarification of terms and identification of knowledge management issues. Furthermore, it helps to pinpoint KM related techniques and tools. It puts them into the right perspective and shows where they bring the greatest benefits. This accelerates the understanding when defining outcomes of a knowledge management project.

This model also explains the critical time dependence of knowledge and information with action. It shows how facilitation, agile methods, design thinking and collaboration software (SharePoint etc.) are connected. It has been developed based on the publication by Dr. Pavel Kraus and Dr. Gil Regev.



Based on: Pavel Kraus and Gil Regev (2017) Beyond Activities
<https://infoscience.epfl.ch/record/230298>

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Underlying assumptions and definitions:

Knowledge is a familiarity, awareness, or understanding of someone or something (Wikipedia). It is always bound to people (Probst, Raub, Romhardt; D-A-CH Wissensmanagement Glossar). For this model we use the term «knowledge» defined as what people know in their heads at a given moment.

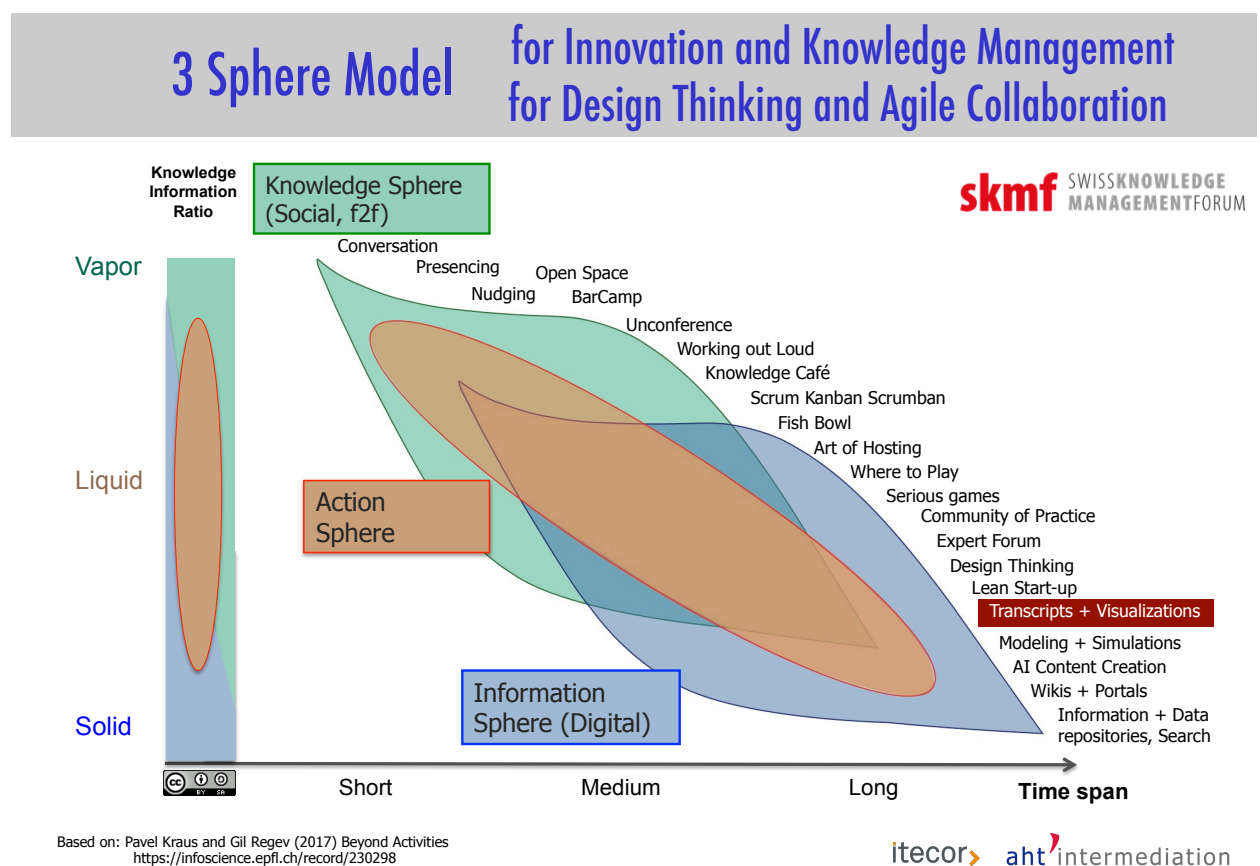
Information is that which informs. Information's existence is not necessarily coupled to an observer, while in the case of knowledge, the information requires a cognitive observer (Wikipedia). For this model we use the term information mainly as documented knowledge, information in context or captured knowledge expression such as conversation. To our understanding the so called «explicit knowledge» is information.

The 3 Sphere Model has two axes. The first one depicts the transition between knowledge and information. On top there is 100% knowledge, i.e. no recording or note taking has been done. On the bottom only information exists and knowledge has been forgotten. This transition can be also described as the three vapor, liquid and solid states. The second axis depicts the time span in which knowledge or information exists. This also refers to the usage of techniques and tools, which deal with knowledge or information.

The 3 Sphere Model consists of three spheres, the knowledge, action, and information sphere. Their intersections form six distinct areas with different properties:

1. Intuition, Feeling, first thoughts – not very clear yet
(M. Polanyi definition of tacit knowledge – 1960's – pre-thought – you know more than you can tell – you feel there is something there, but you cannot tell it. Plato's Meno paradox – e.g. if a scientist can explain what the problem is there is not problem anymore. You know tacitly there is a problem, but you cannot express it yet.)
2. When ideas become clearer, can be formulated in speech and expressed-communicated to others.
Action is possible, but not mandatory. Action either changes the state of something, or prevents the thing from changing. Area 2 can be just talking, without necessarily acting, but talk is also an action. Link to Concrete Experience-Reflection Observation-Abstraction Conceptualization-Active Experimentation, D. Kolb's Experiential learning cycle. (Plan-Do-Check-Act turned 90 degrees counterclockwise)
3. Coexistence of knowledge and information. Knowledge gets noted down, recorded or captured in some way (written, audio, video etc.) Area 3 is the interplay of knowledge, action and information. Most commonly experienced in workshops or meetings.
4. Knowledge and information available, but lack of understanding / education / maturity. Therefore no action possible. Look for additional answers in Polanyi / Theory U – O. Scharmer. Waiting zone – no action needed, necessary, desired etc. Knowledge is there, but it is not actionable yet – D. Ausubel (see below)
5. Artificial intelligence – action is taken by machines / algorithms / animals and carried out. Action without involvement of people's knowledge.
6. Stored information, no knowledge about it is present in the minds of people involved. Information available and ready to be reinterpreted and transformed back to knowledge again. Information is accessible through search, annotation, structure, tagging etc.
7. Stored information not readily accessible – so called «data grave». Can be also a manifestation of information overload. (Eppler&Mengis, 2003)

Mapping of selected techniques and methods



After more than one year of applying the 3 Sphere Model in consulting and teaching we have realized that the understanding can be still improved, when selected techniques and methods are mapped along the three spheres. The mapping is not exact. It should only show the relative position.

On top are techniques used in dialogues and discussions. They are followed by many facilitation techniques used in workshops and meetings. Then there is a critical step that takes efforts, namely transcribing and visualizing audio or video records to receive information that can be processed further.

On bottom right the information heavy applications are repository close the list.

The depiction of these techniques helps to clarify what we are talking about, when knowledge management is discussed. In which area do we want improvements and what techniques are involved? The 3 Sphere Models enables a fast clarification.

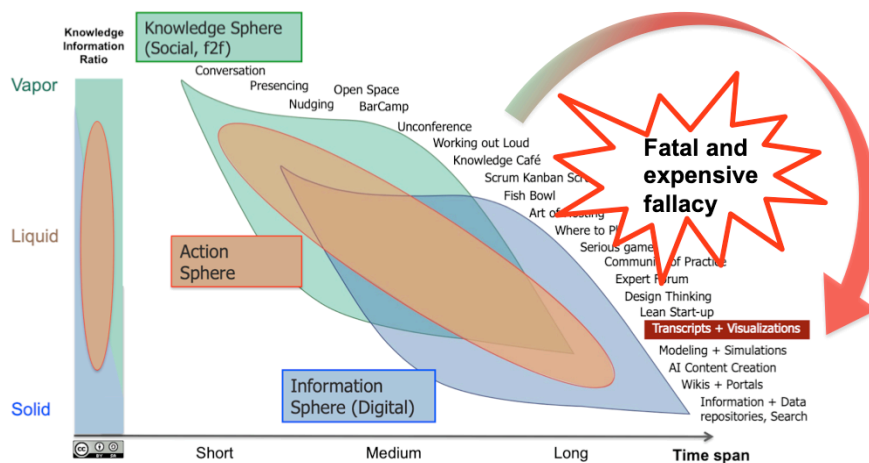
Example for positioning of a case onto the model:

On-boarding of new team members. At the beginning they just receive documents, but have no clue how to consume them and make sense of them. This is a process going through area 4 and moving into area 3. Readiness to see and understand (Geoffrey Vickers). Jean Piaget, David Ausubel – only when you have pre-structures in your brain, i.e. context you can understand what you are looking at.

Exposing a classical knowledge management fallacy

During the work with the model, we have realized that it can be used to expose a fallacy many people fall into, when thinking about KM tools. Unprofessional workshop facilitation and meeting management often leads to unsatisfactory outcomes of these sessions. After some time people cannot remember the reasoning, argumentation or basis for decisions anymore. The common wisdom is that some technological IT tools would alleviate these issues. This is the classical fallacy encountered very often.

In reality what is needed is systematic, state-of-the-art usage of methods in the knowledge intensive upper part of the model. This because the deficiencies created there, cannot be remedied by the tools in the bottom right part.



Content	Link
BPMDS-Paper	http://www.aht.ch/170613_bpmds-paper_beyond-activities_kraus-regev.pdf
	https://infoscience.epfl.ch/record/230298
LinkedIn SKMF group	https://www.linkedin.com/groups/4143903
SKMF resources	https://www.skmf.net/en/resources/

Version history	Date	Author(s)
Version 1	8 Dec 2017	Pavel Kraus
Version 1.1	22 Dec 2017	Gil Regev
Version 2	4 Jan 2018	Pavel Kraus
Version 2.1	1 Feb 2018	Pavel Kraus
Version 2.2	11 Sept 2019	Pavel Kraus