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‘Standardisation’

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EXECUTIVE SUMMARY

This document contains the position statement on KM standardisation of the European KM Forum – European Knowledge Management Forum. The main purposes of this community are to establish a well co-ordinated and effective support infrastructure throughout Europe in order to share and exchange the latest developments in the Knowledge Management domain, as well as to build a common vision on the future of KM and common approaches ('KM standards') towards KM in Europe.

The working paper as a strategic EKMF statement is edited by IAO and BIBA and supported by the nodes of the European KM Forum. The major objective of this position statement is to give a clear overview of the common vision of the EKMF consortium about Common approaches and even future standards in Knowledge Management.

It is argued that the EKMF is looking forward to an "open source" standard, where all interested parties are involved and able to contribute. No single person, organisation, institution, body should be the author of the standard nor be able to commercialise it. In future debates the EKMF suggests that following questions should be clearly discussed: "Who are the stakeholders of a KM standard?" and "What are their interests and motivation behind KM standardisation?"

As an envisioned timeline, the EKMF is suggesting the following:

- November 2001: get together of all interested parties, bodies, organisations, etc. to discuss above mentioned topics
- 2002: starting the process of standardisation in KM, depending on executing institution(s)
- Mid 2002: Publishing first results or draft
- Mid 2003: KM Standard for a KM framework
- 2003: enlarging the developed standard to specific KM framework modules
- 2010: Europe is most competitive Knowledge Economy

As content of a KM standard, the EKMF is envisioning the following three step approach:

- Start with KM framework and KM terminology in parallel
- Continue with specific modules out of the KM framework, e.g. KM processes, KM technologies, etc.
- Context specific standardisation of issues like learning, experience sharing and 'best' or good practices.

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1 INTRODUCTION

Advances in Knowledge Management (KM) research and industrial application require the further elaboration of *various themes like e.g.* KM scenarios, human and organisational issues, communities of practice, KM technologies, inter-organisational KM, and many more. Depending on where the focal point lies, experts from *different disciplines* are involved, like from e.g. information science, business management, linguistics, engineering, organisational psychology, and law. Thus, KM is a truly multidisciplinary domain and can only be brought forward if the various experts *co-operate* and bring their knowledge together in a *synergistic* way for creating innovative and reliable solutions. However, feedback from researchers and practitioners indicates that existing results often remain concealed to interested parties due to a *lack of structured representation and public availability*.

This is the main motivation behind the European Knowledge Management Forum, which aims to build up a *KM community* in Europe and to support commonality in KM terminology, application and implementation. In particular, the European KM Forum intends to bring together a critical mass of KM experts in order to share the latest developments in the KM domain and to define *open standards and common approaches* to KM for making it known and applicable to a broad European business public.

1.1 Overview on KM development

Knowledge management can be defined in a large number of ways, strongly depended mostly on the related background (e.g. social sciences, engineering, etc.). However, independent of the favoured definition, the term ‘knowledge management’ as such was presumably coined somewhere at the end of the eighties.

Meanwhile, as a management discipline, it is receiving increasing attention in both business and academia. It is generally seen as a key discipline for organisations to master in order to be successful in the knowledge economy: *“It (KM – Eds.) is now at the top of the business agenda. Companies across all sectors and public bodies of all descriptions recognise the critical role that effective knowledge management will play in their future success.”* [KPMG, 2000]

The following table gives a rough overview how the discipline of KM shifted focus in the last decade.

Phase	Period	Perspective	Operationalisation
1	before 1990	Awareness raising KM	We know what KM is. It is important to us. We have to do something about it. Concepts for knowledge stock and flow.
2	1990 - today	KM = I&C-Technologies	E-mail, Intranet, Content- and Yellow Pages. Knowledge is Stock.
3	1995 - today	KM = HR-Management / Human Talent-Management	Employability, Corporate Universities, Knowledge maturity levels, Master-Student-Relationships, Return on Knowledge (RoK). Knowledge is Flow.
4	today	KM = Organisation	Fuzzy-, Hypertext- and Web structures, Knowledge Infrastructure Engineering, Recentralisation.

Table 1: Development of the KM as a discipline [Weggeman, 2000 – translated by JK]

Starting of with first KM activities and becoming aware of KM in the late 80's, via an initial focus on KM technologies in the early 90's, and a process and human orientation from the mid 90's, focus is more and more on integrated approaches covering human, technological and organisational issues in an integrated manner.

Underlining the importance and adoption levels of KM, a recent broad international survey of KPMG consulting [KPMG, 2000] shows that the majority of organisations in Europe and the US have KM programmes underway or are starting with one.

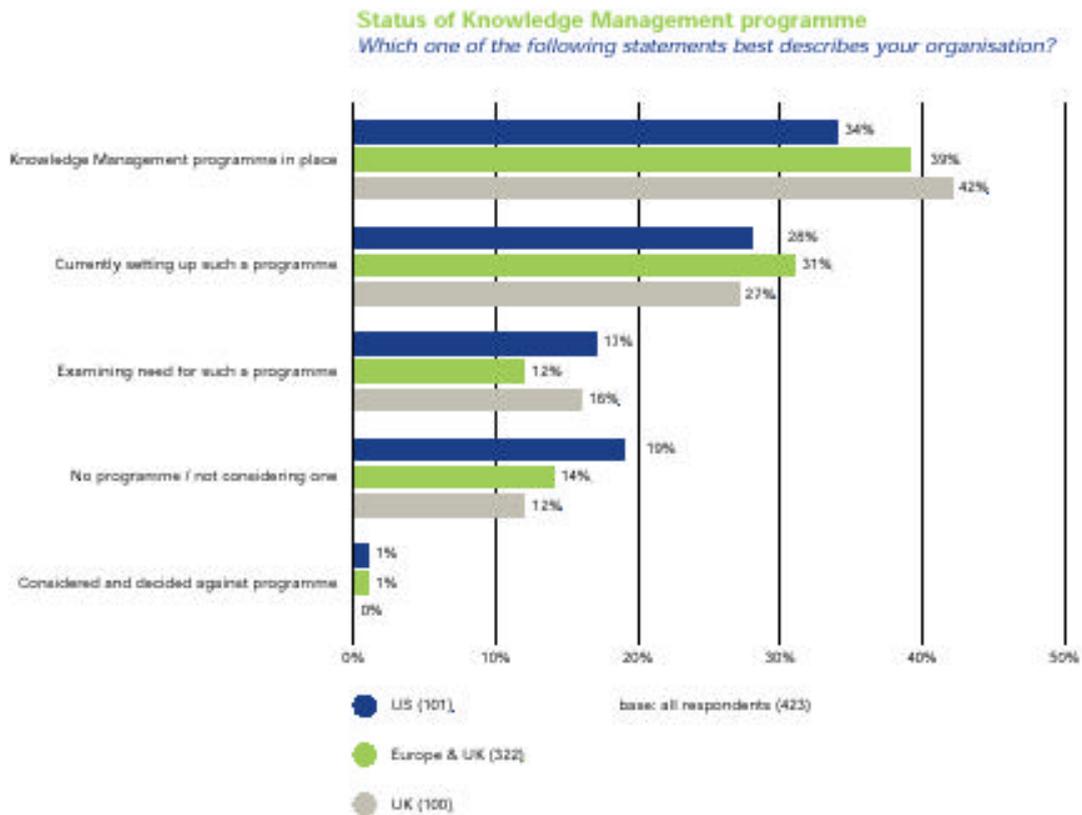


Figure 1: KM towards maturity [KPMG, 2000]

Thus "seen in the light of the confirmed importance of knowledge management for European industries and maturity of European (and US) research, the **time seems exactly right** to start developing common approaches and standardised guidelines for KM application and implementation."

1.2 Overview on initial Global Standardisation Activities related to KM

Indeed, different independent initiatives have been already started to develop standards for KM. Some of them have resulted in concrete results, while others are in progress or at their starting point. Also, there are some standards from other areas that are relevant to discuss as they can serve as models for learning about important issues in standardisation or can be applied within a KM context. The following section will give a broad overview about different types of activities.

We can distinguish three different levels of KM standards:

- 1st level standards are developed from a particular KM perspective, as e.g. the Australian KM framework. They aim to describe the overall concept of KM.

In UK, the British Standards Institution (BSI) has initiated a committee for the development of KM standards. In cooperation with Price Waterhouse Coopers and a panel of KM experts they have published a good practice study in August 2001 which aims to consolidate current KM good practice and to precipitate a public discussion on KM standardisation [Kelleher, Levene, 2001].

In US, the Global Knowledge Economics Council (GKEC) initiated an international knowledge economics standardisation activity. They have started the process to receive accreditation from American National Standards Institute (ANSI) for the development of KM standards and aim to begin through ANSI the ISO standard development. They have published a proposal for candidate terms and definitions for a Knowledge Management vocabulary based on definitions from the Organization of Economic Cooperation and Development (OECD) [GKEC 2001a]. GKEC has set up standards committees for KM Terminology for KM Science and Technology, KM Metrics, Knowledge Quality Management/ ISO 9000, KM Technology, and is planning for different other committees within 2001-2002 [GKEC 2001b].

In Germany, a special committee of the DIN has listed KM as a subject to be investigated for its relevance for RTD driven standardisation (Entwicklungsbegleitende Normung, EBN). Next to this, the VDI (Verein Deutscher Ingenieure, Association of Engineers) will set up a competence field on KM within the next months. A close collaboration between VDI and EKMF is envisioned, especially in setting up guidelines for interpreting European or international standards in KM to national level.

1.2.2 Taxonomies, Ontologies, Classifications, Representations

Significant standardisation work is also going on in the area of taxonomies, ontologies, classifications, representations, etc.: The objective of the ISO/IEC 13250:2000 Topic Maps is to provide a unified model for representing knowledge and linking it with the information resources in which it is embodied [ISO13250]. Topic maps can be regarded as the standard for codification that is the necessary prerequisite for the development of tools that assist in the generation and transfer of knowledge [Rath, Pepper 1999].

The IEEE Standard Upper Ontology (SUO) Study Group aims to develop a standard which will specify the semantics of a general-purpose upper level ontology. It will enable computers to utilize it for applications such as data interoperability, information search and retrieval, automated inferencing, and natural language processing. An ontology consists of a set of concepts, axioms, and relationships that describe a domain of interest. An upper ontology is limited to concepts that are meta, generic, abstract and philosophical, and therefore are general enough to address (at a high level) a broad range of domain areas. [IEEE SUO 2001]

1.2.3 Enterprise and Organisation Modelling

As soon as the design and modelling of organisations and their processes are being discussed, existing enterprise modelling standards become relevant for KM. Examples are

- ISO 14258 Concepts and rules for enterprise models: aims to guide and constrain other standards or implementations that do or will exist on the topic. It defines the elements to use when producing an enterprise model, concepts for life-cycle phases, and how these models describe hierarchy, structure, and behaviour. It provides guide-lines and constraints for enterprise models to anyone attempting to model an enterprise or to model processes. [ISO 14258]
- ISO 15704 Requirements for enterprise-reference architectures and methodologies: aims to place the concepts used in methodologies and reference architectures such as ARIS,

CIMOSA, GRAI/GIM, IEM, PERA and ENV 40003 within an encompassing conceptual framework that allows the coverage and completeness of any such approach to be assessed. The conceptual framework is textual and relatively informal. [ISO 15704]

- ENV 40003 CIM-systems architecture - framework for modelling: aims to provide a common conceptual high-level framework within which key concepts of the (distributed, extended, virtual etc.) enterprise can be identified, documented and shared with partners in that enterprise. Established 'the cube' with its three dimensions of: modelling levels, genericity, and views. Builds heavily on the CIMOSA approach. [ENV 40003]
- ENV 12204 Constructs for enterprise modelling: defines 13 constructs to be used in the composition of enterprise models. Each construct is described in terms of its essential nature by using a common template and relationships between constructs (static and behavioural) are contained implicitly in the descriptions. Based upon inputs from CIMOSA and QCIM. [ENV 12204]
- ENV 13550 Enterprise model execution and integration services: names the standards, services, protocols and interfaces which are necessary for the computer-based development and execution of enterprise models and model components. [ENV 13550]

These standards are particularly relevant for inter-organisational enterprise modelling. However, it need to be considered that all five are stemming from a manufacturing back-ground and thus are not typically addressing the knowledge worker. With respect to KM it will be relevant to discuss in how far these approaches are representing to a too far degree the thinking of classical deterministic manufacturing systems. Additionally to these standards, various comprehensive reference models for business processes and organisation structures are existing and they are covering also other sectors, as e.g. the ARIS reference models. [Scheer 1997]

1.2.4 Skills, Competency Assurance, Certificates, Curricula

While most of the standards tend to define technological issues – and in particular IT standards – there is another relevant branch of activities and this is where organisations are developing national skill standards or competency assurance models for the workforce and corresponding certification systems. Examples are the National Skills Standards Board (NSSB) in US, or the Qualifications and Curriculum Authority (QCA) in UK. However, the focus is on certifying competencies demonstrated in the workplace, rather than acquired knowledge. The measured competencies reflect tasks and activities, with little emphasis on the underlying knowledge that allows a worker to successfully perform those tasks [NSSB 1999]. Starting points are made, however, by the KM certificates and degrees which are offered by various organisations as e.g. George Washington University, Dominican University, University of Denver, Knowledge Management Consortium International (KMCI) in US or Albertay of Dundee, University of Birmingham, German Chamber of Industry and Commerce (IHK), University of Chemnitz, or Copenhagen Business School in Europe. What is missing still is the common accreditation of these certificates. An initiative has been taken within the discussion of the KM certification programme in US, where the KM Working Group of the Federal Chief Information Officers Council (CIO Council) has developed 14 learning objectives for KM as a framework for training and education.

On the technological side, the HR-XML Consortium is working on the development and promotion of standardised XML vocabularies for human resources. They have recently published a standard for a competencies schema which allows the capture of competencies within a variety of business contexts. It is particularly relevant to processes involving the rating, measuring, comparing, or matching an asserted competency against one that is demanded [Allen 2001].

1.2.5 Best/Good Practice and Benchmarking

As we are aiming not only at hard standards but also at common approaches, it is relevant to consider initiatives in the area of defining best/good practice and benchmarking as well as these usually provide the baseline for achieving a synthesis: In 1997 the European Foundation for Quality Management (EFQM) undertook a benchmarking study project in cooperation the American Productivity and Quality Centre (APQC) and with Knowledge Management Network (KMN) searching for good practice in the area of KM [EFQM 1997] and just started a second study in 2001. Another study has been published by BSI (see above). APQC has carried out a series of benchmarking studies on KM in the last years and has developed a road map to Knowledge Management [APQC 2001]. In Germany, a benchmarking study has been carried out by Fraunhofer IPK and resulted in a reference model for KM [Mertins, Heisig, Vorbeck 2001].

1.2.6 Other Relevant Domains

Another domain which can be partly capitalised for our purposes is the area of eBusiness and eCommerce. Though this is a different field, several standards become relevant for KM as well because the enabling technologies used are to a certain degree the same. Typical examples are the usage of XML for content representation, or the application of security technologies for ensuring safe sharing of confidential knowledge between organisations – an issue which has been identified as a major concern for inter organisational KM [Pawar, Horton, Gupta et al 2001]. Within the framework of a CEN/ISSS CWA, a comprehensive overview about frameworks, architectures, and models for eCommerce has been prepared [CEN ISSS/WS-EC 2001].

The EFQM (European Foundation for Quality Management) aims to support European organisations in implementing Total Quality Management for achieving excellence in customer satisfaction, employee satisfaction, impact on society and business results. It has developed a model called Business Excellence which tries to include all relevant aspects in managing organisations [EFQM 1999]. The EFQM model is in particular interesting as it is a well accepted model for a common approach in a soft subject.

It is interesting to note that in discussions with industrial organisations, the value of ISO 9000 is often emphasised when debating the relevance of standardisation for KM. This is despite the fact that ISO 9000 receives continuous criticism due to the practice of many organisations to ‘implement and forget’ it. Consequently, it are ISO 9000 and the EFQM model which could serve best as successful models when discussing the general benefits of standardisation of a soft subject like KM.

1.2.7 Summary

It must be noted that most of the described standards have been influenced by a specific perspective: When differentiating the KM world in two branches of theory, namely on one side technology centred KM thinking which is mechanistic, productivity driven and based on systems implementation, and on the other side a human centred KM thinking which is based on constructivism, cognitive principles, and interaction approaches [Gaßen, 1999], the standards represent up to now mainly the technology centred KM world. Only the proposed frameworks start to open up for the human centred KM thinking – though this area has been usually the one on which the KM thought leaders concentrated. However, it must be recognised, that constructivism and standardisation might be contradictory concepts, which perhaps cannot be brought together. This needs to be investigated.

2 EKMf VISION ON KM STANDARDISATION

The European KM Forum has got a clear vision about the future of KM standardisation. In the following paragraph, this vision will be described in detail. First, the relevance of KM standards will be discussed, naming the pros and cons. The relevance will be also shown by results perceived by the KM community. At least, the business and academic needs will be pointed out.

2.1 Why KM 'standardisation'?

Standardisation in general is quite a complex venture, that is mostly discussed very deeply. In fact, the relevance of standardisation can be discussed from a number of perspectives.

In analogy, has method or process standardisation in sectors like information technology or automotive industry, lead to large benefits from all kinds of perspectives (e.g. organisation, financial, production, etc.). Compared to this relatively hard driven subjects, the domain of knowledge management (KM) consists of more soft and holistic oriented objects. For standardisation of KM, which is a relatively young discipline and deals with quite 'soft' objects, and its relevance a number of arguments are speaking against and some in its favour.

On the one hand, the aspects, that speak against a standardised KM approach are the following:

- A sound process of standardisation takes a long time and might be next to this, quite long in mature. This has to do with the compromise-able nature of standardisation and the possibility of achieving a critical mass and a broad level of consensus. Only if this broad agreement between all involved bodies (most importantly the users and stakeholders of the standardised objects) is reached, any standardisation process can be realised and successful.
- Due also to the duration of the process and the necessary preparation phases, standards are always in danger to lag behind the requirements in everyday practice.
- Furthermore, one of the most critical points concerning standardisation is the question: "what is a sensible degree of standardisation of a soft subject like knowledge management in a detailed and structured, but still useful, manner?"
- Last but not least, standards are mostly seen as a barrier for human development in terms of creativity and flexibility. People consider standards as a frame, that doesn't allow to fulfil themselves beside the given conditions. But not only in the context of creativity, also in the meaning of people's flexibility standards are seen to block these specific aspects of freedom.

Next to the points against, a diverse number of aspects speaking in favour of 'standardising' KM would be:

- One of the aspects, that speaks for a standardisation of KM is, that the activity itself will lead to more transparency, bringing all involved institutions and bodies together and thereby achieving a common understanding and common language through the process itself.
- 'Standardised' KM aspects (like common approaches to KM processes, knowledge technologies, knowledge based human resources, KM strategies, among others) will bring the fruits of KM development to a broader circle of users.
- Moreover, from a KM expert point of view, standardised KM approaches will allow the experts to use a validated European-wide (or even world-wide) common terminology. According to this, the communication in the field will be more ease of use and can start from a higher common platform.

- If some of the main components of KM are standardised, this will leave much more energy and space for creativity in case of (customised) specifications for dedicated and individual solutions.
- And finally, standardised KM basic aspects like a common shared KM framework, will be used in further research and education environments. An existing KM framework will allow future work in the KM domain to start from a higher level.

The described pros and cons are empirically based on opinions and statements taken from the KM community, through e.g. workshop results. Following figure shows results taken from one of the workshops discussing the relevance of KM ‘standardisation’:

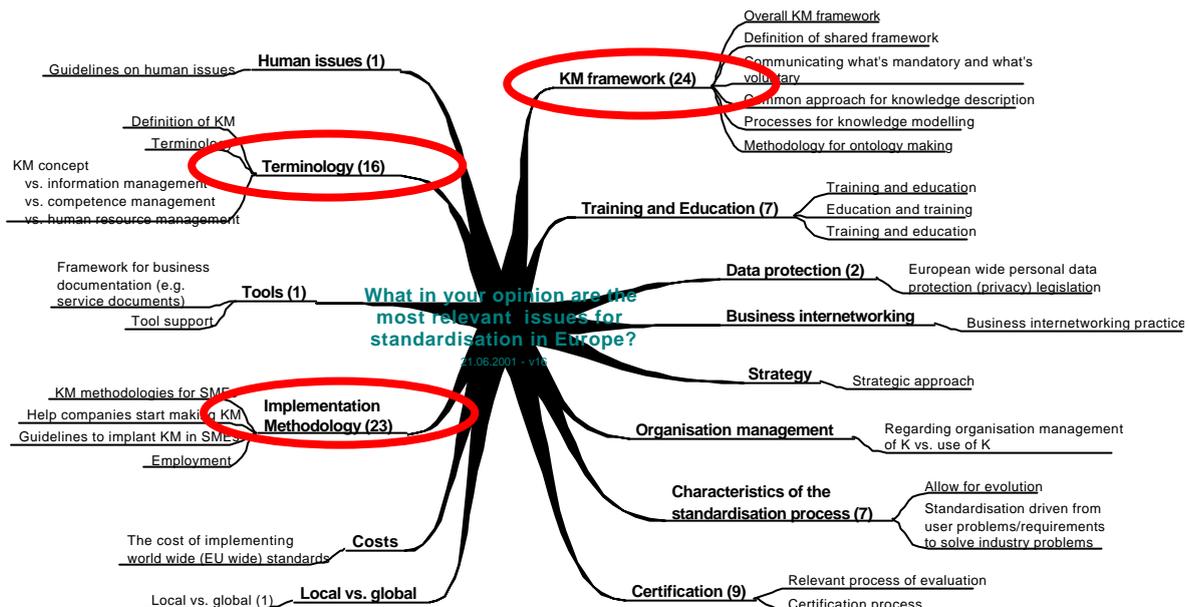


Figure 3: Example of perceived relevant issues¹

The workshop participants stated, that the most relevant issue concerning a future ‘standardisation’ of KM will be the building up of a common KM framework in Europe. Next to the KM framework, the relevance of developing a sound KM implementation methodology and the definition of a common “KM language” – a core terminology have been pointed out.

The business needs for KM standards

The new opportunities in knowledge businesses forces industrial organisations to prepare for today’s new quality of competition in knowledge management. As one of the most frequent stated wishes lots of organisations are asking for a solution of extracting an employees knowledge and save, record or store it in whatever kind of knowledge base. Preferably a large database which could be accessed via intranet, extranet or internet. However, such information databases will not automatically generate the needed knowledge at the inquiring partner’s side when retrieving an information from it. Furthermore, organisations often underestimate the high effort (cost and personnel) of feeding and maintaining such data bases. Thus, an analysis of the current industrial practice which will point out pros and cons of the diversity of existing approaches for the provision

¹ Relevant issues for standardisation in KM, results taken from a workshop held in Brussels, 14.06.01, during a European Commission concertation meeting.

of knowledge and information will be the main prerequisite for the development of a common and standardised approach. From the industrial viewpoint this new approach have to consider the:

- development of appropriate ways of recording valuable daily experiences and successful trouble shooting processes
- integration of the new approaches or SW-solution into existing applications and technological standards
- adaptation, integration or implementation of (semi-)automatically recorded standardized (already existing) reporting processes
- support and ability for knowledge sharing
- integration of the customer's knowledge
- ability of interactive system communication
- possibility of ubiquitous and mobile access by different means and devices
- global aspects and handicaps of knowledge services like e.g. hot-line services (language, different time zones, cultural differences).

However, even if above items will be realised the wish of fully extraction of an employee's knowledge in order to keep it in a company will not come true. Extraction of knowledge will always means transformation into information, but new approaches still cover high potentials for increasing today's low level of re-transformation.

The academic and research needs for KM standards

The discussion about what knowledge is, has now a tradition of about 2500 years in the occidental culture and opinions are still very different [Capurro 2000]. The uncertainty about the definition of the term "knowledge" automatically implies an uncertainty about the definition of the term "knowledge management", since people practising KM would then be managing something that is not clearly defined nor understood. A solution to this dilemma was, that academia started to come up with numerous different definitions in order to have a bases from which to start academic research².

However, over the last 10-20 years as knowledge management gained more and more attention and in particular since the end of the 80ties when the term was coined, it began to establish itself in specific domains. According to [Roehl 2000] these academic domains are basically three, namely:

- Social science
(knowledge sociology, systemic organisational consultancy, new systems theory etc.)
- Engineering science
(retrieval technology, artificial intelligence, expert systems, network design etc.)
- Economics
(organisational development, organisational learning, human resource management etc.)

Scientists or any other interested party who is new to the topic of KM and enter it by any of the above domains, will be confronted with numerous definitions of knowledge and knowledge management, and probably begin to see the "world of KM" exclusively from that perspective. This is not the worst thing to do, if one is up to achieve results particularly in that domain. However, these people will be missing the point of KM, which is about finding the optimal blend of human resources, organisational structures and I&C technologies [Bullinger et al. 1998].

² To obtain an overview of different existing definitions of the terms knowledge and knowledge management please refer to [Roehl 2000] and [Schindler 2001].

Many institutions (i.e. Open University UK, University of Maryland, Technical University Chemnitz) are already introducing academic courses and master programs revolving around KM. The editors are convinced that knowledge management has now come to a point in the academic world, at which it is important to institutionalise fundamental aspects of KM, in order to avoid mistrust among the industrial users on the one hand, and in order to avoid the impression that KM is “everything and nothing” on the other, thus allowing to foster the position of knowledge management as a serious discipline.

2.2 Towards European common approaches in KM

Based on the above mentioned arguments, the European KM Forum sees the standardisation approach as a holistic approach involving a spectrum of standard levels for specific components of KM. The following figure shows the holistic standardisation approach of KM within the European KM Forum.

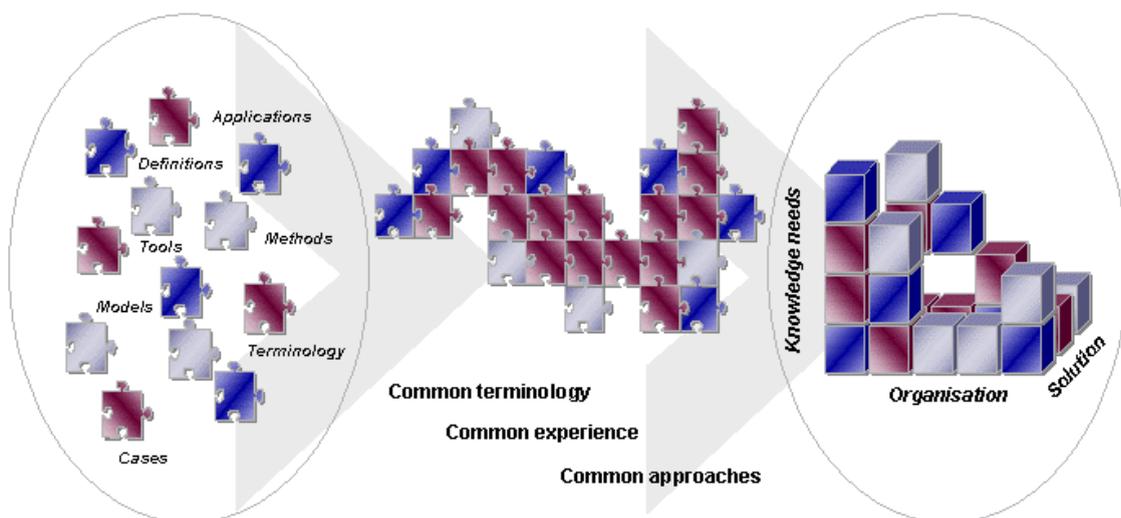


Figure 4: EKMF 'standardisation' approach ³

Due to the broad distributed, single solutions in different KM aspects of the field - representing a broad diversity of 'isles' of experience, competence - at this time (presented in the left side), some approach towards commonality seems to be relevant. In a first step of this holistic process, the most appropriate and relevant pieces are extracted and put together in a systematic, structured way to develop a common terminology based on common experiences leading to common approaches. This builds the KM framework. Out of this framework, guidelines and standards are built. Thereby different standards could be thought of for different components of the framework, like e.g. a EFQM-similar model for the holistic management approach, VDI guidelines for KM processes and CEN-ISSS workshop agreement for KM technology architectures. With this set of solutions, different organisations with various needs of knowledge will be able to solve their specific problems.

³ Refer to appropriate EKMF deliverable

The overall process has to be considered as a holistic cycle, that is enriched every time by cycling through this process and is refined through the contribution of all involved partners, e.g. the European KM community as well as business and research partners.

2.3 Towards a European KM framework

We understand a framework as a holistic and concise description of the major elements, concepts and principles of a domain. It aims to explain a domain and define a standardised schema of its core content as a reference for future design implementations. A KM framework explains the world of KM by naming the major KM elements, their relationships and the principles of how these elements interact. It provides the reference for decisions about the implementation and application of KM.

In a more abstract sense, a framework is a set of ordered representatives of cooperating objects and their relationships that provide an integrated solution within an application domain. It is directed towards explanation of a domain and making its behaviour understandable and predictable. In contrast to a theory it leaves certain space for interpretation, and in contrast to a method it does not describe complete steps yet, but only gives indications about a direction and a normative message. For practical usage it requires an instantiation.

In a practical sense, a framework is common agreement within a group of stakeholders about 'how things shall be done'. It is one side an introduction for beginners and self explanatory, and on the other side a reference for the experienced when decisions about the 'how' need to be made.

Within the overall context – namely to support the industrial uptake and academic research in KM - we can define the following requirements for a KM framework in Europe:

1. To provide a holistic view of the KM domain (in the sense of 'KM in a nutshell, what is KM, what is the mission/message and what are the typical elements')
2. To address all stakeholders in KM (SMEs, large organisations, consultants, academics, vendors, etc.)
3. To be based on broad consensus and give a neutral, non biased, and well accepted view on KM
4. To address the information needs of KM beginners as well as the need for a point of reference for KM experts
5. To provide recommendations and links for the first steps (where to start)
6. To include a core KM terminology
7. To represent the specific challenges and advantages of KM made in Europe
8. To be able to hook in other existing and/or emerging KM standards (namely 2nd and 3rd level standards as named in chapter 1.2)
9. To talk a simplistic and serious language
10. To be short and comprehensive (e.g. 15 pages)
11. To be public domain.

At the same time, we can also define what a KM framework does not need or should not need to do. This is necessary within the specification phase in order to avoid different interpretations and wrong expectations from a KM framework:

1. To provide a complete KM implementation approach up to the deepest level – as this would be instead the objective for e.g. a KM implementation standard, and even this still requires customisation
2. To describe a standardised, one-fit-all enterprise model – as there is no such existing
3. To be mandatory in its approach and to define an exclusive set of methods and tools for KM – as a set of typical principles, approaches, methods, tools is more appropriate.

The European KM Forum considers the building up of an European KM framework as the major KM ‘standardisation activity’ that has to be pushed (at least in the first phase). In parallel to this, the EKMF recommends to develop an European common language in KM – a KM terminology. Therefore, the EKMF has developed a first draft of a KM framework including modules seen as most relevant in KM future.

Following figure shows a first draft of the EKMF KM framework:

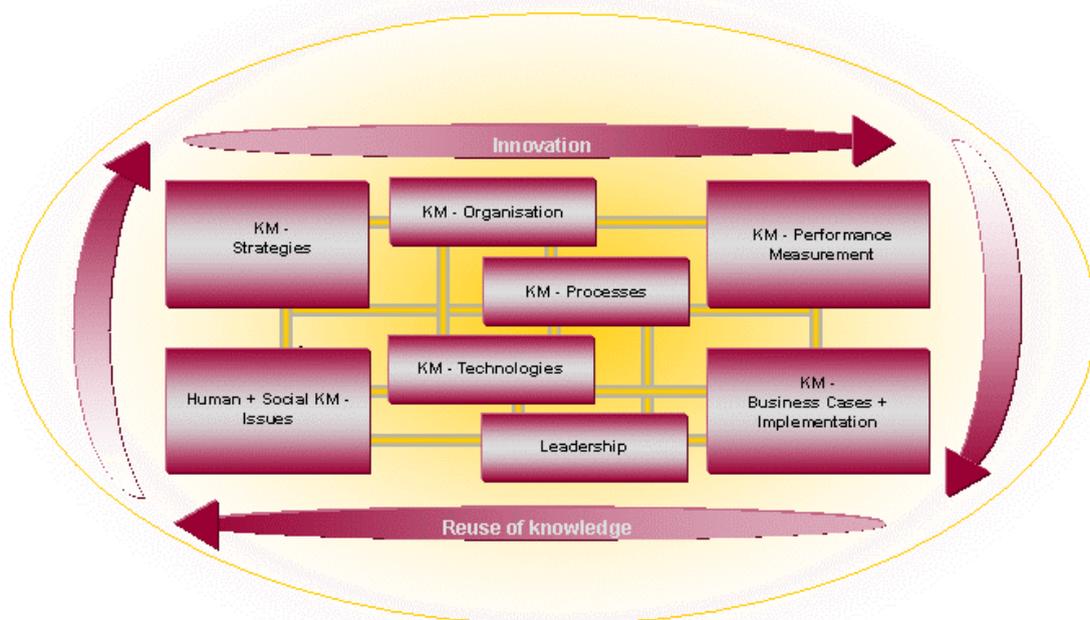


Figure 5: First draft of European KM framework ⁴

The first draft of the European KM framework – which work about is still in progress and will be further developed and improved – includes the following core modules:

KM strategies

Before starting any kind of activity, one has to have a sense of direction, i.e. which ways to go and what goals to pursue. Supporting business goals, the goals have to be clearly defined, also the direction and the manner of reaching these goals. This leads to the point, to declare a strategy especially with regards to KM.

Human + Social KM issues

Hereby, the roles of persons and human beings will be defined. A clear definition about specific human-oriented KM issues will be the result out of this module.

⁴ refer to appropriate EKMF deliverable

KM organisation

With regard to the organisational aspects, the KM framework will provide important hints to create, run and maintain a knowledge friendly organisation. This will include the structure of a 'KM organisation' as well as the roles within such an organisation. It has to be seen as a guideline to align existing organisational structures towards KM.

KM processes

This module will give answers towards the business processes and their adoption to KM. Not only served as business processes also as general processes of activities in organisations, this module will be helpful for the whole target group to be more efficient in acquiring, sharing and maintaining knowledge.

KM technologies

What technology for what purpose? This fundamental question will be answered with the KM framework module 'KM technologies'. It gives an overall overview over existing and future technologies towards KM and will be helpful for organisations to take the right decision in this 'hard' issue of KM.

KM leadership

What will be the critical success factors in introducing a KM leader within your organisation? What characteristics are desirable or presupposed? What activities are has the leader to do? All about leadership and the surroundings is part of the KM framework module 'leadership'. Appropriate answers to the above and further questions will be given.

KM performance measurement

A KM system cannot be improved, if there is a lack of measuring its performance. This module also provides metrics to get an overview over the maturity of a KM system. In addition to this, measures will be formulated to push a KM system forward.

KM business cases + implementation

This module will provide good and best practices in the different areas of KM. In addition to this, a general roadmap will be suggested. It will help organisations on their way to install and establish their KM system, as well as to support organisations in making the business case for KM. Due to the general orientation of this implementation methodology, it will be possible to customise it to specific business requirements and needs.

The relationships between the above mentioned modules of the KM framework have to be clearly defined.

2.4 Specific Beneficiaries and Benefits of Common approaches

One of the basic questions is, who will be the beneficiaries / stakeholders of a KM standard (e.g. a Common KM framework) and what will be the benefits for each of these parties. Figure 7 shows the envisioned stakeholders for a KM framework:

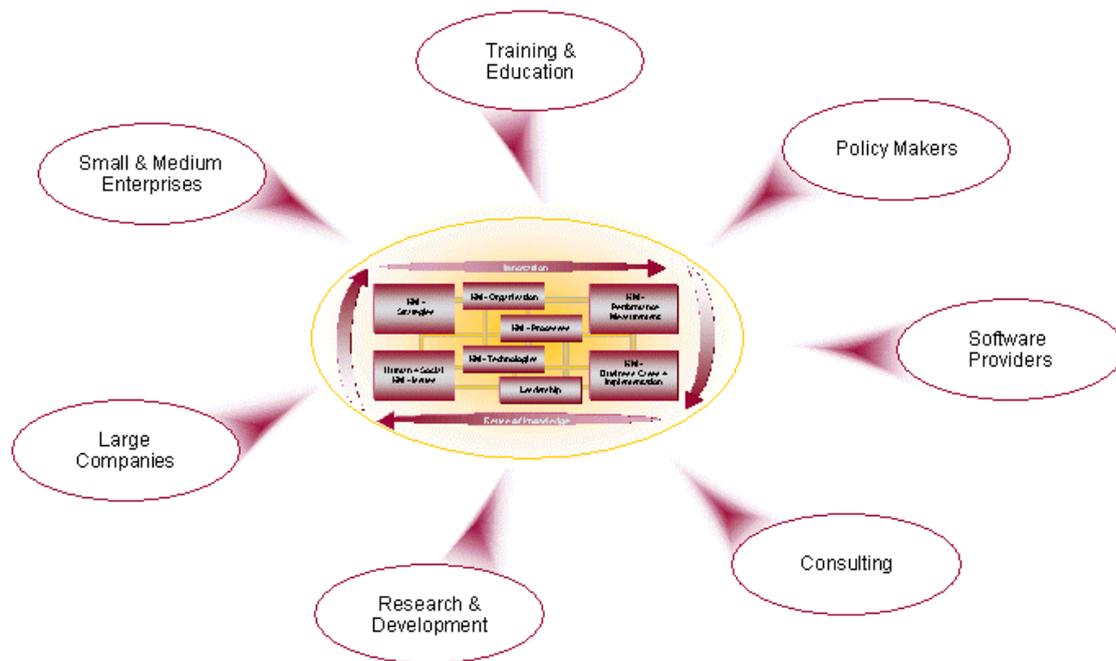


Figure 6: Potential beneficiaries of the envisioned KM standard

It is not sufficient to define the target group without discussing the benefits each out of it will profit from a KM standard. Following, a quick overview is given about the benefits for the different beneficiaries. The given examples refer to a future KM framework as ‘KM standard’:

- **SMEs – Small and Medium Enterprises**

A KM Standard will provide a quick and comprehensive overview over KM. On the one hand side it will give first ideas for SMEs as KM newcomers, on the other hand, it will be a guideline for KM experienced SMEs, for example what KM may bring to their businesses.

- **Large companies**

For this special target group, common approaches and even KM standards will pave the way for checking the maturity of their KM efforts. Through a common language which a KM standard will provide, large companies will learn from other experiences and will be able to map their own activities against others. Moreover, companies will adapt and improve their current efforts by improved insight in the power of KM and the impact on the business stakeholders.

- **Research & Development**

A KM standard – also seen as a broad accepted reference work for KM – will serve for organisations and institutes in the R&D domain as a common baseline for further RTD activities. Furthermore, due to a common language, a common KM standard will foster innovation through common shared mental models.

- **Training and Education**

With regards to the training and education sector, a KM standard will be a common guideline for future training and educational activities. It will provide answers to the questions, what will be need and necessary to teach or even to certify, when KM will be educated and trained to professionals out of all kinds of businesses.

- **Consulting**

The benefits for consultancy organisations will be the fact, that a common approach or a KM standard will always need to be customised to specific industries and be able to tailored to specific customer needs and requirements.

- **Software Providers**

A KM standard will provide the baseline for software manufacturers as well as software providers. Through customisation of the common approaches to specific industries and tailoring to specific customer needs, the software industry will be able to increase their businesses by new business opportunities.

- **Policy makers**

A KM standard provides an insight in the discipline of KM and as such it can be seen as the necessary set of instruments and accompanying paradigm for any organisation in the knowledge economy. Thus a standard might pave the way for policy makers for their support in any funding, stimulation and overall activities related to the knowledge economy and required competencies.

3 DISCUSSION AND OUTLOOK

Next to the clearly communicated vision of the EKMF concerning future KM standardisation activities, it is necessary to involve as many interested parties and organisations as possible, to accelerate the ongoing debate of KM standards towards pragmatic KM standards activities. As an appetiser for such a discussion, the EKMF suggests the following topics to be considered while discussing about KM standards.

3.1 Level of Standardisation?

Depending on the involved parties, bodies and organisations, it has to be clearly defined, what kind of level of standardisation is appreciated for a KM standard. Though it's grounded in the nature of standards, that it will mostly be a "hard" standard, it has to be discussed the level ranging from 'best practice sharing' to 'hard standards'. In parallel to this, the spectrum of different 'standardisation' instruments are very important to mention. (best practice, common approach, guideline, reference framework, standard, etc.).

As a standardisation activity is a strategic and also time-intensive issue, the following question has to be answered before starting any activities: "What (standard) is appropriate for KM now and in the future?".

3.2 Nature of Standardisation process?

The nature of the standardisation activity itself is an important issue to discuss. Will there be an open discussion, where anybody is allowed to contribute and participate, or will there be a "KM standards committee", where experts are developing the standard and the work is closed to the outer space?

What is the envisioned timeline of the process? Are there any limitations (e.g. number of involved parties)?

3.3 Who should be involved?

The EKMF is looking forward to an "open source" standard, where all interested parties are involved and able to contribute. No single person, organisation, institution, body should be the author of the standard nor be able to commercialise it.

The following questions should be clearly discussed: "Who are the stakeholders of a KM standard?"

3.4 What should be the next steps?

As an envisioned timeline, the EKMF is suggesting the following (cf Figure 7, though this is still depending on several decisions to be made, e.g. which body etc.):

- November 2001: get together of all interested parties, bodies, organisations, etc. to discuss above mentioned topics
- 2002: starting the process of standardisation in KM, depending on executing institution(s)
- Mid 2002: Publishing first results or draft
- Mid 2003: KM Standard for a KM framework and terminology as CWA available
- 2003: enlarging the developed standard to specific KM framework modules
- 2010: Europe is most competitive Knowledge Economy

As content of a KM standard, the EKMF is envisioning the following three step approach:

- Start with KM framework and KM terminology in parallel
- Continue with specific modules out of the KM framework, e.g. KM metrics, KM processes, KM technologies, etc.
- Context specific standardisation of issues like learning, experience sharing and ‘best’ or good practices.

Following figure gives an graphical overview over the potential roadmap towards KM standards.

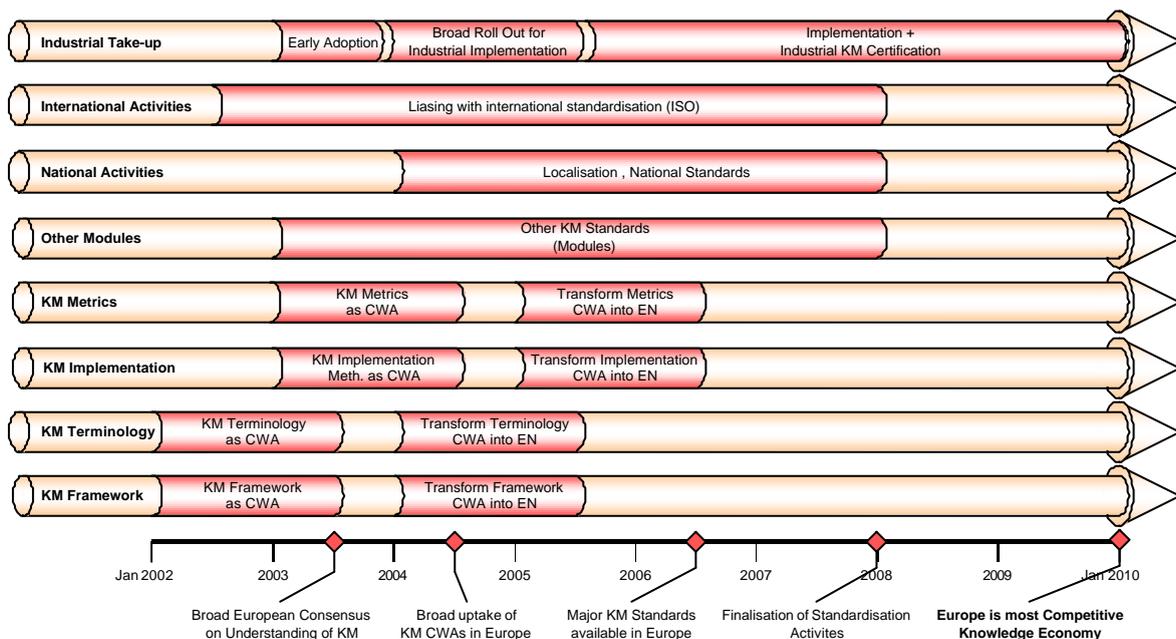


Figure 7: Potential roadmap for KM standardisation in Europe

The EKMF Consortium, November 2001

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