MaKE First Steps – How a Definition of Knowledge Can Help your Organisation

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Abstract: Suitable definitions of knowledge for particular organisational contexts are valuable for knowledge management (KM). This paper explains *why* it is valuable, *how* it can be done and discusses valuable results that have been created by doing it.

The *why* is explained in a brief discussion of relevant literature. The *how* is described through the use of MaKE First Steps (2006a). This paper summarises the process and this constitutes the methodology of the paper. The paper then describes three diverse organisational contexts in which it has been applied: a UK Fast Moving Consumer Goods (FMCG) company; a group of international postgraduate business students; and a large Chinese bank.

The outputs of this work (definitions of knowledge for these organisational contexts) are presented and discussed in detail. There are significant patterns that can be discerned which give some clear suggestions about what knowledge is valuable for organisations and should be the focus of managers investment and time.

This research gives us an insight into what organisations should focus on in terms of investment of energy, time and resources. Broadly, without being too proscriptive, they should focus on the skills and learning of the personnel that make the organisation they work for, special.

Keywords: knowledge definition, collaborative process, organizational context, skills

1. Introduction

The ability to define knowledge in a suitable way for organisations is incredibly valuable. This paper explains *why* it so valuable, *how* it can be done (the process), and discusses *outputs* that have been generated from applying the process.

Why defining knowledge for particular organisational contexts is so valuable is partly explained in Section 2 in a brief literature survey. Section 3 provides theoretical foundations that underpin the process (*MaKE First Steps*) designed by the author to address the challenge of how it can be done. Section 4 briefly describes the process of MaKE First Steps. Therefore, sections 3 and 4 constitute the methodology of the paper. Section 5 explains three organizational contexts in which it has been applied. Section 6 gives a description and analysis of the results from the application of MaKE First Steps. Section 7 is the conclusion.

2. Why a process for defining knowledge is important

There are a number of reasons why it is important for organisations to be able to define knowledge as part of their management strategy. This section discusses literature which reveals these reasons.

It is recognised that, on the whole, the valuable assets in organisations are knowledge related ones. This is apparent in a wide range of organisations in different economic sectors including car manufacture and steel and the software industry (Wiig 1993, Nonaka and Takeuchi 1999, Leonard Barton 1995, Sveiby 1997, Teece 1998, and Stewart 1998;2002) and there is a long-term trend in economies towards greater value accruing from intangible resources (Machlup 1980).

Consequently the fields of intellectual capital and knowledge management have burgeoned in significance among academics and practitioners (Sharp 2003). It has been recognised that the concentration on cost cutting without regard to knowledge strategy has been an unwise approach for the long term existence of a number of organisations (Larsen and Myers, 1999 and Standfield 2000).

However, some authors have argued that KM as a field of study and practise is confused and potentially useless (Galliers *et al.* 2001 and Galliers and Newell 2001). Arguably this view is only sustainable on a narrow definition of knowledge that is used by these authors (Galliers and Newell 2001) which does conform with many definitions used by other authors (Sharp 2003). However, the fact that there are so many different

definitions of knowledge for organisations (Sharp 2003 identifies over 20 unique ones) means that such arguments as those of Galliers and Newell (2001) will inevitably exist unless there are ways of bringing consensus and/or providing a common starting point for proper KM discussion.

Consistent with these arguments of academics are trends in practise. Organisations question the value of KM projects. This is partly because different stakeholders (who may be important players in sponsoring KM projects) have different notions of what 'knowledge' means and question whether it can be managed (Sharp 2003). Consequently, the author invented MaKE First Steps – a pragmatic foundation for KM in practise (Sharp 2006a).
Partly because of this, it was hailed as a seminal work, and upon which other KM workers should build, in the International Conference of Intellectual Capital and Knowledge Management in 2005 (ICICKM 2005) (Remenyi 2005 [ed]). This paper takes the work further. It briefly explains the fundamental assumptions and parts of the process and then focuses on outputs of the application of MaKE First Steps in three different organisational contexts.

The process is a new one that has not been extensively applied before. Therefore outputs from the research are novel and break new ground (see Section 6).

3. Theoretical foundations and assumptions

MaKE First Steps (Sharp 2006a) is a process for defining knowledge collaboratively in organisations. The approach taken in this process rests on various epistemological assumptions. This section outlines these assumptions and the theoretical background before its design and application is explained.

First, the author takes the view that 'knowledge' is defined, discerned and created by humans. Also, because humans do not always have the same view, definitions of knowledge differ. The definition of knowledge is also something that is multifaceted, changes over time, varies according to the context in which it is being considered, and once articulated, it can be something that is shared and reflected upon. In all these respects the author of MaKE First Steps agrees with Sveiby (1997) and Hirschheim *et al.*(1995).

These assumptions are also very practical in nature. It is clear from research into definitions of knowledge that there is very little consensus on the subject. A practical approach is one that accepts this as a reality and asks - "how can this be used to an organisation's advantage?" Because there is little consensus it is sensible to incorporate in the process a high degree of human input that is channelled into achieving a consensus within the organisational context where the participants work. Participants can also help to validate and refine the outcome. In light of this, this research was applied in workshops.

The scope to which MaKE First Steps can be applied in organisations is determined by the *human-determined* context that is deemed appropriate (e.g. the whole of a company, a department, a project, or in an information system development project). This is because the only vital ingredients for MaKE First Steps are willing participants in the organisation with an appropriate understanding of the context to which it is to be applied. The emphasis in this research was upon defining knowledge in the context of *organisations* where *people* work and the literature survey of definitions and related concepts reflected this. However the process itself sits above the *content* of definitions of knowledge. Section 3 outlines how MaKE First Steps works.

4. MaKE First Steps

The design of MaKE First Steps was based on certain premises, most of which, map from the theoretical foundations and assumptions:
1. The process is to *facilitate* the production of a definition by the participants;
2. The *participants* should refine and shape it and ultimately be happy with it;
3. Information of experts on the concept of knowledge would be joined with 'where the participants are coming from' after the participants have expressed their own view;
4. The process is allied with establishing a context for KM in the organisation;
5. An acceptance that the definition may only be relevant for a certain period of time;
6. An acceptance that there maybe disagreements that may need to be addressed in the process;
7. Adopt a practical view accepting that users time is limited and;

8. That the process seeks to help users navigate and 'tap into' a body of work about the concept of knowledge in a relatively simple way

There are three key aspects to the process which became clear from the first application of the process, reflection and feedback on the process (Sharp 2006a). These are:

1. Domain for Definition;

2. Definition Selection and;

3. Hone Definition to Taste.

Before these key aspects of the process are conducted the participants decide who will be an arbitrator (Knowledge Arbitrator) who can resolve disagreements if required in the group. Also, the time period available for the process is determined, participants define knowledge on blank sheets of paper and identify any current statements or definitions of knowledge they may have created already.

For a full explanation of all the possible steps to the process see Sharp (2006a). The remainder of this section will summarise the key aspects of the process noted above.

4.1 Domain for definition

This stage is the one where the context for which the definition is determined. The boundary of the context is people-dependent. Once the context has been determined, suitable employees can be chosen to participate in MaKE First Steps. A suitable participant is a person who has an overview of the context that has been chosen. Two, three or four participants are required. Input from more than one person normally helps in drafting. A group that is no bigger than four in size is practicably easy to manage.

4.2 Definition selection

This stage is where participants select definitions of knowledge that have been devised by experts. Suitable definitions are selected from a comprehensive list of definitions (Sharp 2006a) and are used as a starting point for creating a definition for the participants' context.

The facilitator and participants may use visual tools which categorise definitions of knowledge to do this (Sharp 2006a).

The selected definitions are copied, pasted and listed on a computer in a word processing package. The participants can then highlight parts of the definitions that they wish to include in their final version. Once this is done the participants complete MaKE First Steps by honing their definition.

4.3 Hone definition to taste

The final stage is to hone the definition of knowledge and create a final version. This stage is iterative and is illustrated in Figure 1.

This is a key aspect of the process because it is important for participants to tailor the definition to their satisfaction. In doing so, the participants become more obviously 'owners' of the definition and make it relevant to their context. It also brings closure to the MaKE First Steps process.
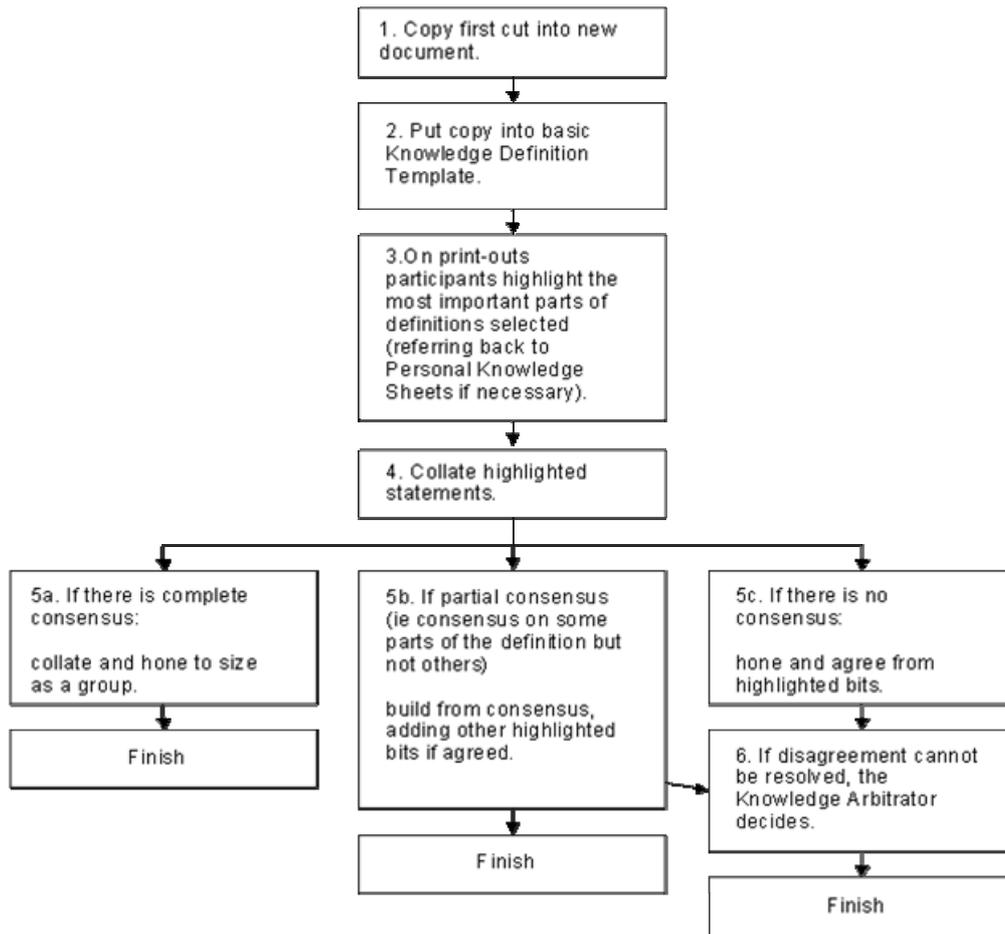
Figure 1: Hone definition to taste

The key features to note about the honing process are below.

1. Collate Highlighted Statements (box 4 in Figure 1)

2. This refers to the process where participants look at definitions of knowledge that they have selected from a list and then they highlight statements they want to include in their definition. Then they collate their highlighted words into one coherent definition.

3. At first, this is done by inclusion of 'AND' between the various parts of the definition. During the honing process unnecessary words are removed.

4. The process of honing takes place using a computer and word processing package.

5. Changes are made only if there is consensus among the participants.

6. The honing process relies to some degree on the part-intuitive process of drafting.

7. If there is a disagreement during the honing process the Knowledge Arbitrator will resolve the disagreement and move the process towards its conclusion.

This process has been applied in different contexts. These contexts are described in the next section.

5. Three contexts

This paper discusses three contexts in which the MaKE First Steps process has been applied.

5.1 FMCG

The company in which the first implementation of MaKE First Steps took place is a major UK FMCG manufacturer and distributor. It makes and distributes FMCG branded goods. It has several brands within the 20 top-selling grocery brands in the UK and holds major UK franchises.

A workshop was the context in which MaKE First Steps was applied. There were seven people present at the workshop: four employees, the author and his two PhD supervisors. The four employees held different positions within the company. One was a newly appointed IT Project Manager, who was introduced to the

project. Another was an IT Development Programme Manager, who had been involved in the negotiations about the project over the previous eleven months. There was also an Insight Resource Manager and a Head of Category Insight, who had an overview of the domain to which the project would be applied.

The exact domain to which MaKE would be applied had not been articulated before MaKE First Steps was implemented. However, the IT-based KM project was being undertaken across the marketing and sales functions of the company, and two of the employees in the workshop were overseeing that project. It was decided that this project would relate to the area of the company over which they had an overview, and that they would be the participants involved in MaKE First Steps. Those who were not directly relevant to the domain, for which the definition was being created, only helped with the honing of the definition.

An agenda was agreed for the workshop. It was agreed to allocate three and quarter hours in total for conducting MaKE First Steps. MaKE First Steps was only applied once.

5.2 International business school

MaKE First Steps was next applied within an international business school called Regent's Business School London in a postgraduate class.

Regent's Business School London is a new business school which is in its tenth anniversary. It is situated in private grounds in Regent's Park. The postgraduate department comprises students from across the world from approximately 29 different countries. The school applies a learning philosophy that conforms to an action research approach that underpinned the development of MaKE (Sharp 2006b).

The domain in which MaKE First Steps was applied was within a module called 'Organisational Effectiveness' run in 2005. The process was applied in a workshop where the concept of 'knowledge' was considered and applied to a case study of General Electric. The KM workshop comprised of 3 groups of 4 students from 6 different nationalities, the majority from the Indian sub-continent. Most of the students were between the ages of 22 and 26 years old and worked part time in family businesses.

MaKE First Steps was applied once in each group in a session of 3 hours duration.

5.3 Chinese bank

MaKE First Steps was also applied among a group of 25 delegates from a major Chinese bank in a day long workshop run by the author in London.

The Chinese bank specialises in products that assist clients in the agricultural sector. It employs over 50,000 employees and the delegates came from across China. The delegates were all middle managers seeking KM advice within the context of their organisation. All the delegates, except for one, were between the ages of 25 and 35.

This work took place in the summer of 2006. MaKE First Steps was applied once in each of the 5 groups of delegates.

The total number of people involved in producing the definitions described in sub-sections 5.1 to 5.3 was 43.

6. Description of the results of application of MaKE First Steps to the three cases

The rest of this paper will focus on the *outputs* from the application of the MaKE First Steps process (i.e. the definitions of knowledge).

Table 1 (overleaf) reveals the definitions of knowledge the groups produced. The author has created an identity number for each definition (first column in Table 1). The second column refers to the three contexts (see above) in which the definitions were produced.

The next section provides an analysis and discussion of these results.

Table 1: Results of application of First Steps

Definition Identity Number	Context	Definition of Knowledge
1	See 5.1	"the integration and reuse of ideas, experience, skills, intuition and lessons learned that influences our problem solving, decision making and the way we work to continually create tangible outcomes of brand value and business worth."
2	See 5.2	"Knowledge is an intangible asset and a spiral process of sharing information with each other" Group 1
3	See 5.2	"Includes the ideas and experience known by a group or an individual in an organisation. This includes awareness of the structure, processes, technology and the people" Group 2
4	See 5.2	"A continuous process of learning from experiences, collecting information, recording insights to measure and enhance performance for the effectiveness and efficiency of the organisation." Group 3
5	See 5.3	"Knowledge is an understanding or information that has been obtained by study or experience and that is either in a person's mind or possessed by people generally which can be applied to a business as a sort of intangible asset to run the business more scientifically and effectively" Group 1
6	See 5.3	"Knowledge is an important intangible asset which can bring a large amount of value to the organisation. It includes science, technology, information, experience, management talent, concepts and adjudgement, etc., which are essential elements for efficiency promotion, organisation, innovation and stronger competition, power advancement and are used to conduct the organisation's behaviour. The main character of knowledge is easy to be learnt, spread and transformed in the organization." Group 2
7	See 5.3	"It is a kind of special intangible asset. It consists of experience, know how, technology, insights etc Through effective use, it can bring productivity, creativity, competitive advantages, effectiveness and profits etc" Group 3
8	See 5.3	"Knowledge is [an] intangible resource that can be integrated and organised. It represents the fruits of the human resource which includes insights, skills, experiences, procedures and diversified cultures. It is an essential resource to improve the efficiency of organisations and to make its development sustainable and strong." Group 4
9	See 5.3	"Knowledge is a kind of asset. It consists of experiences, thoughts, creative ability, intelligence and a set of insights which are known by a person or group of people in a company. It is very important for a company's efficiency, competition and future development." Group 5

7. Analysis and discussion of results

This section analyses and discusses the results using different approaches.

The first approach is a word count. This is an approach that can be applied to the analysis of qualitative data that is a relatively simple way of categorising it (Saunders *et al.* 2007). All the definitions in Table 1 were analysed to see what, if any, words were repeated, and if so, how many times. To determine this, each word (other than 'knowledge' and prepositions) were counted. Some words can be truncated. For example 'created' has the 'trunk' of 'creat'. This trunk can be used to form a number of different words by the addition of different endings. For these words, the truncated stem of the word was used in the word count find. The results of this simple approach technique are given in Table 2.

Table 2: Words used more than once in definitions of knowledge

Repeated Words (alternative spellings are in brackets and truncated words are identified by asterisks)	Number of times word repeated in definitions
Experience(s)	8
Organis(z)ation	8
Intangible	5
Asset(s)	5
Information	4
Efficiency	4
Insight(s)	4
People / person	3
Learn*	3
Technology	3
Business	3
Etc	3
Resource	3
Process*	3
Creat*	3
Ideas	2
Skill(s)	2
Science / scientifically	2
Effectiveness	2
Value	2
Group	2
Essential	2
Competition	2
Integrat*	2
Development	2
Strong*	2

In the definitions of knowledge in Table 1, the words experience(s) and organis(z)ation are used more than any other words. This suggests most of the participants considered experience as an important aspect of knowledge, and that experience and knowledge are linked. It also suggests that they focused on knowledge relevant to their organisation. This is probably explained by the environment in which the research was conducted.

The next most popular words were 'intangible' and 'asset(s)' which have a count of five each. In the majority of definitions knowledge is considered an intangible asset, and a number of participants attempted to suggest where it resides in an organisation. Where this occurs, most suggest that it resides or derives from people. Virtually all the other words that are repeated relate to intangible aspects of knowledge that are people-centric (not computer-centric or paper-based).

The other repeated terms (i.e. etc, strong, business, competition, process, and technology) indicate that the participants believe that knowledge is something that has many different qualities / characteristics that can be added to, and that it provides competitive advantage. Some suggest that it is also related to technology and processes.

Another way to analyse the results is to categorise the content of the definitions. One way to do this, is to see what forms of knowledge participants refer to. Sharp (2003 adapting Snowden 2002) suggested that knowledge can exist in a number of different forms in an organisation. It can be tacit. By this, the author refers to what is within someone's head / body and may not be possible to articulate. It can also take the form of being manifested in speech and action. Finally, it can also take the form of physical objects or be expressed in writing in diagrams or text. Table 3 summarises the content of the definitions using these categories.

Table 3: Forms of knowledge referred to in the results

Form of knowledge	Which definitions refer to these different types of knowledge (identity numbers from Table 1 used below)
Tacit (within someone's head / body and not necessarily possible to articulate)	1, 2, 3, 4, 5, 6, 7, 8, and 9
Manifested in speech and action	1, 2, 3, 4, 5, 6, 8 and 9
Formed into physical objects or be expressed in writing in diagrams or text	2, 4, 6, [in each case referring to information generation / use / sharing]

All the definitions refer to the tacit nature of knowledge and in all except one case, the definitions refer in some way to communicating it by speech or action. In three cases it is *inferred* that it is something that should be expressed in writing or on paper in some way.

The results can also be analysed by scanning the definitions and repeatedly reading them to discern whether there are any common themes. There seem to be five common themes that are referred to in all, or virtually all, the definitions. These are that knowledge:

- is human-based and particularly refers to the use of skills learnt through experience; ['Skills' refers here to what employees can actually do in a company. Broadly this includes virtually any activity described by a verb.]
- is bound up with its organisational context and valuable when tailored to it;
- improves the effectiveness, value and/or competitive edge of organisations;
- is particularly valued when it is applied in its organisational context and;
- is also valued when it is possible to share it.

Also, a couple of definitions suggest the integration of knowledge in an organisation using technology also helps.

These observations corroborate the trends noted using different approaches to analysing the primary data.

Finally, the author observed how the different participants reacted to their own definitions once they had created them. In all cases the participants found the definition itself a focus for conversation about the relevant organizational context. In the case of the FMCG, it publicized in the organization and used in the implementation of MaKE (Sharp 2003). Among the international students it was also used to devise strategies for their case study. In the Chinese bank it was used by delegates to generate ideas to change the organization which are being implemented. The way the participants used their definitions suggests they think that relevant definitions of knowledge can really help make plans to manage knowledge in organizations. These findings corroborates with the others referred to in this section.

8. Conclusion

The results of this research reveal that definitions of knowledge for organisational contexts are valued by participants. MaKE First Steps was implemented with very different participants in terms of culture and organisational context. However, there are some common strands to their definitions of knowledge that accompany differences. The common strands are that knowledge is:

- is human-based and particularly refers to the use of skills learnt through experience;
- is bound up with its organisational context and valuable when tailored to it;
- improves the effectiveness, value and/or competitive edge of organisations;
- is particularly valued when it is *applied* in its organisational context and;
- is also valued when it is possible to share it.

The particular skills that are referred to are problem-solving, insights, learning, ideas, structures, and judgement. The processing of these things, integration and communication of them along with the technology completes the picture of what is valued.

So what should we learn from this about the nature of knowledge and how to manage it in organisations? This research gives us an insight into what organisations should focus on in terms of investment of energy, time and resources. Broadly, they should focus on the skills and learning of the personnel that make the

organisation they work for special. These areas should be nurtured, tailored and applied to the organisation's context to make it more effective for its purpose(s). The processing of information and sharing ideas using technology should support the above.

This research in conjunction with MaKE (2006b) also shows that defining knowledge for specific organisational contexts is useful in identifying what to focus on and how to do it.

Note about MaKE and MaKE First Steps

MaKE stands for 'Manage Knowledge Effectively' (Sharp, 2003). The author wishes to acknowledge that this is not to be confused with an acronym similar, but different to this one, which is described in Winfield, M. J., Basden, A., and Cresswell, I. (1996), Knowledge Elicitation Using a Multi-Modal Approach, *World Futures*, Vol. 47, pp.93-101. MaKE is a trademark owned by its author, Peter Sharp who also designed and created MaKE First Steps. Michael Simm helped 'test' it prior to taking it to into a commercial environment. Alan Eardley and Hanifa Shah were Peter's supervisors.

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