Understanding Knowledge Management

A Parachute Consulting Guide

An exploration and explanation of Knowledge Management with case studies from leading Public Sector KM exponents

Parachute Consulting

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Foreword

The starting points for this paper were a realisation that Knowledge Management (KM for short) was and is a misunderstood discipline that is often unnecessarily over-complicated and a belief that within the UK public sector there are areas of excellent practice from which others can learn. By linking these two thoughts together there comes an opportunity to demystify KM, present a toolkit for others to build their KM on, and use real-world examples from the public sector to demonstrate the art of the possible.

A third factor is the increasing focus on Information Management and especially Information Assurance, given the various problems that the Government has experienced over the past few years, both of which can be addressed through the application of Knowledge Management.

We have not tried in this paper to offer a critique of KM in the whole of the public sector. Instead, we have sought out a number of organisations and individuals that have embraced KM and have positive and valuable success stories as a result. Our aim has been to produce a report that informs and educates, using public sector case studies to support the major themes and show that the public sector has areas of great experience and expertise.

A large number of organisations have committed time and energy in helping us to produce this report and we have attempted to use as much of their input as we can. We would like to thank everyone for their tremendous help and their shared belief in sharing their knowledge for the wider benefit of others; our particular thanks go to the following organisations (you can find a list all of the contributors in the Annex):

- Department for the Environment, Food, and Rural Affairs
- Department of Health
- Improvement and Development Agency
- Natural England

This report is written in three parts: the first looks at KM in the round, discusses definitions for KM and ways to approach breaking it down into manageable pieces; the second briefly considers the role and nature of a KM team; and the third part goes into some detail about establishing KM initiatives. Throughout, case studies, examples, and anecdotes are used to support key points.

We hope that you find this paper both interesting and encouraging.

Jonathan Brassington & Dan Hartropp, Parachute Consulting Limited, July 2008

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Section 1. What is Knowledge Management and why should you consider it?

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In this section we explore the reasons for embarking on a knowledge management journey.

We then go behind the KM label to create a definition for KM that is pragmatic and useful.

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Section 1. What is Knowledge Management and why should you consider it?

If the scope and scale of Knowledge Management seems massive, that's because it is. Everyone has a slightly different definition, a slightly different approach, and slightly different models and concepts. Whilst at first this size and complexity can seem both confusing and daunting, it actually provides a clear and strong message: essentially, KM is what you want it to be; it is as broad and deep or as narrow and shallow as you need.

Using Knowledge Management techniques can bring significant benefits to an organisation, provided that they are used with a clear set of business performance objectives . KM can help to:

- **Reduce costs**
- **Increase effectiveness**
- **Improve quality**
- **Drive innovation**
- **Reduce operational risks associated with information management**

This paper is therefore useful for anybody engaged in making strategic business decisions, designing and running business change programmes, or improving operational performance.

What is important is that you have a definition that suits you and your organisation and an approach (or more likely a set of approaches) that will deliver for you.

You need to decide why you are talking about KM, work out what you need, and – in our opinion – keep things simple. There are tools and techniques that can help reduce the scope down to something more manageable.

This paper aims to act as a guide to understanding and tackling KM. It provides help on determining your motivations for considering KM, moves on to describe some key facets of a KM team, and then gets stuck in to the difficult area of how to define the scope of KM for an organisation.

Throughout the paper we use anecdotes and case studies from people and organisations that have experience of succeeding with KM, bringing things to life.

This paper is written for people who are just embarking on establishing KM in their organisation, have just started thinking about KM and are wondering what to do and how to start, and who are interested in furthering their knowledge of KM concepts and constructs based on real-world examples of success.

Throughout, we will refer to our simple 7-Step model to guide you through the maze of Knowledge Management. We will describe each Step as we get to it.

Step 1.	**Drivers**
Step 2.	**Definition**
Step 3.	**Evaluation**
Step 4.	**Focus**
Step 5.	**Knowledge Assessment**
Step 6.	**Plan for Change**
Step 7.	**Measure and Refine**

Starting points

In an ideal world, a KM journey starts in the boardroom, with a collective realisation of the benefits that good KM can bring to the organisation and a commitment to provide adequate resources to deliver carefully scoped business improvements over a realistic timeframe. We'll pause for a moment to let you recover…

More likely, the starting point will be one of the following:

- Recognition at board level of the potential of KM to improve business performance and a decision to explore further;
- Interested reaction after seeing KM (or the term KM) used positively by another organisation;
- A target-based imperative that references KM and means that something needs to be seen to be done;
- Desire to try to bring some new tools and techniques to the organisation;
- A response to a crisis involving data and/or information and a need to conduct some kind of audit;
- The purchase of a software tool and the need to get some value out of it.

Most of the above are good places to start. In any event, the most important question to ask is why you are considering KM.

The Government's current concerns about information management and information assurance is a good example of a starting point for KM: it involves information, the sharing of that information, and the ongoing management of information. The models that we have developed, which we introduce later in this report, pick up these themes and show how KM can help.

DH Department of Health

The Department of Health's KM journey started as a strategic target.

The department recognised that KM could offer significant value and so in order to drive KM set it as a top-level organisational target.

This gave the KM programme significant visibility and senior support.

NATURAL ENGLAND

The starting point for Natural England was particularly challenging.

Formed from three different organisations, each with their own KM strengths, Natural England's initial business strategy recognised the need to support an evidence-based organisation and so a KM strategy for the new organisation was drawn up.

Activity following the KM strategy was largely in support of the organisational design plans, which had a significant focus on creating a new single organisation from the three legacy ones. KM activities therefore included networking, knowledge sharing events, and establishing a corporate directory.

So, as well as being an overall strategic aim, KM also helped to solve a pressing business problem.

Step 1. Drivers

Understand why you are considering Knowledge Management

This is one of the few questions in KM which only has one valid answer. If you're not doing KM to improve your business activity in some way stop, take a couple of steps back, and start thinking again.

Your reasons for considering KM may be much more specific – for example, a problem in a particular business area – or very general (such as for the target-based driver mentioned above). You may not actually have a reason other than that you know KM is something that is at the heart of a successful organisation and you believe that you are not as effective as you could be.

The important thing to realise is that KM is not an end in itself. We will discuss this later, as it plays a key role in selling KM to the business: KM is not something else that you do on top of your usual business activities; it is how you do what you do.

Understanding that means that we can move on…

What is Knowledge Management?

There are many definitions of KM, and our case study participants are no exception: each has taken a definition that suits its needs, often based on models and concepts developed by other KM professionals.

We introduce our own models in Section 2 'Approaching KM' and it is based on the very simple concept of spinning KM around: the management of knowledge immediately gets you thinking about what knowledge actually is, and you need to get a handle on that before you can start to understand how you can manage it. The term KM is not often thought of in this way – instead KM is seen as a badge, a label, a bit of jargon. Spinning it around gives it more meaning and makes it more accessible. Section 2 addresses Knowledge in more detail, too.

In the boxes on the following two pages we briefly discuss a couple of the more common definitions, highlighting some of the similarities and differences between them, and drawing on examples from our case studies. Whilst these models are interesting and useful as a starting point, most need to be heavily customised to provide practical real world value. We found that one of the main failings of most of them is that applying them in a real world setting is difficult, as they do not enable you to work out where to start. This was the inspiration behind our models.

Ikujiro Nonaka's SECI model

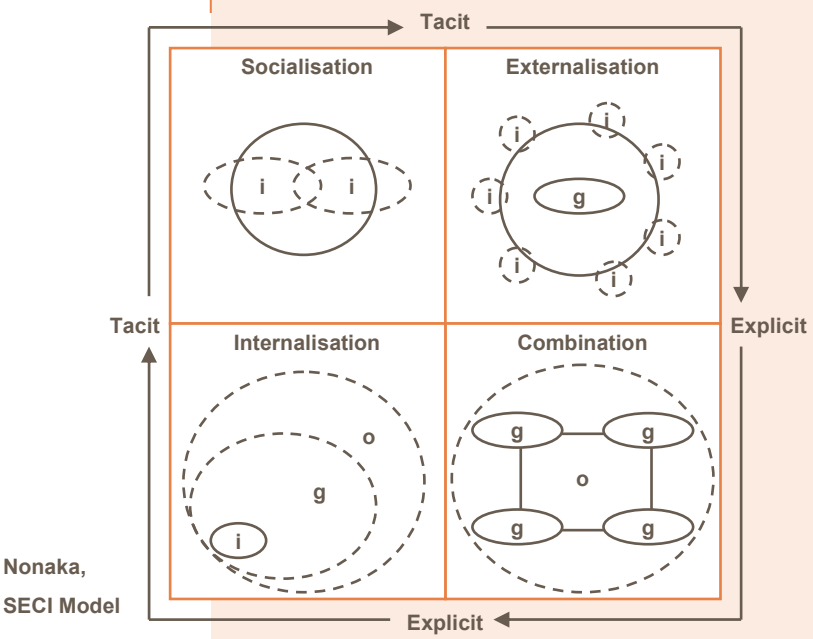
Since the mid 1990s, when knowledge management became established as a discipline, a great many models, frameworks and theories have been developed. They all have similarities, but at the same time they are all slightly different, which can be bewildering for someone looking for the perfect model to apply to their organisation.

In part, the large number of differing models is due to the fact that every organisation is different and so requires a slightly different model to all the others. Nonetheless, there are a number of models which aim to describe aspects of knowledge management at a high enough level to be applicable to the majority of organisations.

It is important to understand that in order to make the concepts accessible and understandable; these models simplify the issues around knowledge management and assume idealised conditions.

The first model we will consider is Ikujiro Nonaka's SECI model, which is arguably the best known and most frequently cited of all the knowledge management models. The model was developed in the mid 1990s and aims to show a spiral of knowledge creation and sharing at an organisational level. Essentially, the model depicts the following four phases of knowledge conversion:

- **Socialisation** (People coming together to share the knowledge in their heads. In the diagram, 'i' represents an individual)
- **Externalisation** (Converting knowledge in people's head into a form that can be easily communicated to others, such as writing it down. 'g' is for group)
- **Combination** (Bringing together different bits of captured knowledge and creating something new. The organisation is 'o')
- **Internalisation** (Taking external knowledge and learning from it – so it exists in an individual's head, as well as on paper)



Nonaka, SECI Model

This very simple way of looking at the complex world of knowledge management is useful, as it allows us to break the complexity down into more manageable sized chunks and provides a way to separate out the individual activities that make up knowledge management.

More information about the SECI model and the concept of "Ba" which goes with it can be found in "The Concept of Ba : Building a foundation for knowledge creation", written by Ikujiro Nonaka and Noboru Konno for the Spring 1998 edition of the California Management Review. A web link can be found in the annex at the end of this report.

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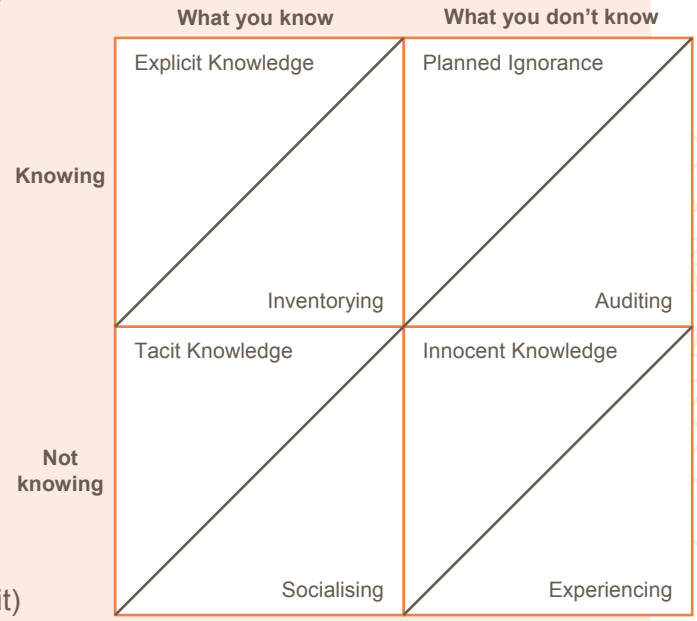
Michael Earl's State of Knowledge model

Another way of looking at knowledge management has been proposed by Michael Earl. Where Nonaka's model is more to do with converting and creating knowledge, Earl's model looks at states of knowledge and identifying what you know (or don't know). The model is summarised in the diagram below and shows four states of knowledge management:

- **Explicit Knowledge** (Knowledge which the organisation is aware of and can keep track of – usually in the form of written words or data)
- **Tacit knowledge** (Knowledge which exists in people's heads, so although the organisation has the knowledge, it doesn't necessarily know)
- **Planned ignorance** (the organisation does not possess the knowledge, but is comfortable with that)
- **Innocent ignorance** (the organisation is unaware that there are gaps in its knowledge, and because of this can only respond to situations by experiencing them)



Michael Earl, State of Knowledge model

Earl has associated activities with each of these states, which can be summarised as follows:

- **Inventorying** (keeping a record of what you know, so others can find it)
- **Socialising** (sharing tacit knowledge with others without writing it down)
- **Auditing** (mapping your knowledge to find the gaps)
- **Experiencing** (responding to events when you didn't realise there was a knowledge gap)

As with the Nonaka model, this simplistic way of looking at knowledge management has its uses, in that it provides a clear and accessible way of talking about different states of knowledge and the activities that go with them.

A more detailed explanation of Earl's model, along with a useful discussion of a number of knowledge management models can be found in Despres and Chauvel's book "A Thematic Analysis of the Thinking in Knowledge Management" – details and a web link can be found at the end of the report.

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Section 2. Approaching Knowledge Management

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KM is a broad and deep topic; we explore techniques and approaches for breaking the topic down into more manageable pieces in order to focus on improving business performance.

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While a simple and idealised approach has its place, it usually means that high level frameworks such as those from Earl and Nonaka cannot be applied directly to real world situations, something that drives organisations to develop their own models and terminology, which in turn makes the direct comparison of specific organisational models difficult.

To overcome the difficulties posed by models that are just a little too theoretical and to allow us to include case studies from organisations that have constructed their own models we have developed a model that is detailed enough (like most organisational models) to be used in a practical way, but also generic enough (like most theoretical models) that it can be applied to all organisations and can be used alongside any internal organisational models which might already be in place.

I&DeA improvement and development agency

Both the Improvement and Development Agency (IDeA) and the Department of Health (DoH) needed models that were more real than the theoretical ones that are widely available – both organisations have separately come up with their own models that allow each of them to frame their KM work.

DH Department of Health

We provide more information about the practical application of our model in later sections of this report, but first we introduce some theoretical models that are the building blocks of our approach, to help provide some insight on the subject of knowledge management and the different ways of looking at it.

Step 2. Definition

Create a definition of Knowledge Management that suits your business

Wherever you are starting from, it is important to apply a consistent definition of KM across your business, so that everyone knows what you and they are talking about – and, equally importantly, everyone knows what they are not talking about.

As with most KM things, the exact definition does not matter so much as the fact that it is well thought out, appropriate for the needs of the business, and consistently applied.

Practical ways of defining Knowledge Management

Over the next few pages we introduce a series of simple techniques that start to break down the problem of Knowledge Management in order to make it more comprehensible and more accessible.

Our techniques have three broad themes:

- Understanding Knowledge – if you don't understand knowledge and have a clear and simple definition of it, how can you manage it?
- Understanding the KM lifecycle – knowledge moves through different stages with each stage needing different management approaches and techniques
- Understanding your own organisation – knowing which parts of your business need to be addressed and which others demonstrate good practice

Tacit Knowledge versus Explicit Knowledge

One of the most common ways of categorising types of knowledge and knowledge management activities is to consider tacit and explicit knowledge separately. This is an approach that both Nonaka and Earl have followed in developing their models and has considerable merit from a practical point of view.

Tacit knowledge exists solely in people's heads – it is what they "know" in a traditional sense. Explicit knowledge is that which has been converted into a form for easier communication, usually some variation on the written word – books, lists, websites, emails, documents – or diagrams and pictures, including video.

The main advantage of considering tacit and explicit knowledge separately is that different techniques are applicable to each. For instance, if we were trying to audit our organisation to look for gaps in our knowledge, we would need to use different techniques to assess written knowledge as compared to the knowledge in people's heads.

Written knowledge, particularly if it is well organised, is relatively straightforward to audit, catalogue, and assess, but getting inside people's heads is a much trickier proposition.

Examples of techniques that can be applied to the management of tacit and explicit knowledge will be covered in a later section of this report.

defra
Department for Environment Food and Rural Affairs

The Department for the Environment, Food, and Rural Affairs decided that the most important area for them to focus on was tacit knowledge.

They have created a KM approach that aims to maintain and retain the knowledge that their staff have and to enable Defra project teams to capture valuable learning to be shared with other projects.

KM Activities and the KM Lifecycle

Drawing on the types of theoretical frameworks we have discussed previously and the models used by our case study participants, we have developed a knowledge management framework that takes account of how organisations actually develop knowledge management programmes.

In creating the model we have struck a balance between avoiding something so generic it cannot be practically applied and something so detailed that it becomes cumbersome and resource intensive to use.

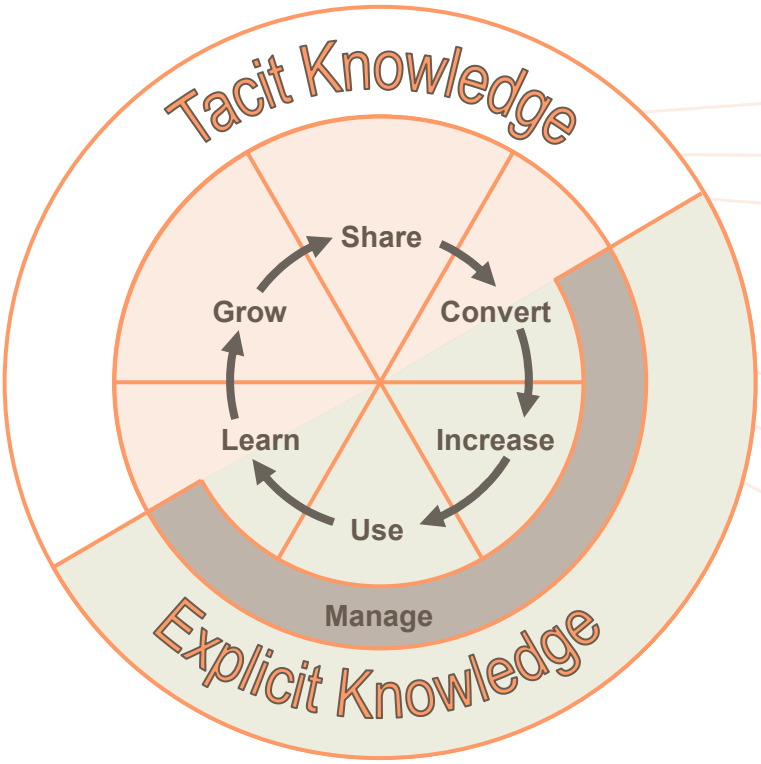
We will discuss how to apply the model in later sections; for now it is enough to understand that the broad approach is to focus on areas of the business with the biggest scope for improvement from a knowledge management point of view.

Breaking the problem down into activities, knowledge types, and enablers helps achieve this by building up a progressively rich picture of an organisation, one dimension at a time, using the information gained from each dimension to focus effort when considering the next. In this way, effort is not wasted by considering all dimensions for all parts of the organisation.

The seven knowledge management activities in our model are grouped into three dealing with tacit knowledge and four dealing with explicit knowledge.

The Tacit and Explicit sides of the model are essentially mirror images of each other. The choice of labels ('Share' as opposed to 'Use' for example) is very deliberate and highlights the fact that although the Tacit and Explicit spaces are clearly related, the way that knowledge is addressed is very different.

This is exemplified by the addition of "Manage" on the Explicit side, something that does not apply to Tacit knowledge.



Grow	Creating new tacit knowledge, either by bringing it on from outside the organisation (for example, by reading a book, taking a non-vocational course), or by collaborating to create new solutions to problems
Share	Distributing knowledge (information, skills, etc.) around the organisations, thereby multiplying the amount of tacit knowledge without actually creating anything new
Convert	Taking tacit knowledge and making it explicit for easier communication and/or storage (for example, by writing it down or drawing a diagram)
Increase	Creating new explicit knowledge, either by bringing it in from outside the organisation (such as buying a book for a company library) or combining existing explicit knowledge in a new way
Use	People in the organisation actively using the explicit resources available in an organisation (for example, reading pages on an intranet, reading a notice on a board). This will spread knowledge around but not create new knowledge
Learn	The process whereby people no longer have to refer to a specific piece of documented knowledge (for example, someone taking a CBT course to improve the way that they do their job). This completes a knowledge circle as it creates tacit knowledge from explicit knowledge
Manage	Overseeing the collection of explicit knowledge through activities such as version control, file management. Includes the removal of content

The diagram also shows a blurring of the boundaries between Tacit and Explicit: as tacit knowledge becomes explicit ('Convert') and explicit knowledge becomes tacit ('Learn') it becomes apparent that two different dimensions are involved: inputs and outputs.

For example, let us assume that Company X has a problem with not enough information being captured electronically such that it can be better shared. This problem lies in the Convert space, but is it a problem with Company X's staff not converting information or is it a problem with the mechanisms that they use acting as a barrier? The solutions will lie in improvements to either inputs or outputs (or possibly both). We will address such questions in Section 4. when we consider how to assess a business.

Organisational Levels

A useful way of approaching any organisational change problem is to consider which level of the organisation is going to change. There are many models for deconstructing organisational layers; we have deliberately chosen one that breaks the organisation down into just three distinct levels: Strategic, Tactical, and Operational. The idea here is that the knowledge needed to operate well at boardroom level is very different to that needed at an operational, or shop floor, level. It is important to note that one is not more important than another and organisational priorities should dictate the amount of effort spent on each.

Within our approach, there is no hard and fast rule for deciding how to assign teams or individuals to each organisational stratum; it is more important that a consistent methodology is used. The aim is simply to break the organisation down into manageable layers which allow similar teams or roles to be compared with each other and contrasted with those in other layers.

Knowledge 'buckets'

In Section 1. we approached KM by taking the simple step of referring to it as the management of knowledge. So far in this section we have looked in more detail at the different aspects of KM; it is now time to think about knowledge itself.

What is knowledge and how can we describe it in a way that works for a business?

We think that any piece of knowledge can sit in one of four areas:

- ***Information*** This is the information that an individual needs to have in order to do their job
- ***Context*** A type of information that allows an individual to do their job better; a richer understanding of factors affecting their job
- ***Skills*** The skills and abilities that a person needs to do a particular job
- ***Processes*** Understanding of how the business operates; in particular, an individual's knowledge of their part of the business

We cover the practical application of these four knowledge types in a later section.

There were a number of starting points for the creation of our definition:

- We had to have a definition that was useful – an abstract conceptual definition would not fit with our view of making KM practical;
- The definition needed to be flexible enough to accommodate pretty much anything – there is no point having a definition that can easily be broken through the inclusion of potentially thorny topic;
- It had to apply to both the tacit and explicit spaces;
- We wanted our definition to separate different areas of knowledge in a way that each metaphorical 'knowledge bucket' could be seen as distinct from the others, without needing dozens of buckets to make this work;
- It needed to support our focus on improving business performance – knowledge has to be real, in the sense that you have to be able to identify how to improve the K in order to improve the business performance

Three dimensions of Business Improvement

Although this report concentrates on using KM as a way of improving business performance, it is likely that KM is going to be the only area to be addressed; in fact, knowledge and/or KM may not be the problem and so the last in our set of techniques considers these other factors.

To keep things simple, we have categorised these factors as ***Tools*** and ***Resources***.

Tools and resources must be in place at a sufficient level for any knowledge management improvement to have a positive effect. Put simply, if you don't have the tools or resources (which include such things as authority levels) to do your job, then no amount of knowledge management activity is going to improve your performance.

For example, an individual might not have the right tools to do a job correctly, or a team may not have enough resources to complete tasks in a given timeframe (based on a position of having all of the right knowledge – information, skills, etc. – in place).

Branding KM

Before embarking on any knowledge management based improvement work, a decision needs to be made about whether to explicitly brand that work as a knowledge management programme or to embed KM into other change activities.

The concern here is that, without careful management and communications messages, KM can be seen as something else to do on top of day jobs rather than as a way to change for the better the way those jobs are performed.

One approach which we have seen adopted in the Department of Health is to use corporate "knowledge management" branding in the early stages of a programme, to create an initial burst of enthusiasm and awareness across the organisation. As knowledge management techniques become embedded as accepted ways of working, the need to drive knowledge management activity from the centre diminishes and so the level of branding and the profile of the programme can reduce. This approach to branding can also be applied to managing the size of the knowledge management team, which we will discuss further in the section.

An alternative approach is to include knowledge management as part of a larger organisational change programme, which provides a pre-existing framework for communicating with members of the organisation with the knowledge management elements of the programme being highlighted at suitable times, as part of an overarching communications plan.

There is no single answer to the question of branding; factors influencing the decision will depend on the organisation involved and how well its members respond to the idea of large central change programmes, how many there are, and whether there is a history of success which can be leveraged.

Regardless of the adopted approach, messages about the improvement programme should focus on the tangible business benefits that will result from changes made. It is sometimes also helpful (particularly in the early days of a knowledge management programme) to demonstrate the knowledge management team's successes, in the hope that this will stimulate further interest in knowledge management techniques and encourage better practice across the organisation.

For the same reasons, it is important to be able to demonstrate that specific problems for specific business units have been addressed by applying KM practices and that these can make people's working lives easier, as well as delivering increased performance.

I&DeA improvement and development agency

"Knowledge Management is the body of practices and procedures an organisation takes to the acquisition and deployment of the 'intellectual property' it needs to perform its function"

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Case Study: Department of Heath

The Department of Health has had an active Knowledge Management programme in place since 2000. The programme was established in response to a Departmental Review that advocated a more evidence-based approach to departmental business and recognised that knowledge underpins everything the department does. The programme was launched as a high profile priority for the department and concentrated on the softer (tacit) side of knowledge management as it was felt that information management across the department was already quite strong.

The programme is still continuing and in 2007, as part of a programme called "Improving the way we work," a group within the Department wanted to raise awareness of KM issues and encourage the adoption of best practice techniques. They did this with a dedicated KM day, which involved a number of sessions throughout the day to help staff improve specific KM skills that were identified as priorities, as well as access to information management floorwalkers and KM champions (a team of change agents that was launched on the day). The day was seen as a success and a commitment has been made to hold a series of similar days.

This is a good example of the need to consider how a KM programme should be branded. Even though marketing techniques were used to raise the profile of knowledge management, the activity was still carried out under the banner of the existing improvement programme. With such a programme already underway, it could have been counter-productive and confusing to launch a separate programme specifically for KM.

This case study is also a good example of how KM techniques were used to solve specific business problems, in this case with targeted skills training, tailored to meet the needs of staff. By solving specific problems, staff are more likely to think about KM in a positive light, which in this case will also reflect positively on the wider improvement programme.

DH Department of Health

Macro Conclusions

We have drawn on the experiences of our contributors and existing knowledge management practice to identify some common themes among successful knowledge management projects. These themes are all addressed in more detail in the following sections of this report; they are summarised here, stated from the point of view of an individual Knowledge Manager, to provide context and perspective.

Successful Knowledge Managers…

Understand what they want to achieve
Clearly defined goals allow you to make an assessment of whether you've been successful. The more objectively progress can be measured, the easier it is to demonstrate success. Where possible, you should assess outcomes, rather than the amount of activity.

Concentrate on improving business performance
There's no point in doing knowledge management for its own sake – you need to deliver an improvement in your organisation's business to justify your activity.

Start small
You can create large improvements in small steps without needing to address the problems of the whole organisation in one go. A number of small and quick improvements are often better than one large slow one.

Create solutions to problems – not the other way round
Re-using a solution is a good idea, provided it is the best way of addressing a business problem. You will have more success if you identify specific problems and create specific solutions for them, rather than trying to find problems that fit an existing solution. Make sure your problem can be solved by applying knowledge management techniques – not all of them can.

Focus on measurement
Make sure that changes in performance are measurable. Measurement should always apply to the performance of the business and not the amount of knowledge management activity underway.

Manage expectations
Successful knowledge management relies on business units changing the way they work. You will find it easier to achieve this if people understand what they will need to do and have reasonable expectations about the benefits to them.

Have authority and sponsorship
To enable people to change the way they work, you need the authority to make changes. To convince people to change the way they work, visible sponsorship from influential people is helpful. To maintain your authority and sponsorship, ready access to the relevant people is important, or they will lose interest.

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Section 3. The Knowledge Management Team

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A brief aside to discuss some of the more important aspects of establishing a successful KM team.

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So far we have considered the theory of KM. Before moving on to discuss how to assess a business in a lot more detail it is worthwhile considering the nature and role of a KM team, plus some of the factors that will affect the team's success.

You need a KM team, not a K team

> "We're a knowledge management team, not a knowledge team" – Maewyn Cumming, Defra

The primary role of a Knowledge Management team is to assist business units and the wider organisation to manage knowledge better, rather than to manage the knowledge themselves. It is helpful to make sure everyone has clear, accurate, expectations about the role of the KM team.

Broadly, the KM team needs to operate at three levels, analogous to the Strategic-Tactical-Operational levels introduced in Section 2:

- At the Strategic level, the team needs to be responsible for the overall KM strategy, the development of KM objectives, and engagement with senior stakeholders and sponsors;
- At the Tactical Level, the focus is the management and delivery of the KM plan. The team also needs to keep abreast of developments in the field of KM;
- At the Operational level, the team is working with other teams on the delivery of KM improvements, embedding KM into operational activities.

> The Department of Health KM team has successfully used a three-layer structure for a number of years

Much of the benefit derived from applying KM techniques comes from the sharing of knowledge. The KM team can act as a broker to facilitate the sharing and using of knowledge. Often, a centralised solution like this is the only practical option, particularly where specialised skills are involved, such as finance or research teams.

The danger is that such centralisation can lead to the mistaken idea that the KM team will "do KM for me" which should not be the case. The KM team helps to deliver improvements in KM activity; the business unit itself must be responsible for ensuring ongoing KM activity takes place.

The issue of who should own information and knowledge is one that needs to be considered and a clear decision taken. While it is very important that there is clear responsibility for ownership of knowledge and information, exactly where that ownership lies will depend on organisational circumstances.

For instance, ownership of lessons learned during a particular project will initially lie with the project team but could move to either a central project office unit, a subsequent implementation team, or even a central lessons learned team.

The important thing is that ownership of information and knowledge should always be clear and based on an assessment of who is best placed to own that information – where ownership resides is less important than the fact that there is clear ownership. Where centralised solutions are being used, it is particularly important to ensure that the issues of ownership and responsibility are clear.

Training courses – Department of Health

When the Department of Health first began its KM programme, it carried out a series of training courses, which eventually reached around one third of all existing staff. The training courses still continue, but they are now aimed at new entrants to the department, as it was felt that sufficient coverage of existing staff had been achieved.

The same core training was included in all the training courses, but the specific objectives were adapted to the needs of managers and knowledge champions in individual business areas. The training courses were therefore intended to address specific business problems and improvement in performance as a result of the training could be assessed against benchmarks established before the training was delivered.

Because managers had to become engaged in customising the training courses, the people attending the courses were a largely self selecting group and had already identified problems that KM techniques could assist with.

Delivering training which was customised to meet the specific needs of individual business units meant that the KM team was able to improve KM practices in the organisation, without having to manage the knowledge themselves. By ensuring that knowledge champions are in place after the KM team leave, the hope is that enthusiasm for KM techniques learned during the training will continue and become embedded in the working practices of the business units.

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Senior Leadership

As with any organisational change team, the KM team needs sufficient impetus and authority to be successful. High level sponsorship is essential, with proximity to the sponsor important. The less access to high-level decision makers and sponsors the KM team has, the harder it is for them to be effective and for results to be visible to sponsors and champions at the top of the organisation.

It is equally important that high level support for the KM programme is visible to business units – an issue which we have touched on in the previous section, where we discussed branding the KM programme. This is because the benefits from KM are usually realised at the operational rather than strategic level. This means that the KM team needs to work between the strategic and operational levels, on the one hand being guided, informing and delivering strategic objectives, and on the other understanding and responding to the individual needs of specific business units. Similarly, it is helpful for strategic planning and objective setting to take this into account and resist the temptation to centralise all knowledge management activity, just to be able to see results more quickly.

"Sharing what we know and do" events – Natural England

Natural England was formed from three previously separate organisations in 2006. There was a recognition that while knowledge underpinned everything the new organisation did, the three constituent parts were bringing different knowledge management skills and styles with them, as well as different knowledge about their work.

To bring everyone in the organisation to a common level of understanding of the work of Natural England and how bringing together the three organisations will result in better joined-up delivery at the 'front line' (the sum is greater than the parts), a series of events called "Sharing what we know and do" were planned. 55 events were held across the country, with the aim of increasing knowledge about the new organisation's work, providing national, regional and local perspectives and to build understanding about the organisation's strategic objectives.

Evaluating the feedback of attendees has shown that where senior (director level) staff attended, overall attendance was higher. There was also a feeling that when senior members of staff were able to visibly support the events as well as the new organisational aims, doing so added significant value.

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It is an important message that strong, visible support is important for any change programme and none more so than those dealing with knowledge management. Without visible senior support, it becomes very easy for staff to dismiss the change programme as 'just another fad' – and if staff are not engaged in a change programme, it is very unlikely to deliver significant benefits.

The team itself

In the vast majority of organisations, a KM improvement programme will require a KM team to drive it. The size of the team will vary depending on the scale and timescale of the team's strategic objectives and should be kept under review. In some cases the 'team' may only need to be a part of a single person's job, but the important thing is that there is an identifiable person who is responsible for delivering KM change.

In all of the organisations we have looked at for this report, a dedicated KM team was in place, usually consisting of between 3 and 5 full time members of staff. The size of the KM teams has remained broadly constant over the life of the KM programmes, but it should theoretically be possible to develop a KM strategy which reduced the size of the KM team over time (probably several years), as KM practices became embedded in business processes. Achieving this might require periods of increased activity by the KM team to maintain momentum and at these points; temporarily increasing the team size could prove fruitful.

Whatever the size of the KM team, a number of skills need to be present to be successful. Familiarity with KM techniques is obviously very important, along with strong project and programme management skills. As much of the activity of the KM team will be working with specific business units to solve specific problems, the ability to analyse information and understand business processes is important.

The position of the team in the organisation

KM teams usually sit in one of three places: in the IT department, as a central project team or as part of an organisational development team. The benefits and dangers of each are summarised in the table on the right. Wherever it sits, a KM team needs to be able to draw on other parts of the business, such as IT or communications.

If the activities of the knowledge management team are restricted to those that fit neatly within the scope of its sponsoring team, a large section of what KM can offer will be missed. Having the KM team as a central project team may not solve this problem, as such teams are often formed to solve specific high-profile problems, rather than the most appropriate problems, as identified through systematic analysis.

It is rare for a KM team to be given a choice about which part of the organisation to belong to, but an awareness of the benefits and dangers is helpful when thinking about working practices.

Position	Benefits	Dangers
Central Project Team	High profile, Broad Scope and good visibility. Ready access to senior people.	Pre-conceptions about the problems to be solved. Cynicism from staff about central project teams.
IT Department	IT is often a key part of KM solutions and potentially gives access to the whole organisation.	Focussing purely on IT as the solution. Tendency to over engineer the scale and scope of solutions.
Organisational Development Team	Potentially broad scope, often with good senior support and visibility. Can provide the flexibility a KM team requires.	Potential branding and timing conflicts, as well as KM being seen as a one-off activity, rather than part of business as usual.

Section 4. Assessing your Business

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The Parachute approach provides a method of successively reducing the scope of the problem until it is a manageable size.

The first step is to identify business areas which have the largest scope for improvement from a KM perspective as that's what we're trying to improve.

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Section 4. Assessing your Business

In previous sections we have discussed the background to KM and the factors to consider before embarking on a knowledge management journey. This section starts that journey and outlines a number of tools and approaches to help you on your way.

We highlighted the size of the knowledge management problem space and what is true of the discipline generally is also true of the specifics of applying it to an organisation. Successful KM is about applying selected techniques and solutions to specific problems – and really successful KM is about selecting the problems with the biggest scope for improvement, from a KM perspective.

Step 3. Evaluation

Assess your business to find out good KM practices and areas where KM could be improved

This is the first of three steps that aim to reduce the size of the problem space by applying a series of filters. Start by systematically constructing a model of the knowledge management capability in your organisation, by conducting an objective assessment of knowledge management activities.

In Step 1 we identified that the reason for considering KM should be to improve business performance; therefore, the starting point for assessing your business for KM capabilities should at a minimum be those areas of the business that are considered to be underperforming.

In addition, you need to decide whether to include other areas of business in the KM assessment. For example, areas that might be expected to demonstrate good KM practice, to act as a comparator. Alternatively, a full assessment of the whole business could be conducted in order to gain a full picture of KM capabilities and to identify areas that have comparable weaknesses, so that effort can be successfully targeted across the business not just in one place.

The key with this step (and the next two) is that the approach is systematic, repeatable, and as objective as possible. This makes it possible to analyse the data in a meaningful way.

In a nutshell, the principle is to identify the business areas with the best potential for improvement, then identify specific problems and work with the business areas to solve them by applying KM techniques. The easiest way to do this is to systematically apply a methodology that looks at the organisation (or part of it) through a series of lenses, progressively reducing the scope of the problem until a single problem and solution is identified. We touched on a theoretical framework for achieving this in an earlier section, where we considered ways of slicing and dicing an organisation by level, activity, knowledge type, and enablers. Through progressive filters, the size of the problem space is reduced to something manageable, for which targeted solutions can be developed.

We have looked at a number of methodologies for achieving this and have come up with a simple, systematic, and objective way of applying the principles. We will outline our methodology in this section and the next.

The whole organisation or a just slice?

Before beginning to apply a particular methodology, the scope of the exercise needs to be defined. The more widely you can cast your net, the more thorough your analysis can be and the more useful the results. It is important to recognise the real world constraints that affect any project, including time, money, and other resources. Usually this means starting with a particular part of an organisation, often a division or directorate, but possibly an organisational level, such as the senior management board.

It is also not uncommon for a KM programme to be set up with a specific problem in mind. It can be a useful approach to tackle a specific, pre-defined problem provided that a small number of other areas are included to act as comparators. Without the ability to compare, it is very difficult to measure relative impact and success, a topic we will return to in the final section of this report.

The objective needs to be defined at the start of the work; for example, in times of economic pressure, it may be answering the question "What do you need to enable you to do your job more efficiently?" For the Government, a popular question is "What do we do to improve information assurance whilst still enabling the essential sharing of information?"

It is useful to consider that the approach can be used in a different way under different conditions. For example, as the economy starts to turn around, the target can be reset to be "What do you need to enable you to be more innovative?" or "What do you need to enable you to increase sales?" and the evaluation can be conducted based on that starting point.

One of the key lessons to learn from our case study participants is to start small, focusing on specific business performance issues and use KM techniques to improve them. This suggests that the first stage of any KM exercise should be to identify specific business areas where there is scope for improving business performance using KM techniques.

If there is no specific problem to address or if there is a wide-ranging organisational challenge (for example, to reduce overall operating costs), the most useful approach is to look as widely across an organisation as resources will allow, identifying those areas that are performing well from a KM perspective and those with the most room for improvement. The objective then becomes simple: to adapt and learn from the best areas and adopt and teach in the worst.

However the scope of the KM programme is defined, by using a systematic and repeatable approach, later iterations of the programme can be compared to lessons learned from the earlier ones, so eventually a complete picture of an organisation will be obtained.

Case Study: A Policy Team – Department of Health

Very often, KM is about applying simple solutions to problems, with the intention of improving business performance. We will outline a useful way to assess an organisation and select specific problems to solve, but this case study shows how effective simple KM techniques can be, provided they are used to address specific problems in specific business areas.

A policy team in the Department of Health found that they needed to improve their performance at responding to media and ministerial enquiries, as they were working to increasingly demanding and tight deadlines and their policy area was a manifesto commitment for the present Government.

Specific problems the team were facing included duplication of effort, because it wasn't always clear whether a piece of work had already been started, access to up-to-date briefing documents and identifying final versions of finished documents. The team felt that these problems could best be solved by approaching them from an information and knowledge management perspective.

A number of simple, but effective solutions were identified and implemented, largely relating to knowing who was working on what and where their information was. Some of the solutions were technical, using shared electronic filing systems in a more structured way and some were more process driven, so it was immediately clear what stage a document had reached. Once it became clear that the team's performance had improved, they shared their solutions and techniques with other teams in the department.

This is a very simple example of simple KM techniques being used to address real business problems, for the benefit of business teams – with success being shared and replicated for wider organisational benefit. By focussing on areas of the business where KM techniques are likely to deliver the most benefit, results can be delivered quickly, which provides tangible evidence of success and makes it easier to convince others of the positive benefits that KM can bring.

DH Department of Health

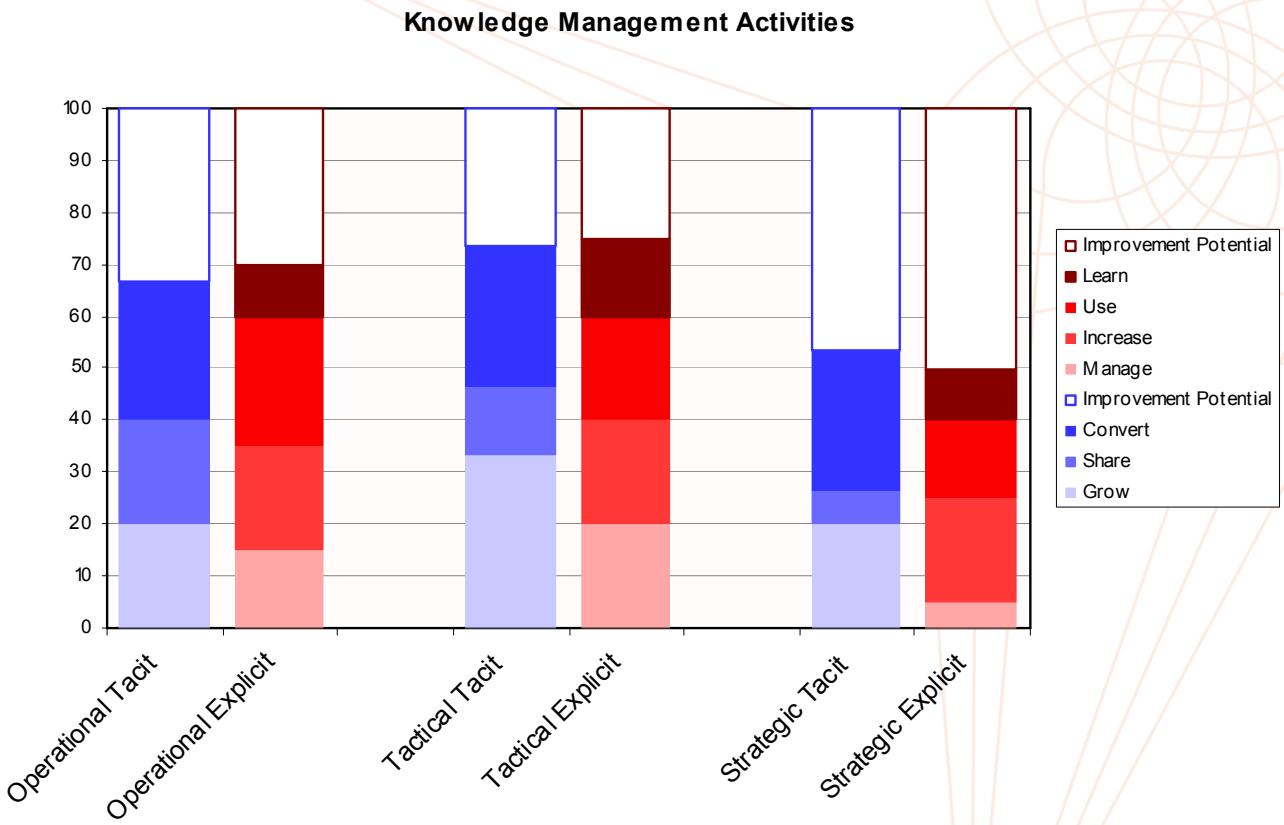
Knowledge Management Audit

A successful knowledge management audit applies a consistent model to an organisation so that its constituent parts can be compared on a like for like basis. The aim is to identify those areas with the greatest potential for improvement, as well as those who may have something to learn from.

There are a number of ways to approach a KM audit, but the key thing is to pick one and apply it consistently so that meaningful comparisons can be made. Our approach draws on a number of others that we have studied and provides a suitably objective way of gathering information about KM capability in an organisation.

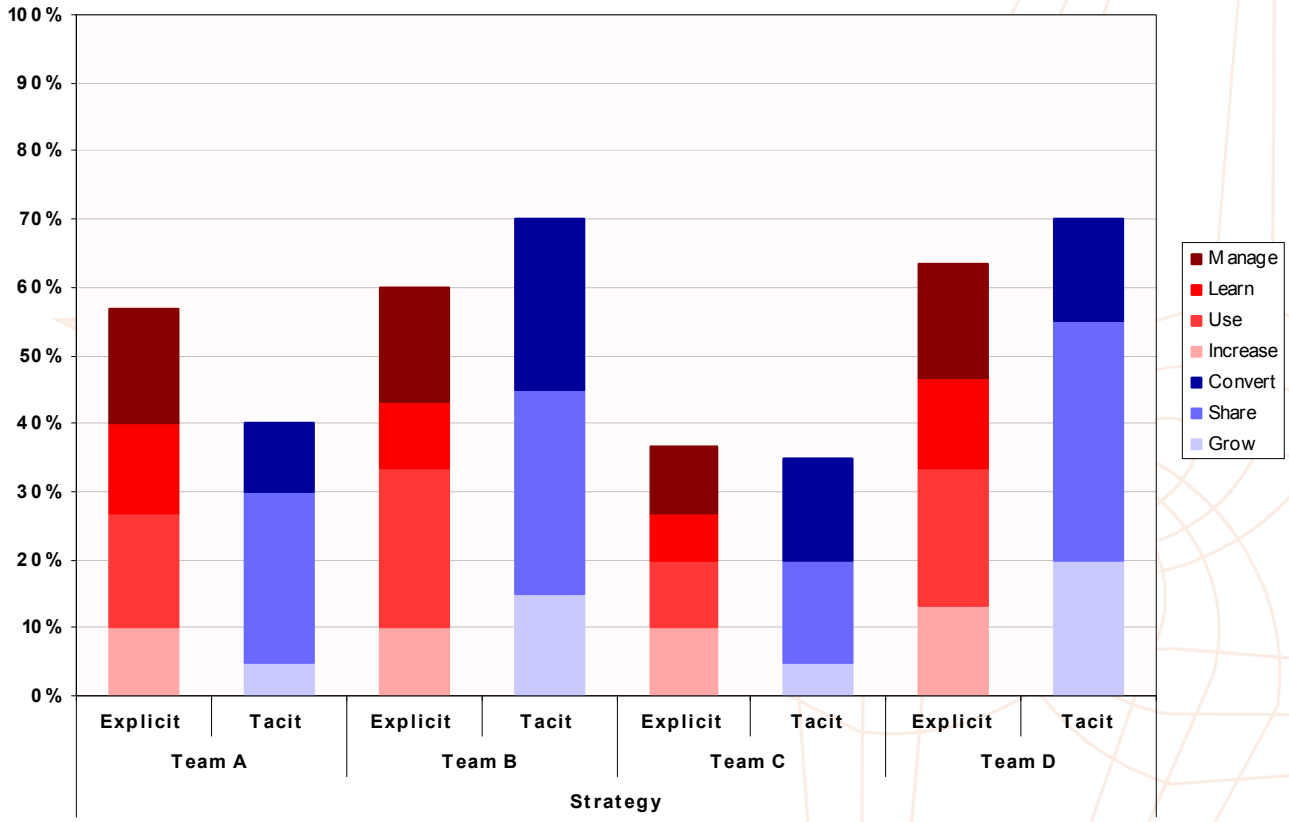
Our approach starts with an assessment of existing KM capability. This identifies areas of the business that are most likely to benefit from improving their KM capability, rather than trying to identify specific problems at this stage.

Business units are grouped together into the three organisation levels of operational, tactical, and strategic. The logic behind this is that different kinds of knowledge and different KM techniques are likely to be required at each level.



Similarly, each of our seven knowledge activities (from Grow through to Learn as introduced in Section 2) is considered separately, as the techniques for improving capability in each are quite different. For instance, addressing a lack of sharing of tacit knowledge will use a very different approach to addressing a deficiency in managing explicit knowledge.

The challenge with breaking the problem down like this is to ensure that the process of gathering information is not onerous; our approach uses a survey with a multiple choice question for each knowledge activity and clear scoring criteria. Respondents can quickly become used to the style of question and only have to think about understanding the activity itself, which makes the assessment process more rapid than it otherwise might be. Keeping the questions the same also allows for easy comparison between activity types and organisational levels.



The aim is to build up a picture of all those surveyed, so that it becomes possible to make statements such as “At the strategic level, we’re managing our explicit knowledge very well, but we’re not happy with our performance at sharing tacit information with each other” or “Operational level teams are very good at growing new tacit knowledge, but a number are poor at learning and using that knowledge.” Being able to make evidence based statements like these is very powerful, particularly when coupled with the ability to identify specific teams at the same level which buck the trend, i.e. teams that are doing it better than most, as these teams may be able to offer some insight and their techniques can be adapted for use by others.

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Section 5. Deciding what to do first

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Decide what specific techniques you are going to use to improve KM performance; get close to the business units and understanding what they do and how they could do it better.

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Having reduced the scope of the problem by identifying business areas that may benefit from KM (as discussed in previous section) the next step is to identify specific business problems to address and decide which KM techniques to apply. The Parachute approach applies another set of lenses to zoom in further; ultimately any successful KM project needs to be implemented by getting close to the business units and understanding what they do and how they could do it better.

Step 4. Focus

Select specific areas of the business to work with

Step 3 highlighted areas of the business with the greatest potential for knowledge management improvement. The results of this assessment can now be used to select specific business units to work with; it is important to make sure that they have the potential for improved business performance. If there is no potential to improve business performance there is little point in trying to improve KM performance, as there will be no overall benefit. External factors are likely to play a part in which units are selected, such as resources and political priorities.

Although there will be many things you might like to do, you can only do so much at a time. A number of factors come in to play here – including the dimensions of tools and resources – such as the need for quick wins, cultural and infrastructure investment, and other change projects currently underway.

The first stage is to further narrow the organisational scope to find business units that have a high potential for improving their business performance and also have a high likelihood that this can be achieved by improving their management of knowledge.

In Section 2 we introduced our tools and methods for analysing KM. At this stage, we need to consider the three improvement dimensions: Knowledge (comprising Information, Context, Skills, and Processes), Tools, and Resources.

Before designing a KM solution to a particular problem, it is important to make sure that business performance is not being limited by either Tools or Resources. To put it another way, if the necessary tools and resources are not in place, no amount of KM improvement is going to solve the problem.

Identify the Knowledge Gaps

Assess the types of knowledge that business units use and look for improvement opportunities. As the organisational scope has been reduced to those business units with potential for improving their knowledge management, it is possible to look at the remaining business units in more detail, allowing more informed choices to be made.

Our model now considers types of knowledge, as distinct from the knowledge management activities that we looked at earlier in the process. Drawing on academic and theoretical models, the Parachute model identifies four discrete types of knowledge – Information, Context, Skills, and Processes – which were introduced in Section 2. The knowledge types provide the framework for a consistent approach to analysing business activity.

Step 5.	Knowledge Assessment

Analyse how different knowledge types affect specific business problems

Having identified specific units, specific problems now need to be considered. Improving KM capability is fundamentally about solving business problems – the approach should be to identify solutions to problems, rather than identify problems that match solutions. The solutions are identified by considering the types of knowledge involved in each problem and identifying opportunities for improvement. Analysis of the problem and identification of solutions should involve the people who own the business problems as their understanding is crucial to developing the right solution.

It is important to work with a business unit on specific problems, looking at each knowledge type in turn, with the aim of finding the limiting factor. The relationship between the four types of knowledge will often be complex, which is why business involvement is essential.

Once a knowledge type (or types) has been identified as critical to solving a particular problem, a solution can be designed and KM techniques selected. This should also be an interactive process involving the business units, as solutions need to be aligned with business practice and each technique can easily affect more than on knowledge type. A selection of KM techniques and their application is in the Annexes.

Often, solutions can be adapted from what other teams are already doing. What works well for one team may not be directly transferable to another, but an efficient way to improve performance is to learn from the best performers and adapt their techniques for use by the worst performers. By applying a model or framework, the best and worst performers can be identified and compared – but only if the model is applied consistently.

This type of engagement is usually most effective when carried out interactively, and in a structured way – workshops are often used to good effect. Although this is a very important step, it can also be quite resource intensive, which is why it is important to reduce the scope to those areas where there is strong potential for both KM and business performance improvement.

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Case Study: IDeA Communities of Practice

It is possible that, having analysed business areas and identified gaps in knowledge management capability, common themes emerge from several different parts of the organisation. Where a common (or suitably similar) problem is identified across the organisation, it may be sensible (or indeed necessary) to tackle the problem at an organisational level, rather than individually and repeatedly with each business unit.

Each business unit is unlikely to have exactly the same needs as the others, so in order for an organisational solution to be effective, it must be customizable to meet the specific needs of everyone it is aimed at.

A good example of this approach being used in practice comes from the Improvement and Development Agency (IDeA). As part their role in driving improvement across the local government sector, the IDeA identified a number of different groups of practitioners who were facing similar challenges to each other and would benefit from being able to share experiences and learn from one another. Each of these groups was distinct from the next, as they all carried out different functions and faced a different set of challenges, but all the groups had a need to share knowledge better among themselves.

The IDeA's response was to set up a number of communities of practice, using a combination of regular training events and developing a technology solution which enabled emerging virtual communities to be established and encouraged members of these communities to interact. The solution provides members with access to a range of web 2.0 technologies, including Wikis, blogs, forums, syndicated news feeds, tagging and personal profiles. Members are also able to store documents online, as well as generate (and subscribe to) email alerts. Crucially, the ability to customise the online environment is provided to facilitators of each community to pick and choose the web 2.0 technologies to be used within the community.

By first identifying a number of business areas which have similar problems, designing a solution which is flexible enough to meet the needs of all of them and then handing control over to the business units themselves, the CoPs are working well, as evidenced by anecdotal feedback and performance metrics.

More information on the IDeA CoPs can be found at http://www.idea.gov.uk and in a white paper published on the Semantix website – details are in the annex at the end of this report.

I&DeA
improvement and development agency

Decide which areas of the business to start with

It is likely that a number of business units and a number of specific problems with KM solutions will have been identified and so a decision as to which one to tackle first is due. A number of factors are likely to come in to play at this point, such as other change projects already under way, available resources, political imperatives.

Another advantage of applying a model consistently is that it provides a reliable evidence base for making and justifying decisions about where to start. In reality, options are usually limited by external factors and so the fact that we have reduced the scope of the work to concentrate on those projects that will work means that whichever project is chosen will be one that delivers benefits.

Step 6. **Plan for Change**

Create a knowledge management improvement plan

Any business change activity benefits from having a well thought out plan, and KM is no exception. Create a plan with input from the relevant business units, as it is important for everyone involved to have realistic expectations and to know what is expected of them. Include a plan for the departure of the KM team – KM activity needs to continue once the KM team has moved on to the next project.

Create a knowledge management improvement plan

At this point, we have arrived at a point where we know which business units to work with, what their specific problems are, and which techniques to use to address them.

A project plan is the next step, drawn up with the business units involved, so that everyone is clear about roles, responsibilities, and expectations. The style and nature of the project plan will vary depending on the size of the project, organisational project planning methods, and experience of the people involved, and is not something that a KM paper needs to go into detail about; the important thing is to have a plan and to have it agreed.

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Section 6. Measuring improvement and moving on

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If you can't measure it, you can't manage it… but knowledge can't be measured with a ruler.

In this section we discuss some of the techniques for approximating KM performance and the part it plays in overall business performance.

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A significant challenge for anyone implementing a knowledge management programme is measuring the outcome of any changes made. An objective way of measuring success is the only real way to know whether a positive difference has been made, but measuring KM outcomes objectively presents a number of challenges.

Because knowledge is fundamental to almost everything an organisation does, it is often difficult to separate the impact of knowledge management techniques from the impact of everything else that affects an organisation. Although it is often a relatively simple matter to measure improvement in business performance, it is far less simple to work out what proportion of the improvement is attributable to better knowledge management.

In addition, knowledge itself is not a measurable entity. Because it cannot be measured directly, there is often a temptation to measure the degree of activity, rather than the degree of improvement – or to put it another way, the input rather than the output. This is dangerous because if the KM activity is having no effect (or worse, a detrimental one) on business performance, then the activity is wasted and only serves to make the organisation less efficient.

By focusing on specific business problems in specific business areas, and by targeting those areas that are known to have the potential to improve their knowledge management, it becomes easier to identify the improvements that knowledge management techniques are delivering.

Step 7. Measure and Refine

Measure the outcomes of the changes made and adjust plans if required

Measuring KM outcomes can be difficult, as it is difficult to separate knowledge management from the many other factors which influence business performance. Nonetheless, measuring outcomes is the only real way to know whether changes are making a positive difference or not. There are a number of techniques that can help in finding objective ways to measure KM. Constantly measuring outcomes and comparing them to expectations allows plans to be adjusted, which is necessary to ensure that the goal of improving business performance is achieved.

Measurement Techniques

Where possible, existing performance metrics should be interrogated and used as proxy measures for KM improvement. The nature and detail of the metrics available will depend entirely on the problems being addressed and the organisation, but an example of how this might work in practice is given in the case study at the end of this section.

Where there are no suitable metrics already existing, the approach we have been outlining in this report – that of consistently and objectively applying a KM model – can also be useful for measuring the success of a KM programme. Provided that the level of KM capability was assessed prior to making any changes, when it is assessed again, it should be possible to measure the impact the changes have had. Indeed, if a KM programme has been designed to raise the level of a unit's KM capability, it should be possible to see a specific, planned, improvement towards that level. We have discussed tools for making objective assessments of KM capability in a previous section – they are also useful here.

Where KM capability is being assessed using a survey, care needs to be taken about the nature of the questions, as the more subjective they are the less reliable the data is as a measure of improvement. An issue to be aware of when conducting surveys to assess improvement is "second survey syndrome," where the results of a second survey round are artificially low, because the first survey increased awareness. The underlying performance may not have changed, or even have improved, but by the time of the second survey respondents have a more critical and better informed point of view, which can adversely affect the results. This effect can, however, be reduced by ensuring the questions are as objective as possible.

Natural England events – evaluation technique

Natural England's national programme of "Sharing what we know and do" events took the form of workshops, which were evaluated using forms completed by approximately 1100 attendees.

Feedback provided on the forms was very positive – over 80% of attendees thought that the workshop had helped to explain more about the work of Natural England, and that they knew how to get additional information if they needed it. Nearly 40% of staff felt that they would work differently as a result of the workshops, a significant number that will have a positive impact on the ways of working within the organisation.

This method of evaluation is a tried and tested way to measure the perceptions of those people that matter most … those who will benefit directly from the changes being made.

A key lesson that Natural England learned as part of the evaluation process was that where a large amount of data has to be analysed (1100 forms from 55 workshops), it is very important to ensure consistency. Some regions had made changes to the feedback forms, which meant that comparison at national level became very difficult.

The key is not just to gather sufficient performance data, but to ensure that it is gathered in a consistent way – and that it meets the of all those who need to use it.

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What next?

Once a KM programme is underway and results have been measured and analysed, all that remains to do is decide what to do next! There are numerous options, depending on how successful the KM programme has been as well as any external factors that may have come in to play.

If a consistent and systematic approach has been followed, it is likely that a number of other projects and business units will have presented themselves as possibilities, especially if the successes of previous KM projects have been widely publicised. In a more simplistic world, the KM team would simply move on to the next KM project, but the reality of constant change means that lessons will need to be learned, techniques adapted, and new opportunities assessed.

Using the toolkit as an indicator of success

The Parachute toolkit can be used to monitor KM capability over time, by running it again after changes have been made. If successful, the score should be higher where changes have been made.

The Parachute Toolkit frames the questions as objectively as possible. A targeted survey could be a useful companion to the Parachute Toolkit, particularly where changes to tacit knowledge management have been implemented.

It is also possible that as a KM programme reaches maturity, there is less work for the KM team to do – if KM techniques become embedded in normal working practice, the need to drive them from the centre should reduce. Logically, this should mean that it becomes possible to reduce the size of the KM team, but so far, we have not found an example where this has happened – even where KM teams have been in place for several years. Part of the reason for this may be that knowledge management as a discipline is constantly evolving, as new technologies are developed and new theories are created.

A key lesson from the research conducted in writing this report is to make sure that business performance and the needs of the business remain at the heart of knowledge management activity and that the temptation to deploy the latest technological solution is resisted, unless a problem has been identified first.

Knowledge management is a journey, not a destination. There will always be better ways of managing and exploiting an organisation's knowledge – the key is to ensure that improving business performance is the main driver and that addressing business needs is the main motivation.

Case Study: Correspondence and Parliamentary Questions

In most of the organisations we spoke to while writing this report, methods of handling parliamentary questions and correspondence from MPs and the public was a key issue (along with staff directories and organisational restructures).

Handling correspondence and answering parliamentary questions is a key activity for most government departments. Performance information is made publicly available, ministers are involved, and the subject matter can cover the whole organisation, which makes this an interesting area from a KM perspective.

As an example of measuring knowledge management activity with existing metrics, this case study considers a method for measuring the quality of draft correspondence and parliamentary questions.

The process of answering a letter or parliamentary question is usually quite procedural and can often require significant knowledge of the subject matter, as the topics can be quite politically sensitive. The application of this knowledge is a key factor in the overall quality of the response.

Because most departments have sophisticated systems for tracking the progress of each response, a large amount of information is available about the quantity handled and time taken at each stage in the process.

Information is often also available about the number of draft responses which get approved by a minister on the first draft. The approval and rejection rates can be used as a measure of the quality of the response, as these rates indicate how often a minister was happy with the content and therefore the knowledge that went into drafting it.

Where the statistics can be broken down to the level of individual business units, this provides excellent measurement data against which to assess KM improvement. For instance, if KM techniques are being applied to improve the way contextual information is captured and used within a unit, it would be reasonable to expect that the number of responses rejected for lack of context would fall. By sampling the reasons for rejection before and after the techniques are applied, success (or lack of it) can be measured.

When implementing proxy measurements in this way, it is all the more important to ensure that the business units themselves are involved in designing the measurement scheme, as this helps to validate any assumptions made. If the assumptions are correct, however, this is a useful way of adapting existing metrics for use in assessing KM improvement.

Annexes

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Contributors to the report

References and other useful materials

Knowledge Management techniques and their applicability

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Contributors to the report

We would like to thank the following people for their time and willingness to share their thoughts, experience, and knowledge with us

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During the preparation of this report we found the following resources either useful and interesting:

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Knowledge Management techniques and their applicability

Two tables that provide a wide list of KM techniques and how they relate to the seven stages of our KM model.

Technique	Description
Alerts and Subscriptions	A method of receiving notification that information has changed - or receiving the information itself each time it changes.
Chat Rooms	A method of synchronous online communication, usually using instant messaging systems.
Communities of Practice	Touring events designed to communicate a particular message, occurring in more than one location.
Discussion Boards	Asynchronous online communication, with messages usually grouped by thread - also known as an internet forum.
Document Management Systems	A system used to track and store electronic documents and/or images of paper documents.
Email Lists	Collaborative software designed to help people achieve a common goal.
Face to Face conversations	Communicating in person.
Focus Groups	Interactive, qualitative research method, using small groups of people.
Groupware	A gathering or training session which emphasises problem solving, often using hands-on techniques.
Intelligent Agents	Software which can perform non-repetitive tasks on behalf of a user - often with the ability to adapt and learn.
Knowledge Mapping	A way of discovering the areas of knowledge within an organisation and their relationships to one another.
Knowledge Mining	Sorting through large amounts of knowledge and selecting what is relevant.
Library	A collection of information, resources and services for the use of its members (or the public).
Mentoring	Communicating a message using a detailed, possibly embellished, account of what happened.
Posters	Large bits of paper used for communication.

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Technique	Description
Profiles and Personalisation	Ways of adapting software to meet the needs of the user, in terms of the information they receive and how its is displayed.
Roadshows	Creating a developmental relationship between a more experienced person and a less experienced person.
Search Engines	An means of retrieving information stored on computers, without having to know where it is stored.
Staff Directory	A list of the people in an organisation, usually arranged alphabetically.
Staff Magazines	A periodical published by an organisation for its staff.
Storytelling	Contact lists of people interesting in receiving specific information by email.
Suggestion Schemes	A method of collecting ideas for improvement from staff or stakeholders, often with a reward for the best ones.
Tips of the Day	Small bits of knowledge or information communicated each day
Video Conferencing	Communicating using video technology, so the people involved don't have to be located in the same place.
Wikis	Web pages designed to be created, updated or changed by anyone who has access.
Workflow	The processes and procedures someone needs to do their job - often integrated into software applications to ensure things happen in the correct sequence.
Workshops	Social interaction and learning that occurs when people with common goals come work together.
Yellow Pages	Staff directory, organised by business function.

Technique	Grow	Share	Convert	Learn	Increase	Use	Manage
Alerts and Subscriptions				■		■	■
Chat Rooms	■	■					
Communities of Practice	■	■		■	■	■	
Discussion Boards			■		■	■	
Document Management Systems							■
Email Lists			■	■		■	
Face to Face conversations	■	■					
Focus Groups	■	■					
Groupware			■	■	■	■	
Intelligent Agents						■	
Knowledge Mapping							■
Knowledge Mining					■		
Library						■	■
Mentoring		■					
Posters				■			
Profiles and Personalisation				■			
Roadshows		■		■		■	
Search Engines						■	
Staff Directory	■	■					
Staff Magazines						■	
Storytelling		■	■	■		■	
Suggestion Schemes			■	■	■		
Tips of the Day			■	■		■	
Video Conferencing	■	■					
Wikis			■		■	■	
Workflow			■	■	■		■
Workshops	■	■	■				
Yellow Pages	■						

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