



Consulting

**Knowledge Management
Research Report 2000**

Foreword

This is the second research report that KPMG Consulting has published on knowledge management. When we published the *Knowledge Management Research Report 1998*, we said that we intended to make it a biennial exercise. At the time, the term 'knowledge management' was just beginning to enter the business language. It was still sufficiently novel for a major finding of our research to be that knowledge management was not a fad but was here to stay.

The progress made by knowledge management since then has been much greater than the intervening two years might suggest. It is now at the top of the business agenda. Companies across all sectors and public bodies of all descriptions recognise the critical role that effective knowledge management will play in their future success.

All of us operate as members of the information society. What matters is what we know and how we deploy that knowledge. The emergence of the 'dot.com' economy demonstrates the importance of know-how over the traditional sources of economic power, such as capital, plant and labour. The organisations that prosper in the future will be those that capture, expand and exploit their know-how – in all its guises.

These survey findings demonstrate that this first lesson – the importance of knowledge management – has been grasped. But the survey findings also show that few organisations have tackled implementation as effectively as they could or should.

There remains, therefore, a great deal of work to be done - and many mistakes that the less well-informed run the risk of making.

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Executive summary

1.1 Knowledge management is an accepted part of the business agenda

We asked 423 organisations in the UK, mainland Europe and the US whether they had a knowledge management (KM) programme. Over four-fifths (81%) said they had, or were considering, a KM programme. 38% had a KM programme in place, 30% were currently setting one up and 13% were examining the need. The great majority of leading organisations are now actively pursuing knowledge management.

1.2 The benefits of knowledge management are being realised

Respondents understood the potential role that knowledge management could play. Companies were looking to KM to play an “extremely significant” or a “significant” role in improving competitive advantage (79%), in marketing (75%), in improving customer focus (72%), employee development (57%), product innovation (64%) and revenue growth and profit (both 63%).

Respondents’ experience was that KM does provide real benefits. For example, almost three-quarters (71%) of those with a KM programme in place said they had achieved better decision making, 68% said they had achieved faster response to key business issues and 64% said they had delivered better customer service.

1.3 Organisations with a KM programme are better off than those without

Companies with a KM programme are better placed than those without. For instance, under half with a KM programme complained about reinventing the wheel (45%), compared to nearly two-thirds (63%) of those without a KM programme; 61% could access data profiling the buying habits of a particular customer within half a day as opposed to 38% without; and 72% could access an agreed methodology for a business process within half a day as opposed to 55% without.

1.4 There are even greater benefits to be gained

Organisations may be missing fundamental opportunities. Three-quarters of respondents whose organisations had a KM programme in place expected it to lead to new ways of working, increased market share or additional business opportunities.

They may also be missing the longer-term financial benefits. Three times as many respondents expected their KM programme to lead to increased profits (76%) and reduced costs (73%) as expected it to lead to an increase in their company's share price (28%). They see the immediate, internal cost gains but fail to equate these to any external, longer term benefit, such as intellectual capital growth. Although it is useful to concentrate on profits and costs of other internal factors, companies should also understand they can benefit in other ways such as share price growth.

1.5 Organisations are failing to tackle KM's real challenges

This may be because organisations do not understand – and are not supporting – the full implications of KM implementation.

The 36% of respondents who said that the benefits had failed to meet expectations were asked why. The most often cited reasons included:

- lack of user uptake owing to insufficient communication (20%);
- failure to integrate KM into everyday working practices (19%);
- lack of time to learn how to use the system or a sense that the system was too complicated (18%);
- a lack of training (15%); and
- a sense that there was little personal benefit in it for the user (13%).

In short, KM brings its own challenges, which organisations are failing to address. Even those companies with KM programmes complained about problems such as:

- the lack of time to share knowledge (62%);
- failure to use knowledge effectively (57%); and
- the difficulty of capturing tacit knowledge (50%).

1.6 Organisations are blind to the employee considerations

These problems reflect organisations' failure to grasp the cultural implications of KM. A knowledge management programme should remove the frustrations that employees face in gathering and accessing knowledge. Yet only a third (33%) of all respondents had knowledge policies – stipulating which knowledge elements to store, update and cull – and fewer (31%) rewarded knowledge working. Fewer than one in five of all respondents had created a knowledge map (18%) – a catalogue or guide showing employees what information is available.

This might explain why nearly two-thirds (65%) of organisations with a KM programme complained of information overload – the creation of a knowledge glut or an overwhelming collection of information for information's sake that can be difficult and laborious to use.

This lack of organisational commitment was evidenced by the finding that only 16% of respondents whose organisations had or were considering a KM programme measured intellectual capital – that part of an organisation's value that is based on intangible assets such as knowledge, innovation and relationships. This mirrors organisations' failure to see KM in terms of creating shareholder value (see 1.4 above).

Organisations that grasp the cultural implications can achieve what we define as the High Performance Employee – an individual that uses KM procedures and technologies to fulfil their own potential and deliver real business benefits to the organisation, its customers and its stakeholders.

In terms of staff attraction and retention, the effective implementation of KM should make an organisation more attractive to staff by making their jobs easier. Yet under half (45%) of respondents whose companies had KM programmes saw KM as a means to attract and retain staff and only 30% had actually achieved it.

1.7 Companies still see knowledge management as a purely technological solution

Organisations have adopted a number of relevant technologies for KM purposes. 93% of respondents used the Internet to access external knowledge, 78% used an intranet, 63% used data warehousing or mining technologies, 61% document management systems, 49% decision support, 43% groupware and 38% extranets.

However, while organisations were most advanced in the use of technology to achieve KM, they were failing to exploit its full power. Only 16% of respondents whose companies had implemented relevant technologies said that they had a system specifically configured for KM.

1.8 Companies have a long way to go on the knowledge journey

Most organisations do not have a fully integrated KM system. Half (53%) of respondents whose companies have a KM programme in place considered KM to be an integral part of organisational and individual processes. This equates to being at stages 4 and 5 of KPMG Consulting's Knowledge Journey and represents a high level of achievement in KM implementation (see section 8). However, when we measured their detailed responses against our Knowledge Journey benchmark, we concluded that the largest percentage were only at the first two stages of the Knowledge Journey. Only 10% of the sample were at stages 4 and 5 and just 1% were at stage 5, (the highest level).

This indicates that even those organisations that have KM programmes have a long way to go. The issues have less to do with implementing the necessary technology than with running a complete KM programme.

1.9 There are few sector and geographical differences

Although the research was carried out amongst organisations in the UK, mainland Europe and the US and across a number of sectors there were no significant differences between respondents' views on a sector or geographic basis.

This seems surprising given the differences in cultures and working environments of the countries surveyed. It is also surprising given the perception of the US being more technologically advanced than Europe.

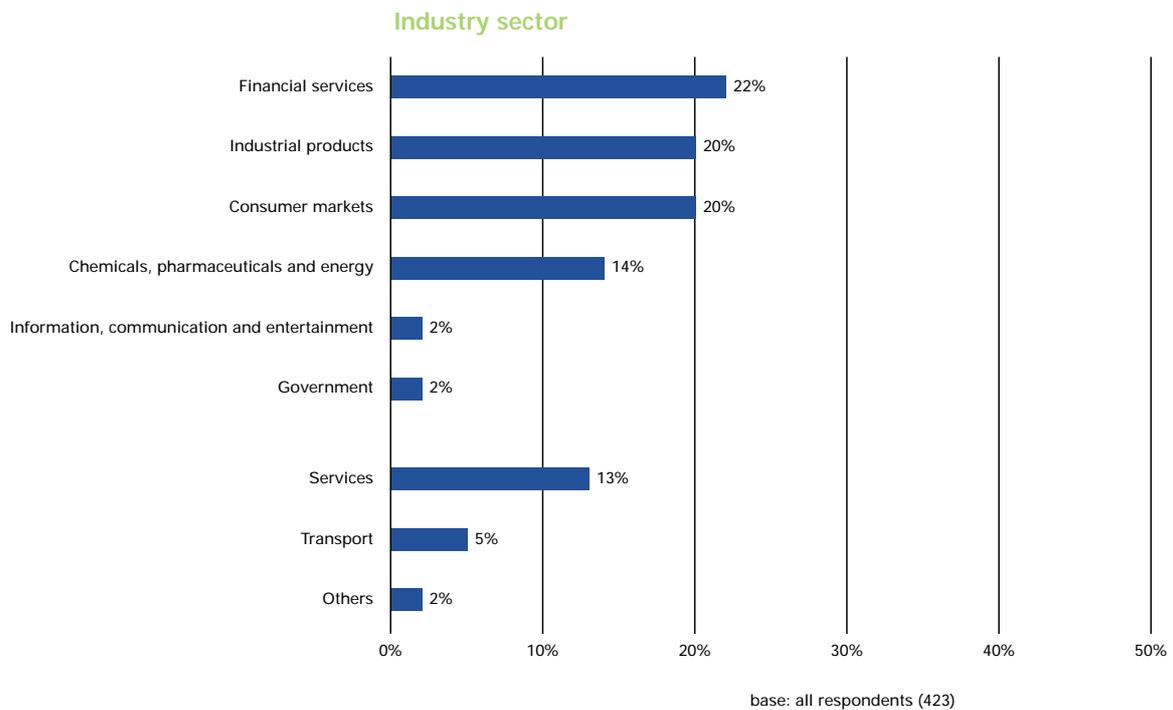
2 Introduction and methodology

2.1 Aims

This research report is a sequel to KPMG Consulting's *Knowledge Management Research Report 1998*. That report probed the extent to which organisations were aware of KM, took it seriously and were pursuing initiatives to implement it. This report investigates further organisations' claims that they are implementing KM effectively.

2.2 Methodology

The research was conducted by Harris Research, part of Taylor Nelson Sofres, in July and August 1999 among chief executives, finance directors, marketing directors and those with specific responsibility for KM at 423 organisations with turnover exceeding £200 million (US\$347 million) a year. This sample was chosen because organisations of this size have the greatest need to implement KM initiatives, have possibly the greatest capability and resources to do so, and potentially can reap the greatest benefits. The subject focus was the collective knowledge of their organisations' employees and their own use of information.



Distribution by country

	<i>Actual</i>	<i>%</i>
USA	101	24
UK	100	24
Germany	83	20
France	77	18
Netherlands	15	3
Scandinavia	15	3
Elsewhere (Italy, Spain)	32	8
Total	423	100

2.3 Definitions

For the purposes of this survey, respondents were asked to apply the following definitions:

Knowledge:

The knowledge in the business about customers, products, processes, competitors, etc. that can be locked away in people's minds or electronic form

Knowledge Management:

The systematic and organised attempt to use knowledge within an organisation to improve performance

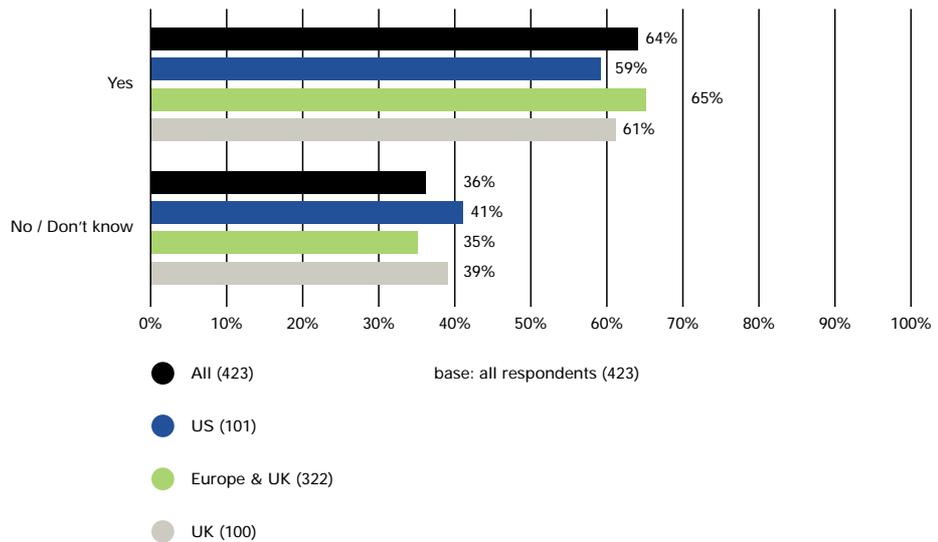
3 Current state of KM

3.1 KM strategy in place

Respondents were asked whether their organisation had a KM strategy (applying the definition of KM detailed in 2.3 above). Overall, 64% of respondents said that their organisation did.

Knowledge Management Strategy

Based on the definitions, does your company have a Knowledge Management strategy?



3.2 Status of organisations' KM programmes

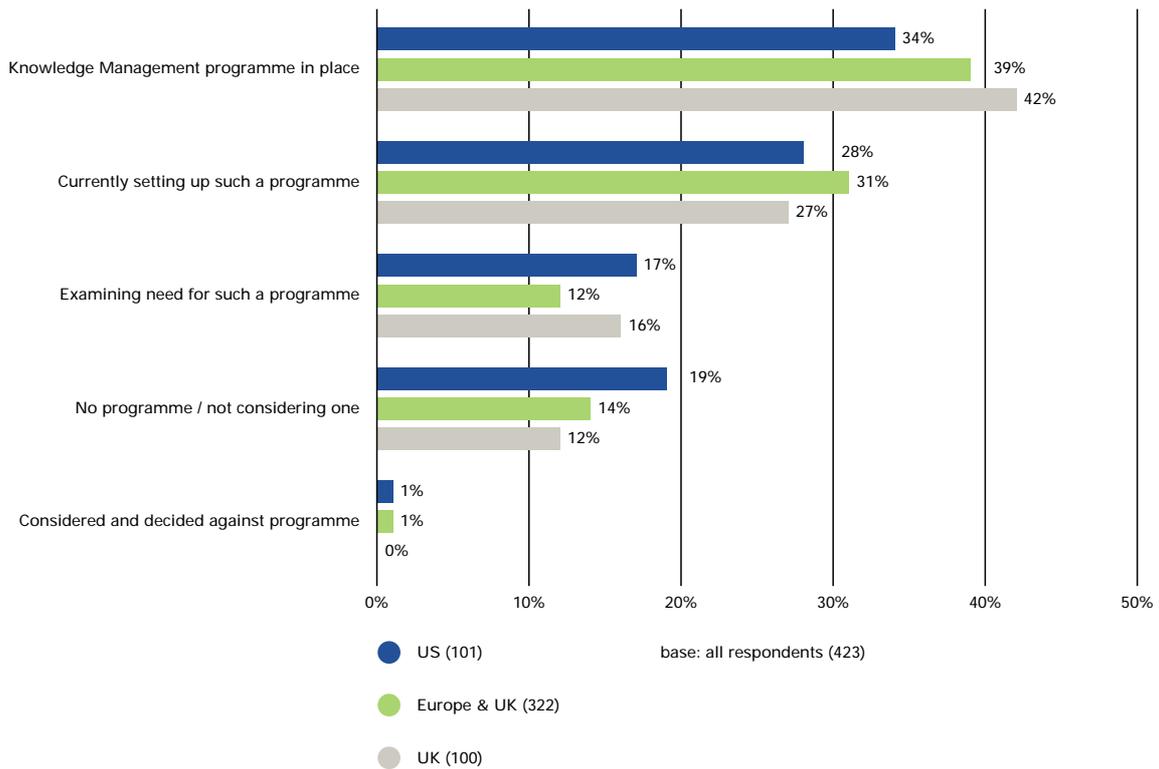
Respondents were asked to specify the extent of their organisation's KM programme. 38% said their organisation had a KM programme in place. 30% said their organisation was currently setting up a KM programme and 13% said they were examining the need for such a programme. Only 1% said they had considered the need for a KM programme and decided against it. Only 15% had no programme or were not considering one.

Current state of KM (continued)

3.3 However, as other results in this survey confirm, when we subjected respondents' detailed responses to closer scrutiny, we found that implementation falls short of a full KM programme (see section 8).

Status of Knowledge Management programme

Which one of the following statements best describes your organisation?

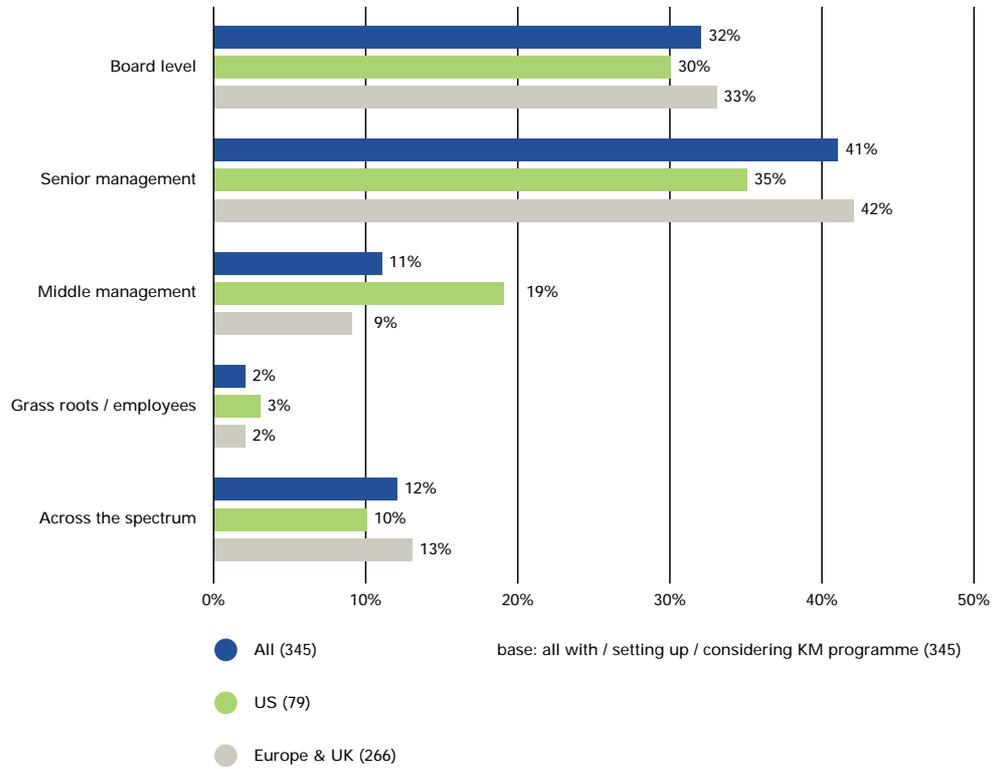


3.4 KM drivers

Respondents from organisations that had or were considering a KM programme were asked to specify the level in the organisation from which the greatest drive for a KM programme was coming. 32% said it was coming from board level and a further 41% from senior management. This indicates that the leaders of organisations understand the significance of KM and are driving their organisation's KM initiative.

Who is pushing hardest

What level in the organisation pushed / is pushing hardest to have a Knowledge Management programme?

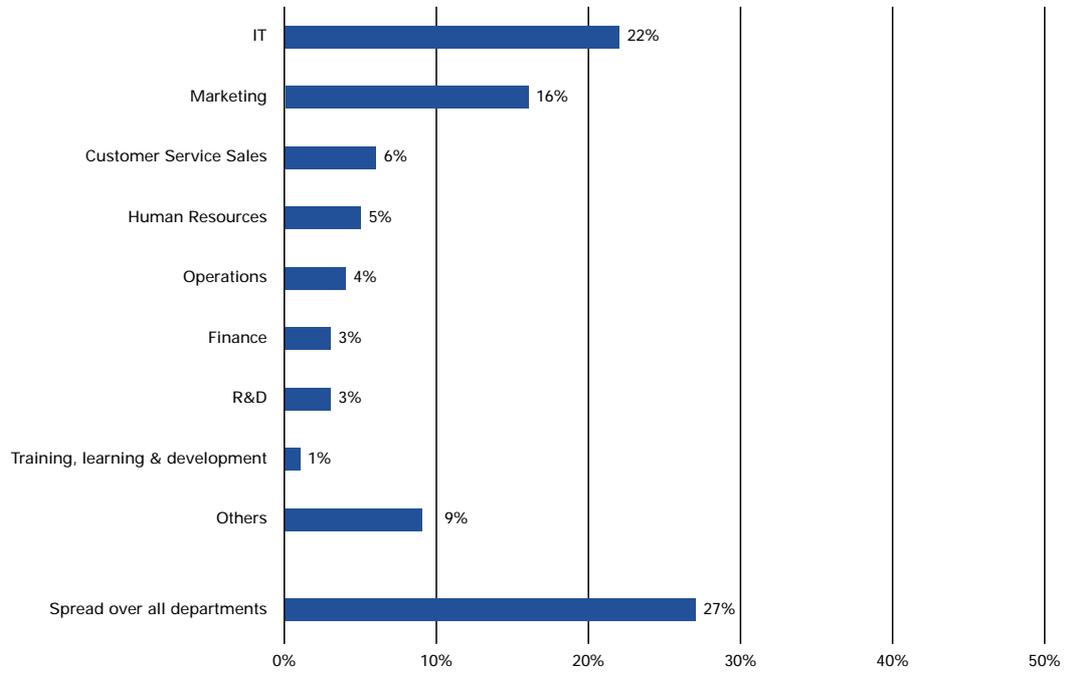


Respondents from organisations that had or were considering a KM programme were asked which departmental or functional budget was contributing most to KM costs. 27% – the highest single figure – said it was spread across all departments while 22% said it was being met by the IT function. This indicates that organisations are beginning to understand that KM is not simply an IT initiative, but also highlights the leading role that IT plays in the practical implementation of KM.

Current state of KM (continued)

Greatest contribution to costs of KM

What departmental or functional budget contributes most to Knowledge Management costs?



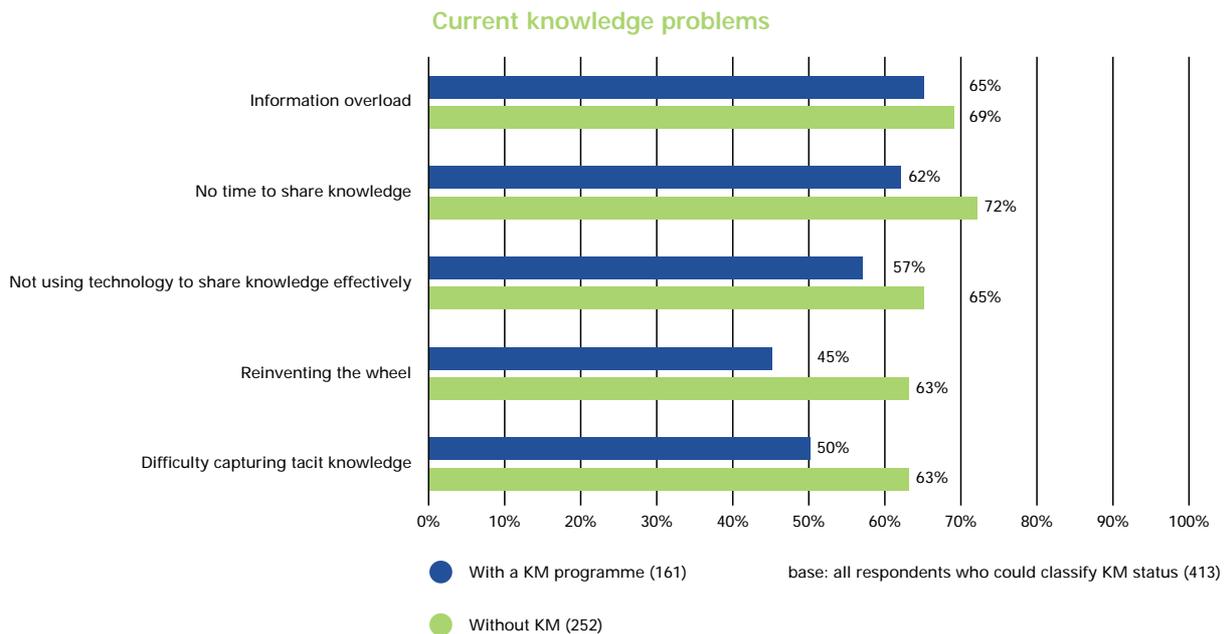
base: all with / setting up / considering KM programme (345)

4

Experience to date of KM

4.1 Current KM problems

Respondents were also asked to specify the knowledge problems from which they suffered. Again, those whose organisations had a KM programme in place were less hampered than those without. Under half with a KM programme complained of "reinventing the wheel", against two-thirds of respondents without. Half complained of the difficulty of capturing tacit knowledge, against two-thirds without a KM programme. But a significant number of those with a KM programme complained about information overload and the lack of time to share knowledge. This indicates – confirmed by findings elsewhere in this report – that while organisations with a KM programme are better off than those without, there is still much to be done to progress in the knowledge journey, as the following sections indicate.

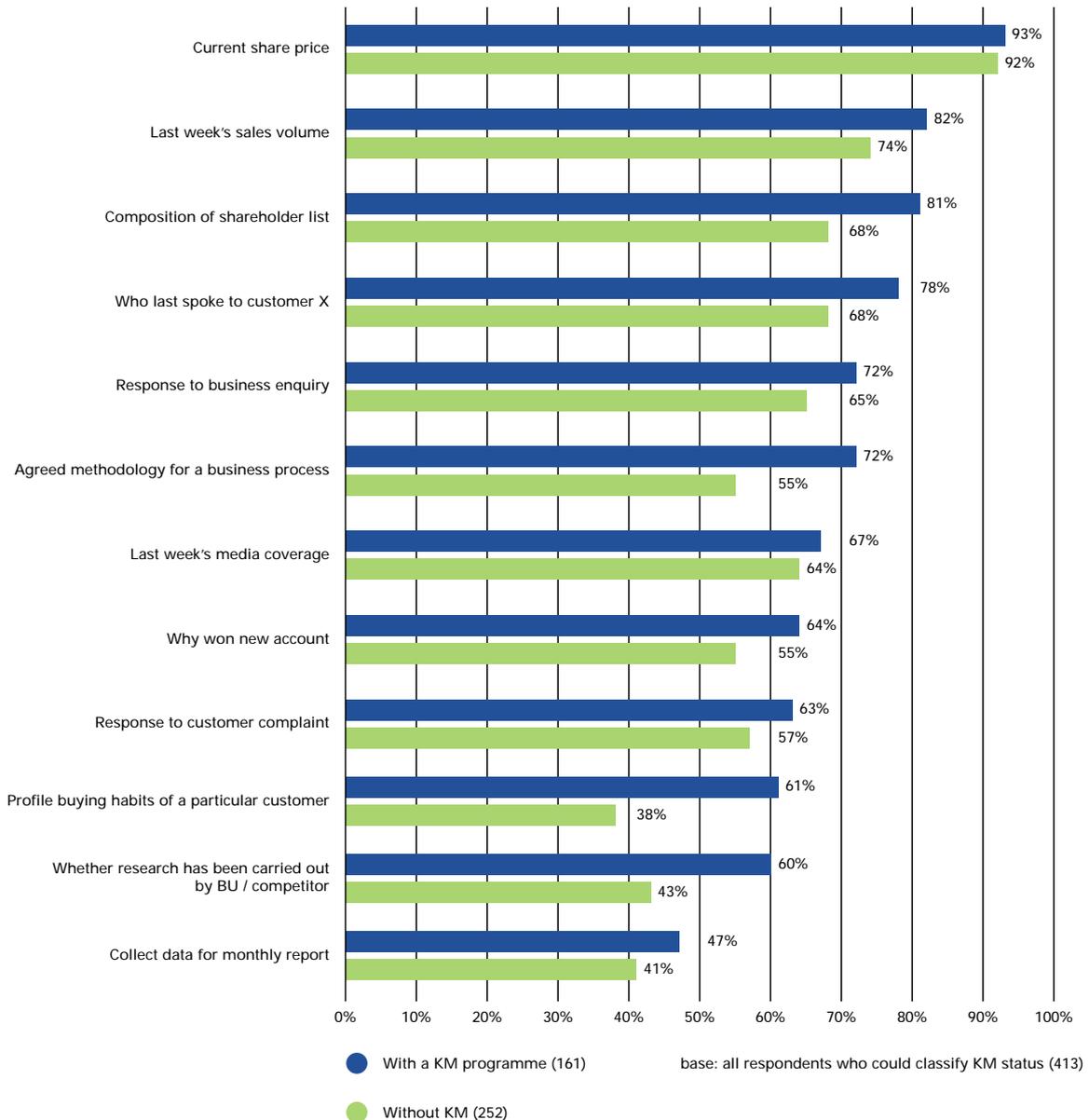


4.2 Speed of access to information

Respondents were asked how long it would take them to access certain types of information. Those whose organisations had a KM programme in place were able to demonstrate appreciably faster response times. For example, 61% could access data profiling the buying habits of a particular customer within half a day as opposed to 38% without a KM programme. 72% could access an agreed methodology for a business process within half a day as opposed to 55% without. In addition, 78% of organisations with a KM programme were able to identify who had last spoken to a particular customer and 64% could find out why their organisation had won a new account.

Leadtime on information

*How long will it take you to get answers on the following issues?
% proportion taking up to half a day*



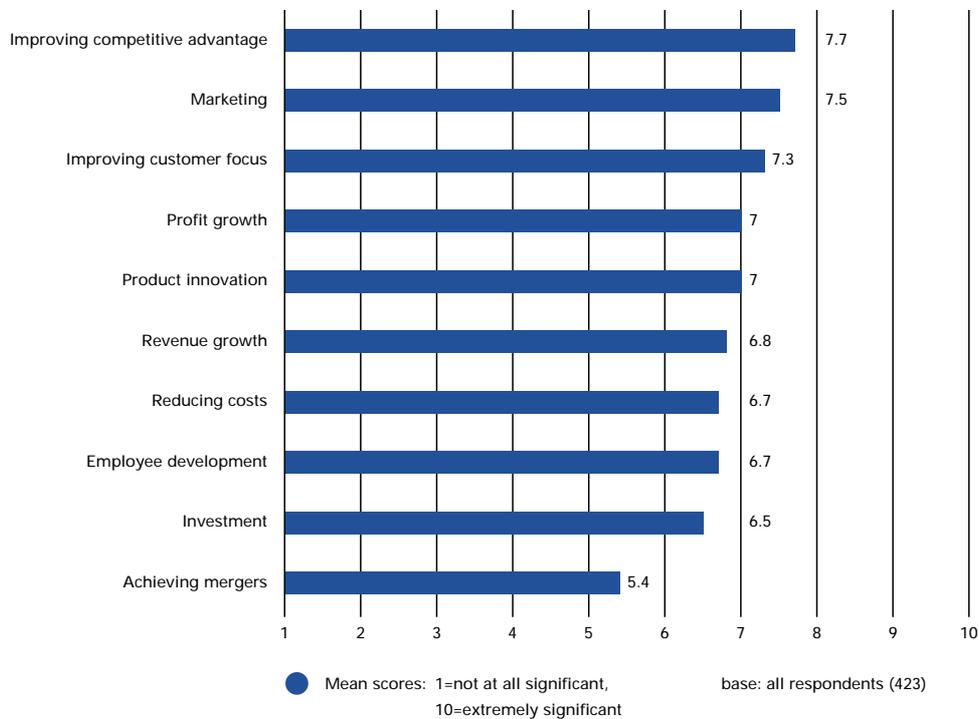
5 Achieving the benefits

5.1 The potential role of KM

Respondents were asked for their views of the potential role that KM can play in achieving specific organisational objectives. 79% believed KM can play an “extremely significant” or a “significant” role in improving competitive advantage, 75% in respect of marketing, 72% in the case of improving customer focus, 57% in respect of employee development, 64% in respect of product innovation, 63% in respect of revenue growth and 63% in respect of profit growth. These figures indicate that respondents view KM as having a key role to play in achieving many of their organisations’ objectives, and how closely KM is aligned to issues such as customer management.

Potential role of Knowledge Management

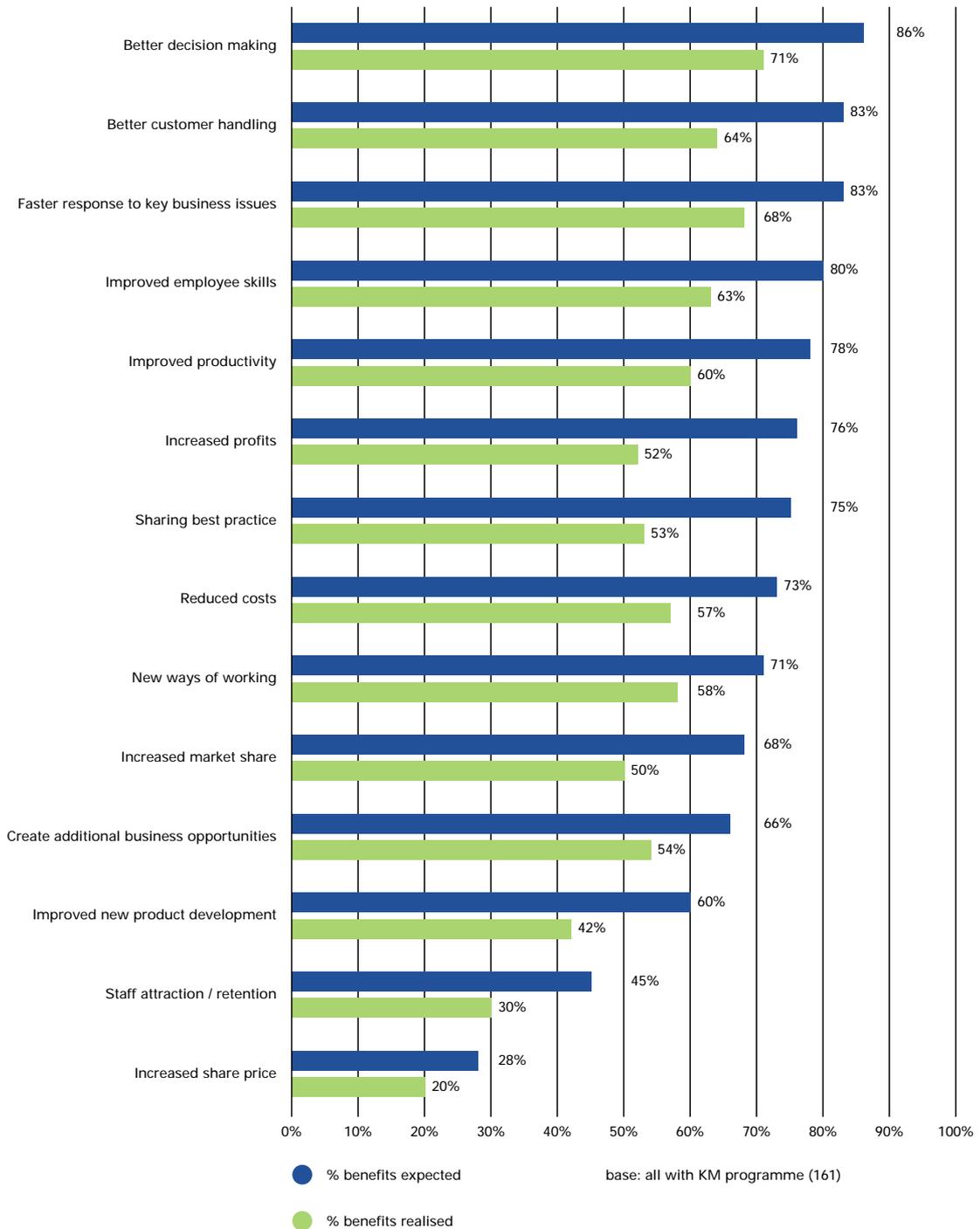
How significant is the role that effective Knowledge Management can play in achieving best results with respect to . . . ?



5.2 The benefits expected

Respondents whose organisations had a KM programme in place were asked which benefits they had expected from KM. These reflected respondents' overall expectations of KM's potential (see 5.1). In particular, better decision-making (86%), faster response to key business issues (83%) and better customer handling (83%) scored highly.

Benefits expected and actually realised



5.3 The benefits achieved

Respondents whose organisations had a KM programme in place were asked to identify the benefits they had realised from KM. The most significant benefits realised included better decision making (71%), faster response to key business issues (68%) and better customer handling (64%). But organisations were failing to achieve some of the more cultural benefits, such as new ways of working, sharing best practice and retaining and attracting staff. They appear to lack a holistic approach to KM, reflected in the fact that few (20%) were seeing their KM initiative reflected in the organisation's share price.

The findings here indicate that while there is no significant gap between the benefits expected and those realised, there is a gap of as much as 20% in some cases between the two. We believe this reflects a failure on the part of organisations to understand and grasp the wider, organisational implications of KM. Too often they are fixated with the technological aspects. However, it should not be overlooked that those with a KM initiative in place are better off than those without, as findings elsewhere in the survey demonstrate.

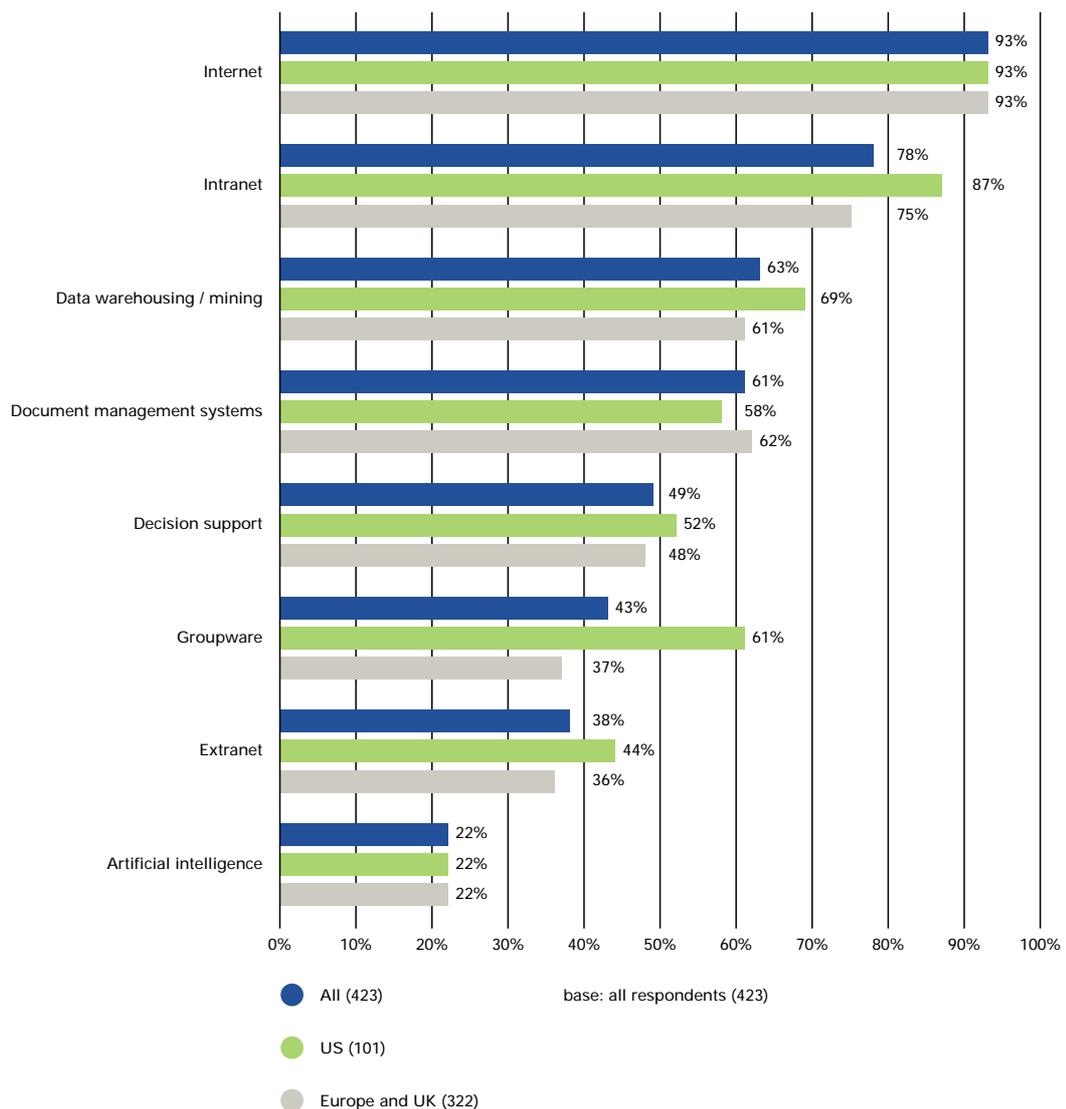
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KM and the role of technology

6.1 Use of technology to implement KM

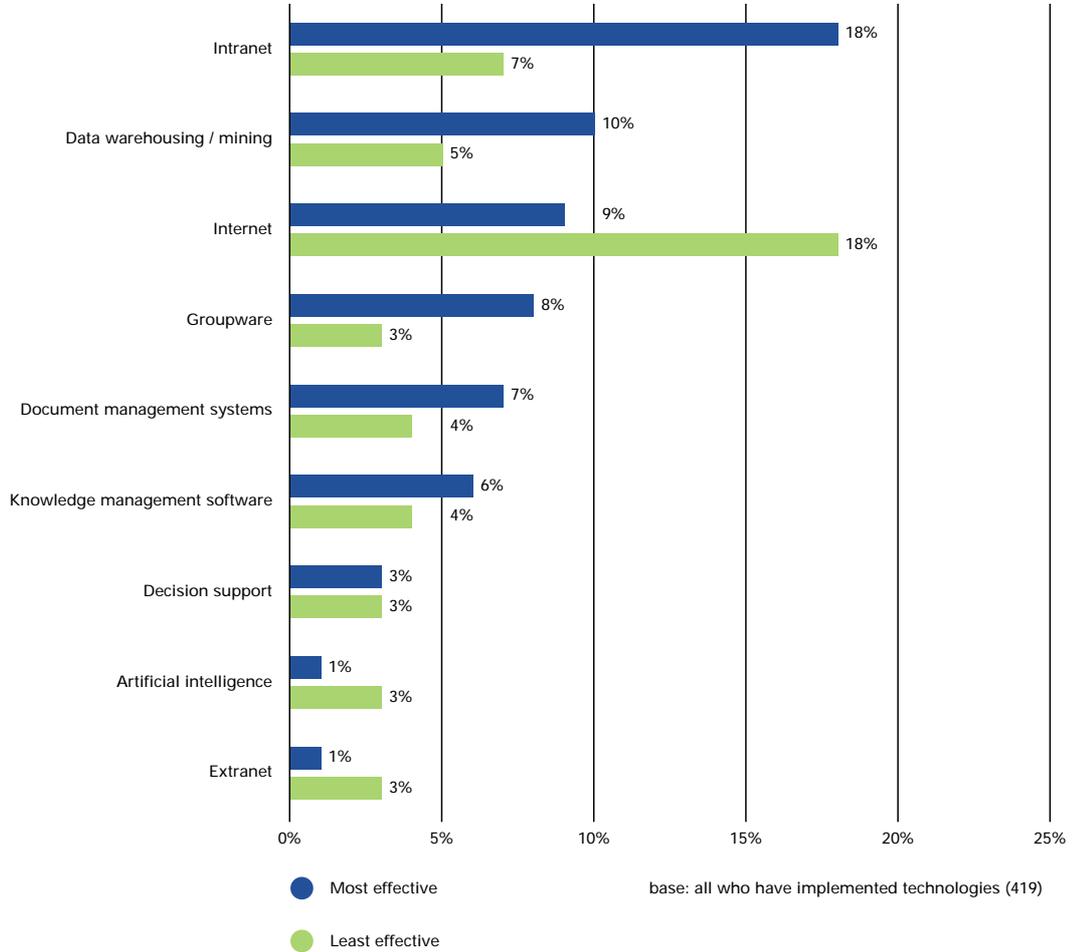
Technology, in itself, does not constitute a KM programme but, rather facilitates one, especially in large, geographically dispersed organisations, typical of the type that participated in this survey. Accordingly, respondents were asked about their use of technology to manage information. 93% had implemented Internet access, 78% had an intranet, 63% used data warehousing and mining techniques to analyse data, and 61% had document management systems. One interesting geographical difference here was that respondents from US organisations favoured Groupware more than others.

Use of technology to manage information – percentage implemented
When did you, or when have you expected to, implement the following technology?



Most / least effective technologies

Which technologies have been most / least effective in helping you manage information?



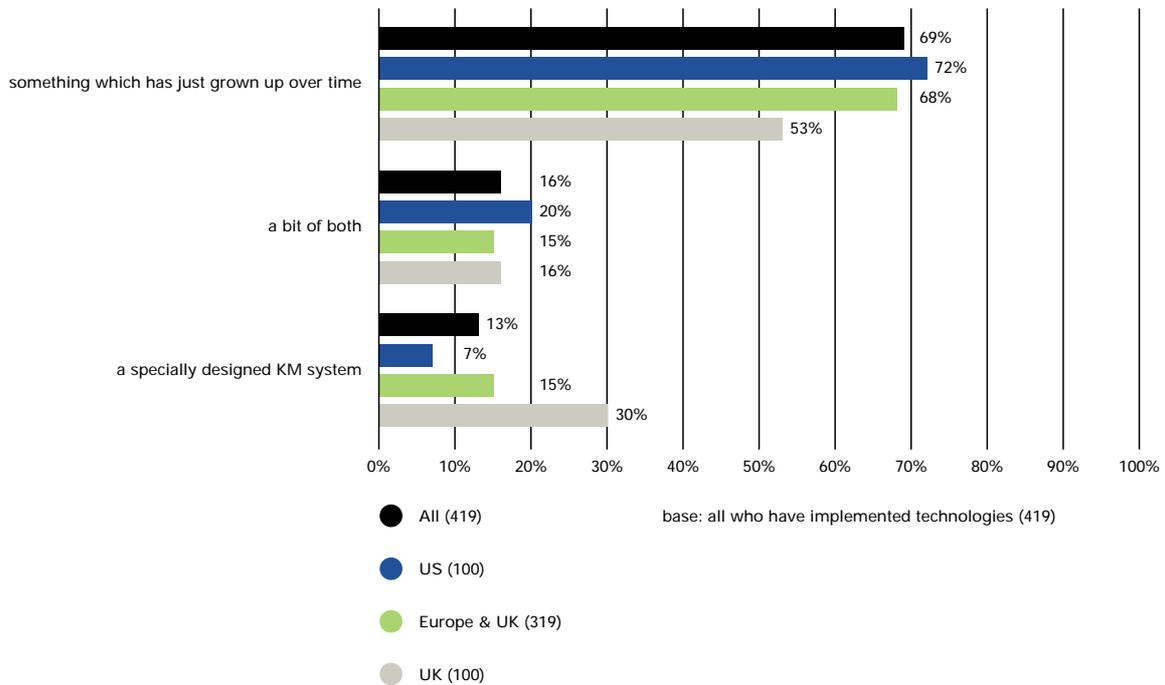
Respondents found intranets (accessing internal information) the most effective technology in helping them manage information and the Internet (accessing external information) the least effective. This suggests that organisations have only been able to get to grips with internal information so far but they need to improve with respect to external information. This may explain why data warehousing and data mining tools were regarded as the second most effective technology in helping them manage information.

6.2 Nature of technology implementation

Respondents whose organisations had implemented technologies to manage information were asked how those technologies had developed within the organisation. Only 16% said they had a specially designed KM system; 69% said the technology used for KM had grown up over time and 13% said it had been a bit of both. This may indicate that the approach taken to KM has not been a thoroughly strategic one in most cases.

Nature of technology implementation

Thinking about the technology your organisation has in place for managing information, would you describe it as . . . ?



6.3 Reasons for failing to realise benefits

Respondents whose organisations had implemented technologies were asked whether their expectations had been realised. In the case of each technology, only a small minority – ranging from 8% to 13% – said their expectations had not been realised. When probed further, respondents gave unprompted reasons that illuminate common implementation issues. 20% said there was lack of user uptake owing to insufficient communication, 19% that every day use did not integrate into normal working practice, 18% complained that there was a lack of time to learn how to use the system or it was too complicated, 15% complained of a lack of training and 13% said that users could not see the personal benefits. In short, the people and process issues had not been as well addressed as the IT ones.

Why benefits failed to meet expectations

Why do you think the benefits failed to materialise?



base: all where benefits failed to meet expectations (137)

These responses confirm the fundamental flaw in viewing KM as a technology issue: it is not the technology that is holding organisations back but a lack of strategy and a failure to build KM into the organisation's day-to-day operations and its culture in order to encourage end-user buy-in.

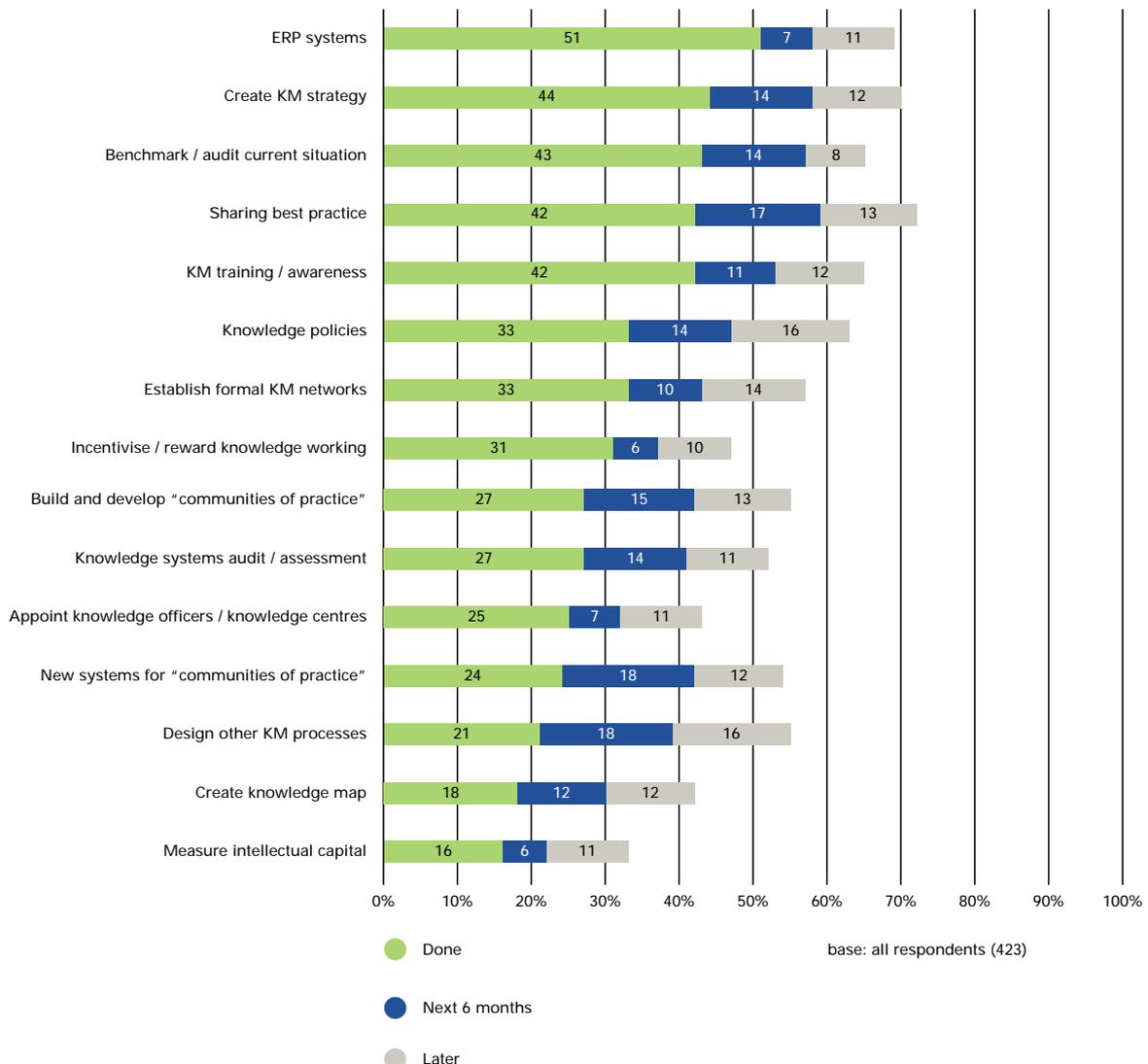
7 The organisational implications

7.1 Failure to undertake key KM requirements

Respondents were asked when their organisation intended to undertake certain aspects of KM implementation. Implementing enterprise resource planning systems, creating a KM strategy and benchmarking the current situation scored more highly than establishing knowledge policies, incentivising knowledge working, creating a knowledge map and measuring intellectual capital (the latter of which may explain why organisations neither expected nor experienced any impact on their share price through their KM programme or strategy). This confirms that less attention had been paid to the non-IT aspects.

Knowledge Management implementation

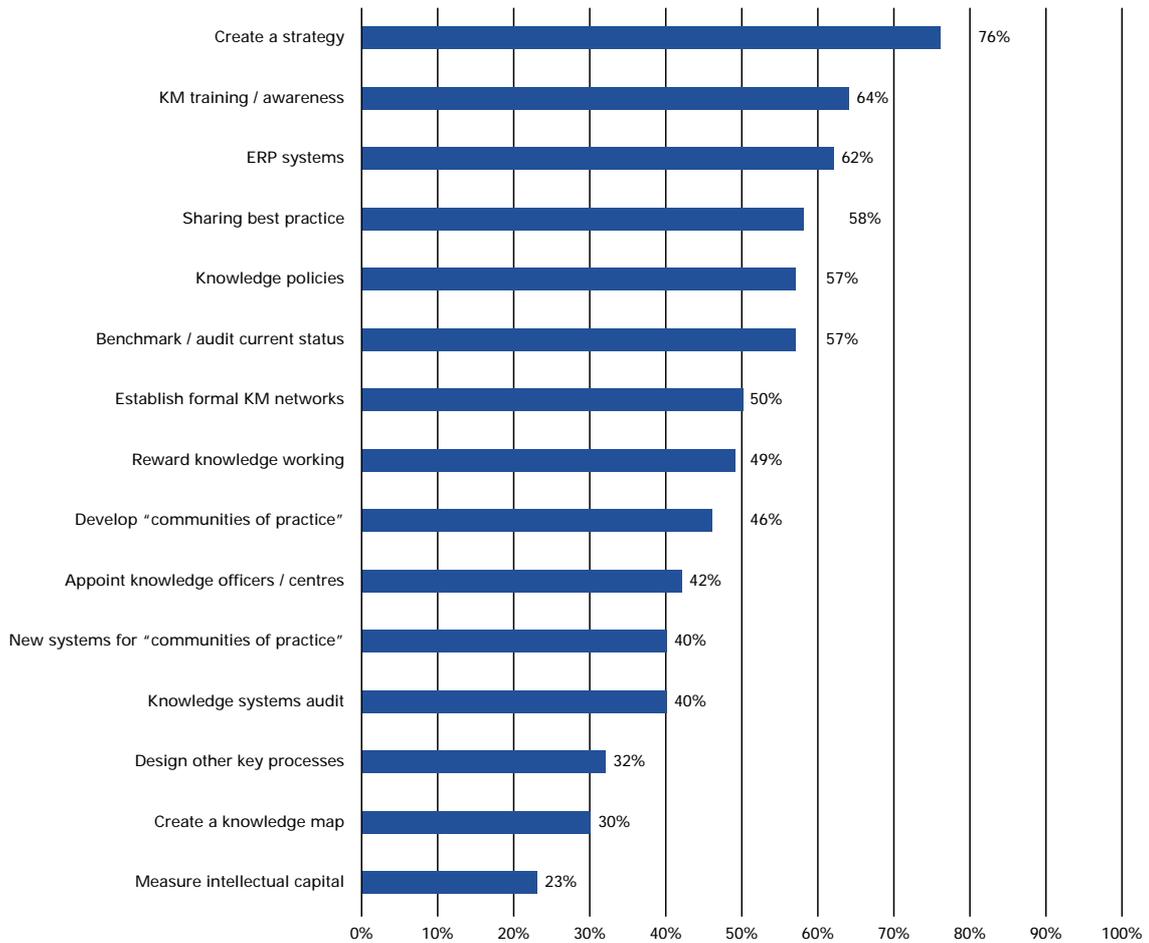
When, if at all, do you intend to do any of the following, or has your organisation done them already?



7.2 KM action taken to date

Respondents whose organisations had a KM programme were asked what the KM implementors in their organisation had done. Again, those aspects that go to the heart of an organisation's operations and culture – such as rewarding knowledge working, creating a knowledge map and measuring intellectual capital – had still to be undertaken by the majority.

What KM implementors have done



base: all with KM programme (161)

8

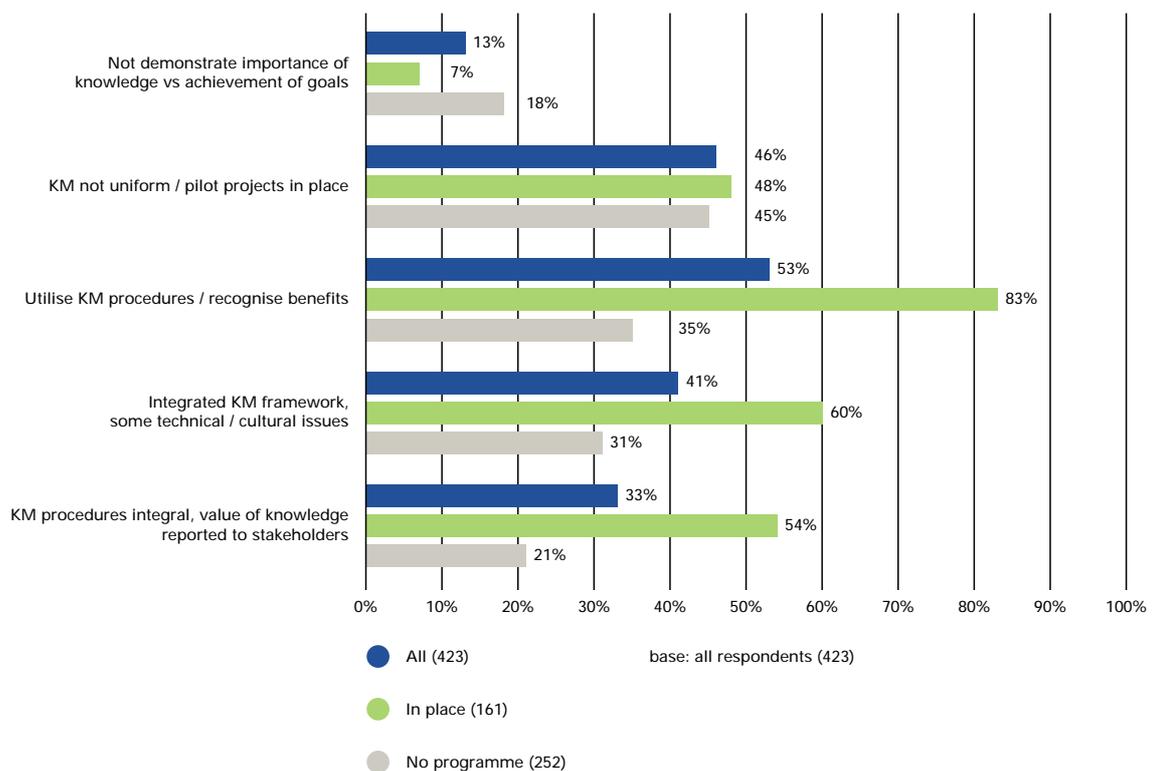
The knowledge journey

Respondents were asked where they believed their organisations stood in terms of KM. We provided them with five descriptions and asked them to specify that most applicable to their organisation:

- 1 The organisation does not demonstrate a relationship between the importance of KM and the achievement of organisational goals
- 2 Awareness and implementation of KM across the organisation may not be uniform but pilot projects are in place in some areas
- 3 The organisation uses KM procedures and tools and it is recognised that KM brings some benefit to the business
- 4 The organisation has an integrated framework of KM procedures and tools, but there are some technical and cultural issues still to be overcome
- 5 KM procedures are an integral part of organisational and individual processes and the value of knowledge is reported to the stakeholders

Knowledge management in practice

How accurately do these statements reflect your organisation?



Note: percentages do not sum because the respondents were allowed to select any or all of the five categories above, and were asked to express how applicable they were to their organisation. The above chart represents scores 7 or above in each category, on a scale of 1-10 where 1 meant 'not at all' and 10 meant 'extremely well'.

Respondents were optimistic in terms of where they saw their organisation's KM development. Most saw their organisations falling into stages 3 or 4. But integral to the realisation of the greatest benefits is recognition that there is still some way to go. We mapped their responses against our Knowledge Journey benchmark and devised an alternative view of where organisations stand today in their knowledge journey:

The KPMG Consulting Knowledge Journey Benchmark

Key to a KM programme are:

People

- implementing KM training/awareness (e.g. workshops or roadshows)
- appointing knowledge officers and creating knowledge centres
- incentivising and rewarding knowledge working
- building and developing "communities of practice"
- establishing formal KM networks (e.g. dedicated workers in discrete groups, or communities of KM practice)

Process

- benchmarking or auditing the current situation
- creating a KM strategy
- implementing new systems for "communities of practice"
- designing other KM processes

Content

- creating a knowledge map
- implementing knowledge policies
- measuring intellectual capital

Technology

- carrying out a knowledge system audit or assessment
- implementing ways to share best practice
- use of KM software (either dedicated or Intranet or Groupware software)

Where is your organisation on the **KPMG Consulting Knowledge Journey**?

Stage 1 – Knowledge Chaotic: 3 or fewer of the above

Stage 2 – Knowledge Aware: 4 or more, drawn from at least 2 sections

Stage 3 – Knowledge Focused: 6 or more, drawn from at least 3 sections

Stage 4 – Knowledge Managed: More than 2 from each section

Stage 5 – Knowledge Centric: All

Our findings indicate that 43% were at Stage 1 – Knowledge Chaotic. Only a third (32%) could be said to be at Stages 2 or 3 – Knowledge Aware and Knowledge Focused. Only 10% were at Stages 4 or 5 (only 1% were at the latter stage). This may be due to the imbalance of their KM strategy in technology or human resources. There is a need to address all areas in order to become knowledge centric.

9

The future

The findings of this report confirm that knowledge management is an accepted part of the business agenda: the benefits of knowledge management are acknowledged; and organisations with a KM programme are demonstrably better off than those without. However, the full benefits of KM are being missed and organisations are failing to tackle KM's real challenges.

In particular, they are blind to the employee considerations and many still see knowledge management in purely technological terms. As a result, employees complain of information overload and of policies that fail to reward them for driving KM initiatives – for instance by sharing and maintaining knowledge. Organisations are failing to grasp the fundamental changes to their day-to-day operations and culture that successful KM implementation requires. They are also failing to raise their sights and recognise the impact on profit, share price and employee retention and development that KM can deliver.

However, a number of developments will address these issues.

Technological improvements will help knowledge workers, not least in combating information overload: the emergence of KM tools in areas such as content management, user needs profiling and intelligent Internet searching will make their jobs easier. Knowledge workers will be able to work remotely through the development of universal mobile telephone systems (UMTS) that will enable broadband communication (TV, intranet, videoconferencing, multimedia, as well as voice and data) on a new generation of hand-held mobile devices.

Increasing awareness in the business community of the 'dot.com' revolution will focus attention on companies' KM assets and how they are managed. Those companies that have grasped KM and implemented policies to encourage it will be rewarded with enhanced market ratings.

This, in turn, will drive a more sophisticated understanding of the HR and internal communications aspects as organisations take a more holistic view of knowledge and its value. The result will be a virtuous circle as organisations take KM more seriously, make the necessary internal changes to encourage knowledge working and see the benefits in terms of enhanced shareholder value.

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