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The Importance of Strategic Fit

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INTRODUCTION

One of the issues of importance raised by members of the Henley Knowledge Management Forum when it was launched in June 2000 was that of knowledge management (KM) strategy. A working group co-championed by the authors was set up and started deliberations on the topic at the second Forum meeting in October 2002. The main aims of the project were to highlight the nature of different organizations' KM strategies and to examine whether firms of different strategic direction varied in their approach to KM. The objectives of the project were set out as follows:

- identify different types of KM strategy pursued by organizations;
- develop a working model of KM strategy and organizational type; and
- identify which strategies are more successful and how these differ across different types of organization.

In summary, the project was testing whether a 'one size fits all' approach is appropriate in KM, and if not, what might be the relevant factors that should be taken into account when developing a KM strategy.

BACKGROUND

Over the last couple of decades many scholars, consultants and practitioners have developed frameworks that attempted to find the elusive link between information systems and business strategy (Marchand *et al.*, 2000). A major milestone in this field was the creation of a model for strategic alignment developed by MacDonald *et al.* as part of MIT's 'Management in the 1990s' research framework (Scott Morton 1991). The model brought together the elements of business strategy, IT strategy, information systems infrastructure and process, and organizational infrastructure and process (including organizational change processes and HR issues). Much subsequent research has followed in this direction. It is the recent study by Marchand *et al.* (2001) that is one of the first to discover evidence for a link between information orientation and business performance. One of the major findings of this study is that demonstration of a significant link to performance requires a holistic approach, which considers all the factors of IT practices, information management practices, and information behaviour/values. The Forum's study was carried out in parallel and did not have the benefit of these findings as they have been published subsequently. Whilst the research approaches are essentially similar, the studies are complementary in that only the Henley study (reported here) has included the element of strategic orientation.

APPROACH

The research method adopted is mainly quantitative with primary data collected through a questionnaire-based survey. The overall approach is exploratory and seeks to discover new relationships and models. Supplementary qualitative data was collected through a series of focus group meetings involving the project working group and structured interviews with other practitioners.

A literature review of current models in this area revealed the need to build a new model for strategic alignment that suited a quantitative approach, as most of the previous studies were primarily qualitative. The elements of strategic orientation, environmental turbulence and business performance were taken from established and validated models (described in following sections). As no model could be found for knowledge orientation, this was developed by the working group and based on a mix of KM dimensions already identified in the literature and the practical experience of the group. This resulted in the development of a 49 item survey instrument for measuring knowledge orientation (see Appendix).

RESEARCH MODEL

The main elements of the survey are represented in the Figure 1.1. Each element is described in more detail in the subsequent sections.

KNOWLEDGE ORIENTATION

IDENTIFYING A KM STRATEGY

A review of the literature, confirmed by the experiences of the working group, indicated that few organizations have explicit KM strategies. In many organizations, the KM strategy formation process tends to be emergent rather than the subject of formal long-term planning. This is in line with recent trends in business strategy formation with a shift in emphasis from highly prescriptive models to those that emerge as a result of a flexible approach driven by organizational learning. Mintzberg (1999) identifies as many as ten different schools of strategy formation and concludes that dealing with the complexity of the different approaches to strategy formation in one process may seem overwhelming. After all, strategy formation involves judgemental designing, intuitive visioning and emergent learning.

A further problem in examining the effectiveness of any strategy is the dependence of the outcome on the manner in which the strategy has been implemented. No matter how brilliant or well aligned a strategy may be, it will still be unlikely to lead to a successful outcome if it has been poorly implemented.

For these reasons, the emphasis of this project moved away from looking purely at KM strategy, which in effect is a statement of intended actions and expected results at some point in the future. Instead the working group chose to look at current knowledge practices and management. This was defined as the knowledge orientation of the organization.

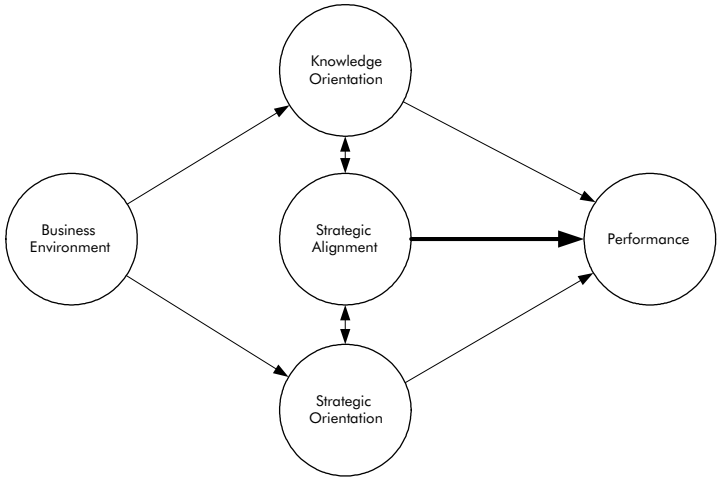

FIGURE 1.1 STRATEGIC ALIGNMENT MODEL

DEVELOPING A KM PROFILE

At the second Forum meeting a focus group of ten people from different organizations reviewed the key dimensions of KM. Through a brainstorming session without any prior input twelve key dimensions were identified. These are listed in the left-hand column of Figures 1.2 and 1.3. This was followed by each participant benchmarking his or her own organization against these criteria. It was clear from the broad range of results that the participating organizations varied considerably on each of the dimensions.

This analysis provided an early indication of some of the main dimensions of knowledge orientation. Whilst some differences may be explained by the maturity of a firm in KM terms, others might be due to different organizational objectives and needs. Members agreed that many of these dimensions highlighted important issues and decision areas for management. Another important observation of the group was that achieving the highest possible score on each dimension was not a relevant objective. Each organization needed to develop what for it would be an optimal profile, which might score high on some dimensions and low on others. However, a ready model for this was not available and it was decided that the research of this group would be directed towards examining these issues.

BUSINESS STRATEGY

In order to review how knowledge orientation varies between organizations of different strategic types it was necessary to find a quantitative instrument that enabled the categorization of respondents to the survey. Following a review of several models of business strategy, a survey instrument developed by Conant & Mokwa (1990) was chosen. Based on a typology developed by Miles & Snow (1978) the instrument provides a validated and reliable tool for categorizing organizations according to their strategic orientations.

Miles & Snow proposed a relatively complex strategic typology interrelating organizational strategy, structure and process variables within a theoretical framework of co-alignment. They viewed the 'adaptive cycle' characterizing this process as involving three imperative strategic 'problem and solution' sets:

1 an entrepreneurial problem set centring on the definition of an organization's product-market domain;
2 an engineering problem set focusing on the choice of technologies and processes to be used for production and distribution; and
3 an administrative problem set involving the selection, rationalization and development of organizational structure and policy processes.

In their research across different sectors, both public and private, Miles & Snow found that the organizations they studied fell into one of four strategic type categories, which they defined as follows:

1 **Defenders** are organizations that have narrow product-market domains. Top managers in this type of organization are highly expert in their organization's limited area of operation but do not tend to search outside of their domains for new opportunities. As a result of this narrow focus, these organizations seldom need to make major adjustments in their technology, structure, or methods of operation. Instead they devote primary attention to improving efficiency of their existing operations.
2 **Prospectors** are organizations that almost continually search for market opportunities, and they regularly experiment with potential responses to emerging environmental trends. Thus, these organizations often are the creators of change and uncertainty to which their competitors must respond. However, because of their strong concern for product and market innovation, these organizations usually are not completely efficient.
3 **Analyzers** are organizations that operate in two types of product-market domains, one relatively stable, the other changing. In their stable areas, these organizations operate routinely and efficiently through use of formalized structures and processes. In their more turbulent areas, top managers watch their competitors closely for new ideas, and then they rapidly adopt those that appear to be the most promising.

KM Dimensions

Priority given to knowledge management by top management

Senior management **commitment**

Visibility of commitment to knowledge management

Formality of KM strategy

Degree of **centralization**

Measurement processes in place

Alignment of KM, culture, business systems and incentives

Emphasis on **tacit** knowledge

Emphasis on **explicit** knowledge

Creating new knowledge-based **value** for the organization

Link between **innovation** and KM

Effectiveness of **application** of knowledge in the organization

The single line profile around the centre of the figure represents the mean for the whole group

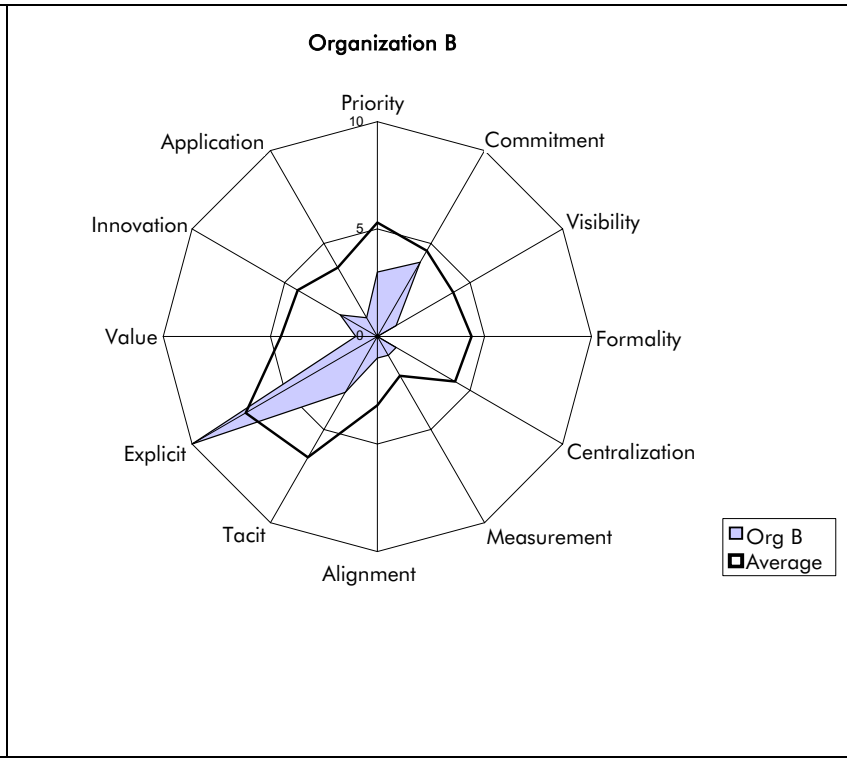

FIGURE 1.2 ORGANIZATION B – KM PROFILE

KM Dimensions

Priority given to knowledge management by top management

Senior management **commitment**

Visibility of commitment to knowledge management

Formality of KM strategy

Degree of **centralization**

Measurement processes in place

Alignment of KM, culture, business systems and incentives

Emphasis on **tacit** knowledge

Emphasis on **explicit** knowledge

Creating new knowledge-based **value** for the organization

Link between **innovation** and KM

Effectiveness of **application** of knowledge in the organization

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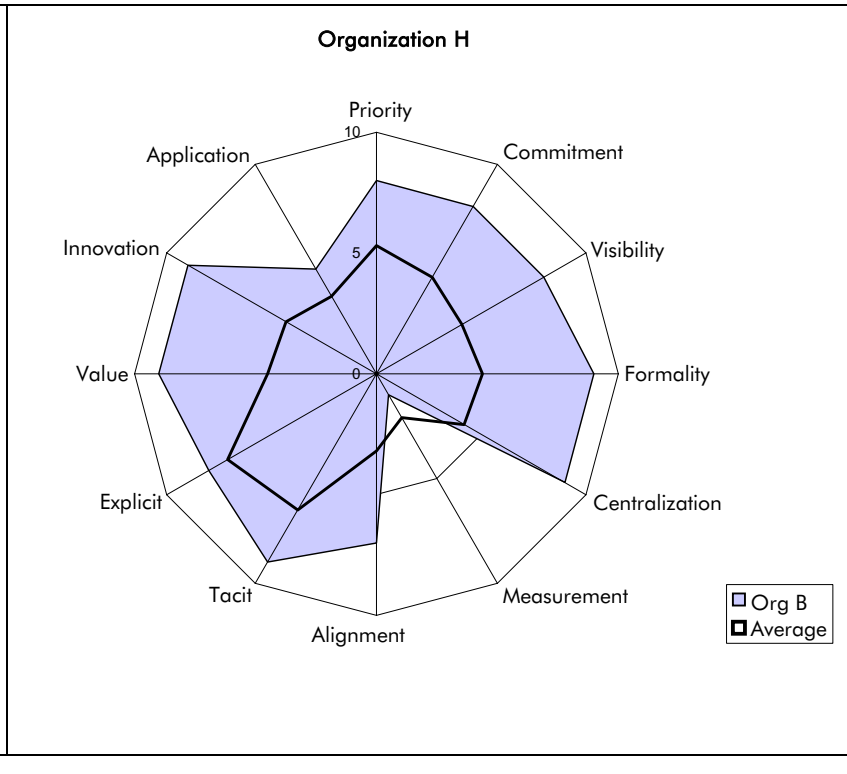

FIGURE 1.3 ORGANIZATION H – KM PROFILE

4 **Reactors** are organizations in which top managers frequently perceive change and uncertainty occurring in their organizational environments but are unable to respond effectively. Because this type of organization lacks a consistent strategy/structure relationship, it seldom makes adjustment of any sort until forced to do so by environmental pressures.

The *defender* and *prospector* are at opposite ends of the adaptive scale, whilst the a*nalyzer* shares characteristics with both these types and is a form of hybrid. The *reactor* is a residual type that does not display a fixed pattern of behaviour, rather responding when it is forced to do so.

Miles & Snow found that all four types tend to exist in any single industry and that prospectors, analyzers and defenders tend to perform equally well, whilst the reactors' performance is comparatively inferior.

BUSINESS ENVIRONMENT

As the Miles & Snow model is essentially based on the behavioural patterns of an organization when it responds or adapts to changes in the business environment, a measure of the business environment was incorporated in the research model. A scale developed by Ansoff & Sullivan (1993) was adopted because it had already been used successfully in a number of studies that have reported reliable results.

Ansoff (1965) defines the degree of changeability of environmental challenges as the level of *environmental turbulence*. The latter is determined by a combination of numerous factors, which include:

- changeability of the market environment;
- speed of change;
- intensity of competition;
- fertility of technology;
- discrimination by customers; and
- pressures from governments and influence groups.

The more turbulent the environment the more aggressive must be the firm's response, but common experience shows that some firms take full advantage of the opportunities offered by turbulence and others lag behind.

Ansoff & Sullivan developed a strategic-success-formula (SSF) that is based on the thesis that to optimize a firm's performance, management must align the firm's strategies and capabilities with the state, or turbulence level of the environment. Their model includes five levels of environmental turbulence:

1 **repetitive**: no change;
2 **expanding**: slow incremental change;
3 **changing**: fast incremental change;
4 **discontinuous**: discontinuous predictable change; and
5 **surpriseful**: discontinuous unpredictable change.

This measure of environmental turbulence was included in the questionnaire as a single item.

MEASURING PERFORMANCE

Assessing the performance of multi-industry firms is difficult because profitability can be influenced by industry-specific factors, and methods of allocation of revenues and costs across subsidiary business units may vary. Previous studies have shown that subjective assessments by senior managers can be used to provide reliable measures of performance, and that these correlate well with objective measures where they

are available (Dess & Robinson 1984; Pearce *et al.* 1987). The following performance measures (comparative to competitors) were used in the questionnaire:

- overall performance in the last year;
- return on investment over the last three years; and
- growth in volume of sales in the last three years.

SURVEY

In a series of focus group meetings, including academics and practitioners, the concept and dimensions of knowledge orientation were explored, using brainstorming techniques to identify factors that are most likely to vary across organizations of different strategic orientation. In combination with a thorough literature review, 49 dimensions were identified and developed into measures for the questionnaire (see Appendix).

After piloting the draft questionnaire and making some minor amendments, the survey was sent out via several channels. These included a printed version distributed with the *KM* magazine (Biz Media); an Internet-based version through the Henley Management College website; an electronic version via the Gurteen newsletter and by direct email to Henley alumni. Around 180 responses were received. Of these, 70 per cent came from respondents in the UK and 21 per cent from other parts of Europe. These covered a range of sectors including financial services, professional services, telecom, education and IT products and services. Twenty responses came from the public sector.

FINDINGS

ONE SIZE DOES NOT FIT ALL

Analysis of the survey results clearly shows that knowledge orientation varies significantly with the strategic orientation of organizations. Of the 49 dimensions of knowledge orientation that were measured, 33 proved to vary significantly (28 at 99 per cent confidence level and 5 at 95 per cent confidence level). The results for the dimensions that vary at the 99 per cent level of confidence are set out in Table 1.1 below. The right-hand column indicates the significant differences in more detail. The figures shown under each of the strategic types – prospector, analyzer, defender and reactor – represent the mean of the knowledge orientation measure for each strategic group. Scores are on a scale of 1–7.

TABLE 1.1 VARIANCES IN KNOWLEDGE ORIENTATION

Ref.	Knowledge Orientation Dimension (Questionnaire Item)	Prospector	Analyzer	Defender	Reactor	Significant Differences (99% Conf. Level)
28	Our training relies on documentation and manuals	2.59	3.71	4.51	3.71	R>P, D>P, A>P
29	People joining our company are good at problem solving in unclear situations	5.08	4.75	3.93	3.67	P>D, P>R, A>R
31	Our remuneration systems encourage direct sharing of knowledge with others	3.92	3.18	2.58	2.25	P>D, P>R
32	Secondments to and from our company are used to foster people networks	3.94	3.38	2.78	3.00	P>D
33	Our HR policies and systems are aligned with the knowledge needs of our organization	4.02	3.29	2.95	2.67	P>D, P>R
36	We use leading edge information and communications technologies (ICT)	5.25	4.31	3.93	3.83	P>A, P>D, P>R
37	Our information systems provide comprehensive performance measures for our company	4.10	3.58	3.07	3.08	P>D, P>R
38	We can generally access the information that we need without having to refer to the person who created it	4.60	3.67	3.71	3.58	P>A
39	We can find the documents that we need very fast with a simple search in our electronic databases	4.48	3.24	3.37	2.75	P>A, P>D, P>R
42	Once we have developed new knowledge we re-use it as many times as possible in our product/services	4.78	4.29	3.63	3.42	P>D, P>R
43	The product/services that we provide always involve bringing together experts with relevant knowledge and experience	5.69	5.53	4.71	4.21	P>D, P>R, A>D, A>R
44	Detailed knowledge of our customers is treated as a priority and is continuously updated	5.08	4.87	4.10	3.54	P>D, P>R, A>R
45	Detailed knowledge of our competitors is treated as a priority and is continuously updated	4.40	4.32	3.53	3.25	P>D, P>R, A>R
46	Detailed knowledge of our industry or sector is treated as a high priority and is continuously updated	5.12	4.78	4.15	4.04	P>D, P>R
54	The knowledge that our company relies on requires rapid and continuous refresh	5.62	5.02	4.56	4.96	P>D
55	We are effective at acquiring and/or creating new knowledge assets	4.69	4.11	3.59	3.33	P>D, P>R
56	We are very effective at exploiting our knowledge assets, that is by utilizing them ourselves, selling or disseminating them to others	4.56	3.60	3.24	2.96	P>A, P>D, P>R
57	The knowledge that we acquire or create is closely related to the knowledge that we use in our main activities or sell on to others	5.31	4.42	4.68	4.13	P>A, P>R
61	Our information systems provide access to documents generated anywhere in the organization	4.66	4.14	3.12	2.92	P>D, P>R
62	Most of the knowledge in our company flows horizontally across the organization at all levels	4.62	3.64	3.17	3.50	P>A, P>D, P>R
65	Our company operates mainly through set procedures and people are discouraged from deviating from these	3.08	4.13	4.93	4.17	P>A, P>D, P>R
67	Project teams operate horizontally across the company	5.38	4.73	4.33	3.75	P>D, P>R
68	People in the company normally respond rapidly to requests for information from colleagues	5.25	4.93	4.44	4.13	P>D, P>R
69	Our KM practices are aligned with the overall objectives of the company	4.61	4.16	3.49	3.08	P>D, P>R
72	Information about failures, errors, and mistakes is shared and addressed constructively	3.83	3.53	2.75	2.63	P>D, P>R
73	We are generally allowed time to reflect on completed tasks and projects, and to share our experiences with our colleagues	3.62	3.42	2.71	2.43	P>R

Ref.	Knowledge Orientation Dimension (Questionnaire Item)	Prospector	Analyzer	Defender	Reactor	Significant Differences (99% Conf. Level)
75	Our knowledge systems are focused on internal aspects of our company	3.48	4.40	4.43	4.00	P>A, P>D
76	In comparison with our competitors we spend more on research and development	4.86	3.98	3.71	3.23	P>A, P>D, P>R

Some of these dimensions are examined in more detail in the following sections.

Approach to training

Items 28 and 30 examine contrasting approaches to training. These are shown graphically in Figures 1.4 and 1.5.

Figure 1.4 relates to training that relies on documentation and manuals (explicit or codified knowledge). Defenders score highest on this measure as might be expected from an organization focused on internal efficiency.

On the other hand, Figure 1.5 relates to the reliance of training on knowledge transfer through coaching and mentoring (tacit or personalized knowledge). Whilst there are marked differences between the strategic groups, they are less significant in statistical terms than those for document-based training and therefore are not included in Table 1.1. Prospectors and analyzers make more use of people-to-people training.

Both these findings are consistent with the model of KM strategy developed by Hansen & Nohria (1999), whose model defines the following two strategies:

- codification: people-to-documents (explicit knowledge); and
- personalization: people-to-people (tacit knowledge).

Application of technology

Figures 1.6 and 1.7 describe, respectively, the main application of information and communications technologies (ICT) to accessing documents and contacting people.

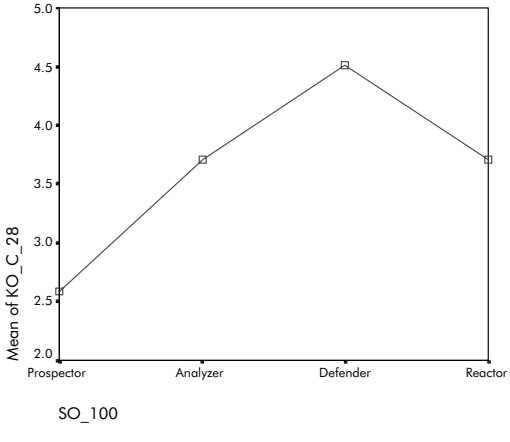

FIGURE 1.4 TRAINING (DOCUMENT-BASED)

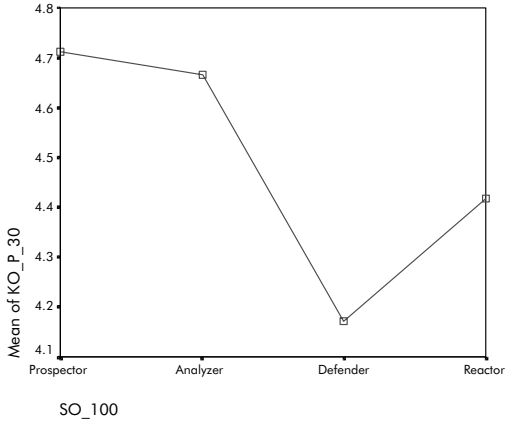

FIGURE 1.5 TRAINING (PEOPLE-BASED)

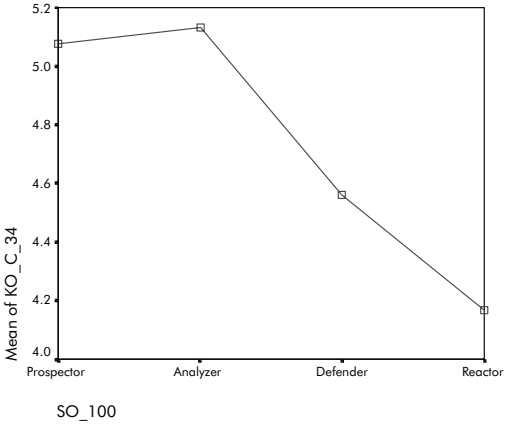

FIGURE 1.6 ICT FOR ACCESSING DOCUMENTS

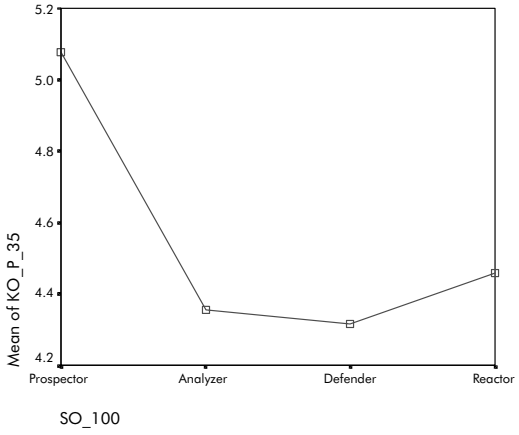

FIGURE 1.7 ICT TO CONTACT PEOPLE

Although these variations are less significant (closer to 90 per cent) they are still worthy of comment. Prospectors are higher than the other three types on the focus of ICT on connecting people. It appears that only prospectors have high scores on both counts.

Remuneration systems

The linkage of remuneration systems encouraging direct sharing of knowledge varies considerably, as shown in Figure 1.8. Prospectors are significantly higher than defenders and reactors.

Re-use of knowledge

A perhaps surprising result, as shown in Figure 1.9, is that prospectors have the highest score for re-use of knowledge. Hansen & Nohria's model would suggest that defenders should have the highest score as they are more efficiency-focused.

The analysis presented here is by no means comprehensive, but is indicative of some of the relationships that have been established for the 49 dimensions of knowledge orientation.

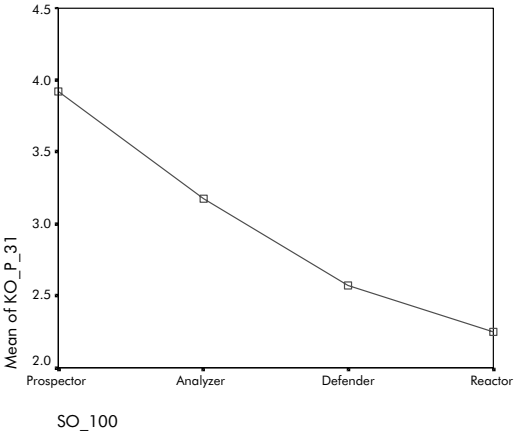

FIGURE 1.8 REMUNERATION AND KNOWLEDGE SHARING

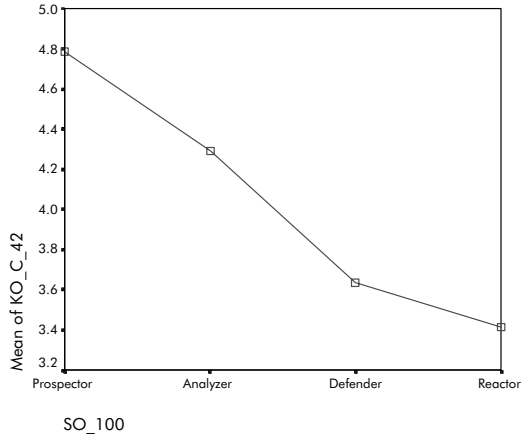

FIGURE 1.9 RE-USE OF KNOWLEDGE IN PRODUCTS/SERVICES

PERFORMANCE IS RELATED TO KNOWLEDGE ORIENTATION

By dividing up the response sample by strategic type it was found that there are significant correlations between a number of the knowledge orientation dimensions and overall performance. These are set out in Table 1.2.

Three of the dimensions in Table 1.2 are common to three of the strategic types:

- KM practices are aligned with objectives (P, A, R);
- people respond rapidly to requests for information – collaboration (A, D, R); and
- higher spend on R & D (A, D, R).

For each strategic type the knowledge orientation dimensions with crosses against them (in Table 1.2)

TABLE 1.2 CORRELATIONS BETWEEN KNOWLEDGE ORIENTATION AND PERFORMANCE

Ref	Knowledge Orientation Dimension (Questionnaire Item)	Prospector	Analyzer	Defender	Reactor
29	People joining our company are good at problem solving in unclear situations				XX
30	Our training relies on knowledge transfer through coaching or mentoring	X			
37	Our information systems provide comprehensive performance measures for our company		XX		
39	We can find the documents that we need very fast with a simple search in our electronic databases	X			
43	The product/services that we provide always involve bringing together experts with relevant knowledge and experience	X		X	
44	Detailed knowledge of our customers is treated as a priority and is continuously updated			X	
45	Detailed knowledge of our competitors is treated as a priority and is continuously updated			XX	
46	Detailed knowledge of our industry or sector is treated as a high priority and is continuously updated			XX	
49	We have comprehensive and up-to-date shared directories of experts which provide information about their experience and current work	XX		X	
53	We are generally expected to seek out for ourselves the information and know-how that we need to carry out our jobs effectively		X (R)		
55	We are effective at acquiring and/or creating new knowledge assets		X	X	
56	We are very effective at exploiting our knowledge assets, for example by utilizing them ourselves, selling or disseminating them to others		XX		
58	We are frequently short of up-to-date information that is needed to carry out our work effectively			XX (R)	
65	Our company operates mainly through set procedures and people are discouraged from deviating from these			XX	
67	Project teams operate horizontally across the company			X	
68	People in the company normally respond rapidly to requests for information from colleagues		XX	X	XX
69	Our KM practices are aligned with the overall objectives of the company	X	X		X
70	KM in our company is coordinated centrally from the top	X			
72	Information about failures, errors, and mistakes is shared and addressed constructively		XX		
73	We are generally allowed time to reflect on completed tasks and projects, and to share our experiences with our colleagues		XX		
76	In comparison with our competitors we spend more on research and development		XX	XX	X

X – significant at 95% confidence level; XX – significant at 99% confidence level (R) – Reversed, that is, negative correlation

represent success factors. This means that the organizations within each group that perform better also have higher scores on these dimensions.

SUCCESS FACTORS

Further analysis of the above success factors is summarized in Table 1.3.

KM CHARACTERISTICS

Analysis of the results and their interpretation through further focus group meetings (see Table 1.3) has yielded the following KM profiles for each of the strategic types:

Prospector

Successful prospectors focus on empowering individuals to help the organization address new opportunities and take it into the future. They focus on coaching and mentoring individuals, putting them in touch with each other through expert directories and creating networks of experts who share tacit knowledge. Without an over-emphasis on capturing explicit knowledge, they provide fast access to documents.

Agility is a key aspect for the fast-moving prospector and this is achieved through the above, plus centralization of KM and alignment of KM practices with business strategy.

Analyzer

Successful analyzers have a balanced approach to both acquiring and exploiting knowledge – both tacit and explicit.

Their working practices allow for 'people time' (for reflection); they have a positive approach to failure and learning from mistakes, and supporting people in responding quickly to requests for information and helping them find information.

They have an even balance between acquiring and exploiting knowledge and invest heavily in R&D (like defenders). This indicates a more mature approach to KM where the benefits of both acquisition and exploitation are understood.

As one might expect for a balanced organization, analyzers have a focus on measuring performance and ensuring KM strategy is aligned with the business strategy.

TABLE 1.3 KNOWLEDGE-BASED SUCCESS FACTORS

	Prospector	Analyzer	Defender	Reactor
Knowledge assets	Speed of access	Balanced acquisition and exploitation	Knowledge acquisition	R&D spend
Working practices	Empowered individuals	Collaborative culture	Communities-based	Problem solving culture
Organization	Centralized and strategically aligned	Performance measurement	Broad-based project teams	KM Alignment

Defender

Successful defenders draw information and knowledge from a broad range of sources to enable them to provide secure and solid foundations for their business. Customer, competitor and industry knowledge combined with heavy R&D spend and a focus on acquiring knowledge means there is a major emphasis on knowledge gathering. This must raise questions around the defender's ability to exploit all this knowledge successfully.

Like prospectors, defenders share directories of experts and create networks of experts. Combining this with the above indicates that they are good 'processors' of knowledge, enabling them to use knowledge effectively within the boundaries of the formal processes of the organization.

Typically, they work across the organization through horizontal project teams, but within the operation of set procedures. There is a negative correlation between success and going beyond set procedures among defenders.

Reactor

Reactors demonstrate fewer success factors than any other group. Successful reactors focus on the inherent abilities of employees to solve problems and quickly respond to requests for information. Consequently, this shows a lack of focus on collaboration and a more centralized approach, as other success factors include high levels of investment in R&D and strategic alignment of KM with organizational objectives. As expected, this would allow them to respond quickly to environmental changes.

IMPLICATIONS FOR BUSINESS

The results of this study indicate that knowledge orientation varies significantly across organizations of different strategic orientation. Different success factors apply to each strategic type (see Table 1.2) and these may be of relevance in developing an effective KM strategy.

This may be operationalized by reviewing the knowledge and strategic orientations of the organization and assessing how closely they are aligned based upon the factors outlined in this section. The research indicates that up to a third of organizational performance may be impacted by correctly aligning knowledge orientation with strategic orientation, so the potential benefits of reviewing these areas and improving the alignment could result in significant performance improvements.

In building tomorrow's agile business, which is more resilient to continuous changes in its operating environment, it is important to achieve a strategic fit between the KM systems and practices and the organizational objectives they serve. This is a vital element in terms of obtaining better value from investment in these areas. The findings of this research should help in building the business case for KM and making better-informed decisions.

FURTHER RESEARCH

The data gathered in this survey requires further interpretation and explanation through more interviews and focus group sessions.

The survey instrument for measuring knowledge orientation may be simplified by further factor analysis and interpretation of the 49 item questionnaire (Appendix) and reducing it to only significant measures.

The results will also be integrated with the KM framework project, which was conducted at the same time within the Henley KM Forum. Both studies are complementary in nature and jointly should add to the understanding of how organizations approach KM with consistently successful results.

APPENDIX: KNOWLEDGE ORIENTATION SURVEY INSTRUMENT

The 49 item survey instrument for measuring knowledge orientation, which was developed for this study, is set out below. Each item was measured on a seven-point Likert scale from 'strongly disagree' to 'strongly agree'. The reference numbers relate to the item number in the overall questionnaire.

Ref	Questionnaire Item	Ref	Questionnaire Item
28	Our training relies on documentation and manuals	53	We are generally expected to seek out for ourselves the information and know-how that we need to carry out our jobs effectively
29	People joining our company are good at problem solving in unclear situations	54	The knowledge that our company relies on requires rapid and continuous refresh
30	Our training relies on knowledge transfer through coaching or mentoring	55	We are effective at acquiring and/or creating new knowledge assets
31	Our remuneration systems encourage direct sharing of knowledge with others	56	We are very effective at exploiting our knowledge assets, for example by utilizing them ourselves, selling or disseminating them to others
32	Secondments to and from our company are used to foster people networks	57	The knowledge that we acquire or create is closely related to the knowledge that we use in our main activities or sell on to others
33	Our HR policies and systems are aligned with the knowledge needs of our organization	58	We are frequently short of up-to-date information that is needed to carry our work effectively
34	We mainly use our information and communications technologies (ICT) to access to documents and data	59	Our knowledge systems are focused on issues external to our company
35	We mainly use our information and communications technologies (ICT) to contact people and to exchange knowledge	60	Knowledge is our primary product/service
36	We use leading edge information and communications technologies (ICT)	61	Our information systems provide access to documents generated anywhere in the organization
37	Our information systems provide comprehensive performance measures for our company	62	Most of the knowledge in our company flows horizontally across the organization at all levels
38	We can generally access the information that we need without having to refer to the person who created it	63	Management places emphasis on capturing knowledge in documents and storing them in electronic databases for later reuse
39	We can find the documents that we need very fast with a simple search in our electronic databases	64	Management places emphasis on identifying and supporting networks of experts and people with similar job-related interests
40	A high proportion of the knowledge in our company resides within individuals	65	Our company operates mainly through set procedures and people are discouraged from deviating from these
41	A high proportion of our internal knowledge-sharing is achieved through direct people-to-people contact	66	We have dedicated staff for capturing knowledge around the organization and storing it in readily accessible documents and databases
42	Once we have developed new knowledge we re-use it as many times as possible in our product/services	67	Project teams operate horizontally across the company
43	The product/services that we provide always involve bringing together experts with relevant knowledge and experience	68	People in the company normally respond rapidly to requests for information from colleagues
44	Detailed knowledge of our customers is treated as a priority and is continuously updated	69	Our KM practices are aligned with the overall objectives of the company
45	Detailed knowledge of our competitors is treated as a priority and is continuously updated	70	KM in our company is coordinated centrally from the top
46	Detailed knowledge of our industry or sector is treated as a high priority and is continuously updated	71	Everyone in the company is expected to follow KM procedures that are formally laid down in documents
47	Our remuneration systems encourage using and contributing to document databases	72	Information about failures, errors, and mistakes is shared and addressed constructively
48	People joining our company are well suited to effectively implementing standard solutions		

Ref	Questionnaire Item	Ref	Questionnaire Item
49	We have comprehensive and up-to-date shared directories of experts which provide information about their experience and current work	73	We are generally allowed time to reflect on completed tasks and projects, and to share our experiences with our colleagues
50	Innovation in our company relies heavily on dialogues between people with relevant knowledge	74	Most knowledge in our company flows vertically from subordinate to superior and vice versa
51	Prior to leaving our company people are debriefed to ensure that their knowledge is transferred to other people within the company	75	Our knowledge systems are focused on internal aspects of our company
52	Accuracy of information is important to us, even though it may take longer to achieve	76	In comparison with our competitors we spend more on research and development

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