

CHAPTER 4

4 FINDINGS FROM INTERVIEWS WITH DISTRIBUTED KNOWLEDGE MANAGEMENT STAFF

4.1 Introduction

This chapter presents the main findings of the research as derived from interview data with twenty employees in knowledge management roles across the firm's business units¹. The interview sample comprised fourteen Knowledge Managers and six Senior Presence Producers.

The main focus of the analysis in this chapter falls on Knowledge Managers and Senior Presence Producers as actors charged with implementing the UK firm's knowledge management initiatives related to the intranet. The operations of other significant actors in the knowledge management implementation actor-network - notably the UK intranet (UKnow), and actor groups (for example, the centralised Knowledge Management Group (KMG)) - also feature in the text. Given that the main goal of this research is to investigate the role of the intranet in knowledge sharing, the distributed knowledge management staff's perceptions of, and comments on, knowledge sharing and UKnow comprise a large part of the discussion. Together with key findings from the review of company documentation (as presented in Chapter 5), the material presented in this chapter helps to build the social analysis of the knowledge management implementation actor-network, of which the intranet is a key component. This in turn allows conclusions to be drawn on the role of the intranet in knowledge sharing.

The interview data analysed in this chapter is largely concerned with the first element of Kling and Scacchi's four point framework: lines of work and going concerns (Kling & Scacchi, 1982, p. 17) (as discussed in Chapter 2). In terms of *lines of work*, this material reviews what the speakers had to say about their roles within KPMG with regard to the nature of their jobs in general (pages 56-60); the knowledge management implementation (pages 56-60) and the intranet as a key component of the knowledge management implementation (pages 70-78). Added to this are four prominent *going concerns* of the distributed knowledge management staff related to what was at the forefront of their minds when discussing the intranet and knowledge sharing within the context of the knowledge management implementation. These are:

- (1) confusion between information management and knowledge management amongst those keen to facilitate knowledge sharing through the deployment of the intranet (pages 82-82);
- (2) misunderstanding that the firm's intranet equated with knowledge management (pages 83-84);

¹ Up until October 2001 the business units that employed client-facing staff were classified as *functions* and *lines of business*(LoBs). The term "function" referred to business units that dealt with cross-industry concerns. The term "line of business" referred to business units that supported particular industry sectors in terms of selling and marketing KPMG products and services. The term "line of business" was replaced with "market" on 1 October 2001 (UK Knowledge Management Group, 2001, September). The third main set of units at KPMG were the infrastructure units, i.e. departments whose role it was to support the general operations of the firm, for example Marketing.

- (3) adoption and use of alternative, multiple, knowledge-sharing channels other than the intranet amongst KPMG employees (pages 84-111);
- (4) power (pages 111-117).

This topic of power is particularly interesting in that it was not identified in the preliminary literature review work on knowledge sharing and ICTs, and it emerged from the primary data for this study through the collation of numerous “minor” comments or asides made by the interviewees. It was not presented as a live issue when they talked about the corporate intranets UKnow (UK) and KWorld (global), and knowledge sharing. However, what was said by the distributed knowledge management staff on the strength of their position within the firm, especially in contrast with that of their “professional” colleagues, provides some explanation of the role of the intranet at KPMG in 2001. In line with this, allusions to the topic of power relations, most notably in the context of the theme of status, are developed throughout the text where lines of work are discussed. They are then analysed more extensively later in the chapter as a going concern with reference to career anxieties of the distributed knowledge management staff (pages 111-117). An examination of the four main going concerns (Kling & Scacchi, 1982, p. 17) provides a view of the organisational context in which the intranet at KPMG was implemented.

Comments made by the interviewees also fit with the three other elements of Kling and Scacchi’s 1982 framework. They occasionally made reference to: the resources made available to support the service that they delivered to the firm (the “infrastructure”, p. 18); the different elements that contributed to the service that they were attempting to provide to the business at large (the “production lattice” pp. 20-21); and the “macrostructure” (p. 16) in which the production lattice was embedded. All the relevant perceptions reported here are therefore aligned with the web model framework where appropriate.

4.2 Lines of work: the roles of distributed knowledge management staff related to the intranet and knowledge sharing

4.2.1 Lines of work: overview of roles of distributed knowledge management staff

In 2001 KPMG in the UK employed two categories of knowledge management staff across the firm’s business units: Knowledge Managers and Presence Producers (as identified in Chapter 3). Of the staff interviewed for this research, the Presence Producers showed greater homogeneity in articulations of their role, even though none of them shared the same job title. The diversity in Presence Producer job titles indicates that they lacked identity beyond their immediate peer group: outsiders would not necessarily conceive that a body of Presence Producers existed within the firm.

The oral descriptions given of the work of the Presence Producer cohort largely matched the definitions of main duties and responsibilities originally outlined in the *Knowledge centres briefing pack*, a policy document published by the firm’s centralised Knowledge Management Group (KMG) in 1998. (This document outlined the plans for the employment of staff in Hazel Hall PhD 2004

designated knowledge management roles as "Knowledge Analysts" and "Knowledge Masters" in the firm's business units. Each grouping can be mapped to Presence Producers and Knowledge Managers respectively.) The primary concerns of the Presence Producers interviewed were the design, maintenance and addition of content to intranet resources. The Presence Producer role was thus largely that of a custodian of an information store. In terms of the production lattice (Kling & Scacchi, 1982, pp. 20-21) the Presence Producer provided the final link in the chain of activities that permitted the extraction of knowledge from the tacit environment to make it available in codified form to all users of UKnow. Consideration of the two main duties of the Presence Producers provides an indication of the intranet's role in knowledge sharing at KPMG in 2001. It was a shared repository, and thus appeared to take one of the boundary object forms identified in Chapter 2 (Star & Griesemer, 1989, p. 411).

There were local variations in how the Presence Producers approached their roles. For example, the resources compiled by one were mainly portal pages and therefore she spent less time than her counterparts manipulating original content. However, the general way in which the Presence Producers described their work demonstrated that their daily duties were largely comparable in that they comprised administrative duties geared to supporting UKnow. Where their roles in practice differed from what had been proposed in the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October) it was the case that more challenging activities, such as reinterpreting original content prior to submission to UKnow resources, and responsibility for data risk, were not part of the interviewees' remit.

In a sales-driven environment such as that at KPMG in 2001, administrative positions are of low status: those occupying administrative roles do not command great power in the networks to which they belong. The network power of the Presence Producers interviewed for this research was limited by the confines of their roles as administrators. This had not been the intention of KMG's initial plans as outlined in the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October).

In contrast to the Presence Producers, and despite eleven of them sharing the same job title, there was much variety in the role descriptions offered by the fourteen Knowledge Managers. Six out of the fourteen emphasised their intranet responsibilities For example, one said:

My job is primarily to liaise with people in the business: to get information from them; give information to them and just try and make sure that what we have on the intranet is accurate and complete... Fulfils their needs as far as we can within the context of what we're able to do with the architecture and what not. And then I will pass that onto the web masters to action, in terms of getting that information onto the intranet for the time-being in the form of static web pages.

Two of the six appeared to spend more time on intranet work than their colleagues in other business units. In one case this was due to an infrastructure limitation (Kling & Scacchi, 1982, p. 20) - low staffing:

I do everything because there's just me! I'm the only knowledge person in {my business unit}. I outsourced the design of the site. But day to day maintenance, it's largely me.

In executing work that was covered by Presence Producers in other units, some Knowledge Managers inadvertently endangered the higher status role. Thus they put at risk both their individual and group network power.

There was sufficient overlap in the work of eight interviewees to argue that they held “typical” Knowledge Manager positions at KPMG. Their three main priorities centred on their roles as:

- (1) gatekeepers to the firm’s information resources (thus indicating that the intranet’s role was geared towards information publishing and retrieval);
- (2) architects of the infrastructure on which these resources were mounted;
- (3) facilitators of knowledge sharing across the firm.

There was overlap with the Presence Producer role as “custodian” of the intranet in the first of these priorities. In addition, much of the “typical” Knowledge Manager role was devoted to facilitating knowledge sharing.

One explained:

What we're really doing, it seems to me, is trying to say, 'We want you to use this pool of information. We'll try to make it as easy as we can for you to actually use it, to try and turn it into something that the client actually finds useful'.

Another emphasised that this role did not rely on the intranet in isolation:

I'm the interface between the business and {the Presence Producer}. I go out there, help people sort of channel their thoughts, facilitate what they want, look at whether it's feasible, whether it's the right method of knowledge transfer, whether they should be using a notice board, or whether they should be using the intranet.

In addition to their UK roles, two of the eight “typical” Knowledge Managers had input into global knowledge management issues at the firm, thus extending their reach into a wider network of contacts.

The daily work of another also matched that of the “typical” Knowledge Managers. However, her position was different in that she was on a temporary secondment to a knowledge management role as an “out-of-box” experience. Similarly, one interviewee’s employment as a Knowledge Manager was regarded as a short-term arrangement. As well as carrying out her knowledge management duties, she was expected to continue her client-facing consultant role for 60% of her working week. (There is further discussion of knowledge management secondments in the context of career advancement on page 116.) These two Knowledge Managers might be regarded as temporary recruits to the knowledge management implementation actor-network and, with a range of contacts in the business, had the potential to persuade others to offer support as boundary people (as discussed in Chapter 2). Unfortunately, at least as far as the knowledge management implementation was concerned, they were not well integrated with the other distributed knowledge management staff. On some issues their opinions were very much out of line with those of their Knowledge Manager colleagues. For example, on the question of levels of senior level support for knowledge management within the firm they offered the most

extreme views of any of the interviewees. This indicates that the “out-of-box” Knowledge Managers were unable to position themselves to learn from their temporary peers.

One Knowledge Manager’s duties focused solely on the third of the priorities identified as “typical” to the KPMG Knowledge Manager role. His specific responsibility was to devise strategy to encourage knowledge sharing in the teams that worked on the firm’s top one hundred world-wide accounts. He explained that his role was “mainly strategic, dealing with the global lines of business and involved in their KM strategy”. This position working with high status colleagues on the firm’s most important customers bestowed upon him, in turn, a higher status than his counterparts in the other business units, and this was reflected in the type of work he was expected to do. Acceptance of the inevitability of having to undertake basic intranet maintenance tasks was not a concern of this Knowledge Manager. Having secured himself a position that was more strategically important than those of the other distributed knowledge management staff, his actor power had strong potential. This came through both his high status role, and the connections that he could make with other high status staff across the business. Like the “out-of-box” Knowledge Managers, however, he was not very well integrated with his peers (perhaps on account of his atypical role) and was therefore more likely to use his influence as an individual, rather than as a representative of a cohort of knowledge management experts.

One Knowledge Manager appeared to occupy a unique role. When first appointed he had expected to take responsibility for his business unit’s intranet resources. However, this did not happen. He fulfilled the role of gatekeeper to a limited degree when helping colleagues source material from the intranet, but most of his time was spent distilling good practice from reports of external feedback from KPMG clients related to proposal work:

It's my job at the moment to try and take all {good practice} and capture it... in the database, so that I can regurgitate it for them for future proposals, and also to feed it back into the templates and the guides that we design.

On the whole, the work of all the Knowledge Managers, as reported in the interviews, articulates well with the plans for Knowledge Masters, as outlined in the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October). However, not all Knowledge Managers were involved in all activities proposed. In the same way that the variety in job titles weakened the potential for strong group actor power amongst the Presence Producers, the variety of Knowledge Manager roles and agendas made it difficult for them to be mobilised as a single unit within the firm. This added to the compromise in their positioning distant from one another across numerous home units. Just one element in the initial plans did not feature in the Knowledge Managers’ discussions of their main roles. This was the formal requirement to “assess HR and behaviour issues to ensure people are given the incentives and rewards to add documents to the Knowledge Repository”. Whilst Knowledge Managers had been involved in discussions on this topic, their work had not led to this stated outcome of the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October). This is important given that the focus of this research is on knowledge sharing, and will be discussed further in the context

of the distributed knowledge management staff's views on knowledge-sharing behaviour and incentives below on page 86, and again with relation to the knowledge management implementation actor-network in Chapter 6.

4.2.2 Lines of work: specific responsibilities of distributed knowledge management staff related to the KPMG knowledge management implementation

The extent to which the intranet and knowledge sharing were actual preoccupations of the distributed knowledge management staff in their lines of work is evident through the analysis of the interview data. The findings from the interviews on distributed knowledge management staff's responsibilities related to KPMG's knowledge management implementation are discussed below according to the interviewees' involvement in the following activities:

- (1) implementation of knowledge management policy, including that on knowledge sharing - as determined by KMG - in the business units;
- (2) provision of communication channels between the business units and KMG on knowledge management issues, i.e. sharing information on the knowledge management implementation to interested parties in the production lattice;
- (3) promotion of knowledge management in the business units, i.e. sharing news of the benefits of the knowledge management implementation;
- (4) provision of knowledge management training in the business units, i.e. sharing skills;
- (5) knowledge brokerage in the business units, i.e. sharing knowledge.

4.2.2.1 Implementation of KPMG knowledge management policy in the business units, provision of feedback to KMG and provision of communication channels from the business to KMG

The distributed knowledge management staff were expected to implement KPMG knowledge management policy (as determined by KPMG) in the business units, and to provide feedback to KMG from the business units on knowledge management related matters, including UKnow. The analysis of the roles (discussed above on page 56) shows that the distributed knowledge management staff were engaged in knowledge management activities in the business units, but there is no evidence in the interview data that they were following a particular policy imposed by KMG. This finding applied equally to knowledge management in general, as well as to the intranet and knowledge sharing in particular. It can be concluded that the policies were incomplete and not implemented fully. In effect, the documents that held policy statements on knowledge management and intranet development were very weak actors marooned at the extremes of the knowledge management implementation actor-network. Considered as infrastructure elements of the implementation (Kling & Scacchi, 1982, p. 18), they indicate a weakness in the implementation's support mechanisms. Similarly, it is argued that although some distributed knowledge management staff did provide feedback to the centre on how they were implementing knowledge management in their business units, this was not achieved in a structured way. It would appear that just one topic formed the basis of feedback between the distributed knowledge management staff and KMG. This was measurement and reward, at

appraisal time, of individuals' willingness to knowledge share. One interviewee said that she had been involved in such discussions. Another showed that she had contributed to the debate when she made reference to the efforts of a member of staff in KMG working on appraisals with Human Resources. A third referred to the work on appraisal criteria by colleagues in her business unit. This work, however could not be regarded as extensive enough to meet the expectation that one of the main roles of Knowledge Managers would be to assess HR and behaviour issues to ensure people were given the incentives and rewards to add documents to the Knowledge Repository, as proposed in the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October) (see page 59 above).

The channels of communication were not set up appropriately to facilitate feedback from the business units to KMG. Several interviewees referred to the inadequacy of contact between distributed and centralised knowledge management staff. Poor links between two of the main actor groups in the knowledge management implementation – the distributed knowledge management staff and KMG – degraded the impact of this particular network, and provided an opportunity for other competing networks in the firm, notably those internal to individual functions and markets, to gain strength. A Knowledge Manager was of the opinion that the size of the monthly Knowledge Managers meetings hindered its power to communicate and develop to a state in which it would be truly effective. The Director of UK Knowledge Management Operations echoed this comment in a later interview (Goody, interview, 7 November 2002). A Presence Producer spoke of her frustration in trying to use the meetings to build relationships:

I met up with as many of them as possible. I got involved with their team meetings, all that sort of thing... Generally I felt that I was well received and then I built up a strong relationship. But sometimes months will go by and they don't contact me... I sometimes feel that it's a one way thing, that I'm always contacting them. So I don't know if that's down to the individual person or if it's just that they're... too busy to constantly be thinking of building relationships.

(Goody showed concern on the appropriateness of some of the distributed knowledge management staff appointments made by the business units without reference to KMG (Goody, interview, 7 November 2002). It is possible that KMG members disapproved of the position of the person quoted above as a Presence Producer, and they did not feel compelled to devote time to establishing a relationship with her.) Some interviewees felt that a better return on KPMG's investment in knowledge management could be achieved through the employment of more formal feedback mechanisms from distributed knowledge management staff to KMG. For example, it was suggested that knowledge management success stories could be channelled to the centre by the distributed knowledge management staff. KMG could then relay these across the entire firm, and thus promote the firm's knowledge management efforts as worthwhile. In making this suggestion it was recognised that KMG had a co-ordinating role in the actor-network, and was better positioned to promote messages to the business than the smaller players in the form of distributed knowledge management staff. This was because KMG held visibility as a centralised function. It may also be argued, however, that this proposal emanated from a desire of Knowledge Managers to renounce one of the higher level, and more demanding, responsibilities assigned to the distributed knowledge management staff member

role. If it were to be carried through, the knowledge management implementation actor-network as a whole might benefit, but the Knowledge Managers as individuals would relinquish actor power through dropping this duty which was of higher status than others to which they were originally assigned. This issue of responsibility for promoting knowledge management across the firm in general is discussed in detail on page 65.

In practice, the ties between the staff in the business units and those at the central function were sustained by basic needs of the distributed staff for support and guidance in preparing intranet resources, rather than joint efforts for the strategic management of the knowledge management implementation. Distributed knowledge management staff relied on KMG to provide the tools and facilities for intranet work and for technical support. The majority of interviewees passed comment on intranet design protocols, four of them making it clear that these were originally formulated by KMG. In some cases, business units sub-contracted aspects of their intranet work to KMG. For example, the UKnow team managed the uploading of content for the unit in which one of the Knowledge Managers was based. Further guidance was offered by the centre on a range of information and knowledge management related issues from the specific, such as legislation related to information risk, to the more general, including advice on launching knowledge management initiatives.

There were indications from the interview data that ties between KMG and the distributed knowledge management staff had loosened over time as the Knowledge Managers (particularly those with responsibility for markets) and Lead Presence Producers felt less isolated from one another and turned enthusiastically to their own growing communities for (1) support, and (2) in an attempt to work more efficiently. One Presence Producer admitted passion for the Lead Presence Producer community:

That's very much a blossoming community... We all can pick up the phone and talk to each other, and mail each other and ask each other questions... We're all very friendly with one another... As time goes on people are becoming more and more confident about what they do and valuing what they do.

Of the community of market Knowledge Managers similar enthusiasm was exhibited:

That group has bonded over the last nearly two years... I'd say that's a really close group... I think we have all got quite a lot of respect for each other. We all know our roles differ. We all know we've got something to add.

The asymmetry in the information crossing the knowledge management implementation actor-network shows on-going shifts in its composition, with the distributed knowledge management staff making gains in creating smaller actor-networks at the expense of KMG. As the distributed knowledge management staff paid less attention to KMG there was the risk that they would lose sight of their core responsibilities related to the intranet as they responded more readily to the demands and ideas of the smaller networks, rather than the "official" centre.

In addition to the help that they received in carrying out the duties of their posts, the distributed knowledge management staff recognised a degree of *social* support offered by KMG. To an

extent, the centralised function facilitated the creation of a sense of community amongst dispersed Knowledge Managers and Presence Producers. This was achieved through its position as the official "hub" of knowledge management activity within the UK firm. For example, KMG invited the distributed knowledge management staff to some of its social functions. However, in the same way that the distributed knowledge management staff were turning to their peers across the business units for support in their work, they were also finding that the social support furnished by KMG was less important than that generated through their links with one another in the Knowledge Manager and Presence Producer communities. When the distributed staff spoke of their main relationships beyond their home units, they more readily prioritised the other distributed knowledge management staff across the business, rather than contacts in KMG. When speaking of relationships that had developed further into actual friendships, interviewees revealed that these were established with members of the distributed peer groups rather than with members of KMG. This was the case with the Lead Presence Producers:

I'd say I've got a couple of good friendships with some of the {Lead} Presence Producers out in the community... We have meetings together, {and} we do go out for lunch outside of those meetings.

There were genuine friendships amongst the market Knowledge Managers:

{The market Knowledge Managers} all socialise together as well... I think that in that group a lot of us are more than just colleagues. We're actually friends as well.

Questions on where the distributed knowledge management staff's loyalties lay furnishes some explanation why the links between KMG and the distributed knowledge management staff were not well established. None of the interviewees indicated a strong loyalty to KMG. The overwhelming majority claimed that their first loyalties were to the business unit, or a sub-group of the business unit, in which they were employed. Various reasons were given for this:

- it was where the interviewees were located on a day-to-day basis;
- it was the business units that determined the work expectations of the distributed knowledge management staff and paid for them to be met;
- with other members of the business unit they felt strongly connected as team members, and the business unit was a more concrete entity than the more fluid communities with which the distributed knowledge management staff interacted;
- the interviewees had a genuine passion and interest for the business of the unit which employed them;
- some had long service within the business unit.

Three interviewees also made it clear that they had personal loyalties to individuals in their home business units: two to their bosses; one Presence Producer to the Knowledge Manager, with whom he worked.

Two interviewees commented that it was quite difficult to distinguish whether their loyalty to knowledge management efforts in the UK firm were stronger or weaker than their loyalty to their business unit. One remarked that his loyalties were split three ways (1) to his function, (2) to the knowledge management team within his function and (3) to KMG, with "orders... coming from lots of different places". Two Presence Producers put their loyalty to the wider distributed Presence Producer community first. One believed that she had more in common with the other Presence Producers. The other attributed her loyalty to her passion for the community that she was helping to nurture. She said: "{It is} closest to my heart... on a personal level".

KMG's position as a centralised function of the UK firm and the interviewees' level of attachment to KPMG as a whole may also be related to the degree of connection between the distributed knowledge management staff and KMG. The suggestion that the distributed knowledge management staff might feel loyalty to the larger entity of KPMG as a firm was openly dismissed on several accounts. In their responses to questions on this interviewees said that the size and history of the firm's creation, as well as its structure as a partnership, were inhibitors of a unified corporate "feel". A Knowledge Manager explained:

You've got historical areas that used to belong to different companies or different firms that now make up KPMG... you've got lots of different pockets of partners who will run things a certain way.

Another Knowledge Manager said he viewed KPMG as a brand rather than a genuine community, and for this reason the firm did not inspire loyalty in him in the way that his business unit did. Added to this, it is important to remember that the distributed knowledge management staff interacted with *internal* contacts only. This meant that they did not often present themselves as representatives of KPMG to the outside world. It was pointed out that those who did define themselves as KPMG employees on a regular basis, such as auditors, may have been more likely to feel loyalty to the firm as a whole, but this was unlikely to be the case for anyone in a distributed knowledge management role. The inference here is that since KPMG could not inspire loyalty at the level of the firm, nor could KMG because of its status as a function that represented the larger entity.

Further explanation for the over-riding claims of loyalty to the business units came through discussions of distributed knowledge management staff positions as individual or team roles. Just five interviewees classed themselves as individuals. Of these one was the Knowledge Manager working on her "out-of-box" experience, another was the Consultant who had also taken the knowledge management role on a short term arrangement, and the third was the Knowledge Manager described as occupying the most unique knowledge management role (as explained on page 59 above). The remaining two "individuals" assigned their solo status to working in isolated roles.

These comments on loyalties highlight the *local* nature of knowledge management work within KPMG. The question of scale raises the question of whether it was worthwhile to implement knowledge management at the level of the firm, and the actual *need* to codify knowledge for

sharing. This is discussed further with reference to systems as detractors of knowledge sharing on page 102 below.

On the basis of this evidence it can be argued that by 2001 the distributed knowledge management staff clearly favoured the creation and maintenance of smaller actor networks over that of the main knowledge management implementation. As a consequence, the core work of the individual business units was privileged over the work related to the knowledge management implementation and, by association, work related to the intranet. KMG was largely excluded from these developments and poorly positioned to remedy this, not least because of a political decision in 1998 to have distributed knowledge management staff report to the business units rather than KMG (Goody, interview, 7 November 2002). (This is discussed further in Chapter 5.) It was argued by the interviewees that the recent creation of separate Knowledge Manager and Presence Producer communities could help spread knowledge management practice, including behaviours conducive to knowledge sharing, in the firm. However, exclusion of the firm's centralised knowledge management experts from this activity risked the proliferation of poor practice as well as good. The undermining of the channels of communication also made it more difficult for KMG's policy decisions to be communicated and actioned, and for Knowledge Managers and Presence Producers to route communications officially to other functions under a combined knowledge management banner.

4.2.2.2 Promotion of knowledge management in the business units

The promotion of knowledge management by the distributed knowledge management staff was largely tied to generating what they termed "buy-in" to knowledge management. Three elements were consistent with the interviewees' use of the term "buy-in":

- (1) individuals' active interest in, and understanding of, knowledge management;
- (2) individuals' uptake of desirable knowledge management behaviours, for example the willingness to share their knowledge;
- (3) high level sponsorship of knowledge management, i.e. the sanctioning of staff to adopt behaviours conducive to supporting knowledge management efforts within the firm, for example making time available for writing project engagement summaries to be loaded on to UKnow.

The third level of "buy-in" is of particular relevance to the discussion of the distributed knowledge management staff's lines of work in the context of the web model's concept of macrostructure (Kling & Scacchi, 1982, p. 21). This is because the distributed knowledge management staff regarded poor sponsorship as a constraint on the firm's knowledge management implementation in general, as well as on the specific efforts to promote knowledge sharing through the use of the intranet in the firm. Sponsorship of knowledge management initiatives is identified in the literature as a key component of the perceived success of a knowledge management implementation (for example, Huysman & De Wit, 2002, p. 163).

From the interview data it is evident that the distributed knowledge management staff viewed generating support for knowledge management as a difficult task. Only three interviewees rated buy-in as good. The statements on the poor levels of buy-in ranged from relatively mild observations to grave expressions of doubt about the future of knowledge management at the firm. Some interviewees made cynical comments on KPMG's self-portrayal as a knowledge management enabled company, suggesting that the firm had generated a truth about its knowledge management implementation in a similar way to that used by companies described by Ekbia and Kling (2003) (as discussed in Chapter 2). Those with most to say on this in the interviews were the Knowledge Managers in the markets, i.e. the business units with a less mature knowledge management function. For example, one spoke of the complexities of seeking support from several different constituencies; another described an "uphill battle" in which she was "thwarted by senior people in senior positions"; a third acknowledged that there was "a lot of work to be done to get the buy-in properly".

There was little indication from the interview data that the distributed knowledge management staff had responded to the difficulty of the task in executing *planned* initiatives to promote knowledge management in the business units, despite recognition that it was damaging to them personally, and to the firm. Their approaches were rather half-hearted. For example, training initiatives were focused less on broad issues of knowledge management good practice and more on the specifics of teaching users how to use particular intranet tools (thus privileging the intranet's role in the knowledge management implementation). In effect, three activities represented the limit of identified efforts of distributed knowledge management staff to fulfil their duties of promoting knowledge management in the business units. These were:

- (1) road-show involvement "going round talking to people about knowledge management, about what it really is, about the difference between UKnow and KWorld, and about how they can use it and how they can share knowledge. And... a lot on how knowledge sharing isn't about your Intranet";
- (2) participation in the campaign for defined knowledge management objectives to be set and measured at appraisal time;
- (3) local lobbying of players who had the power to influence.

The only other indication from the interview data that distributed knowledge management staff played an active role in generating support were quasi-religious references to their "spreading the word" as knowledge management missionaries. For example, two interviewees said that they tried to talk to people about the benefits of knowledge management whenever the opportunity arose, with one speaking with the voice of an evangelist:

If we can harness {knowledge} and use it, it can actually lead to more money... there's kind of a leap of faith involved there.

As will be seen in Chapter 5, the findings from the interview data on efforts of distributed knowledge management staff to promote knowledge management do not match neatly with what is reported in the company documentation. Details in Chapter 5 suggest much greater activity. It is suspected that documents in the company archive may have over-reported activity

(both completed and planned), giving the impression that several initiatives were taking place across all the business units. In fact, *actual* activity was concentrated in certain constituencies of the functions and markets. Most work was evident in a unit of one of the functions - Transaction Services (TS) - and in one line of business/market Information, Communications and Entertainment (ICE). Exaggeration of the scope of what might be achieved in the future, whether intentional or not, is not uncommon practice in situations when one party is working to persuade another to commit to its support. Here the mismatch of reported and actual activity indicates that minuted articulations of future intentions were voiced for political purposes.

In the main, it was recognised that there was much work to be done with regard to encouraging support of knowledge management. Vague references were made by the interviewees to strategies for tackling the challenge of increasing knowledge management support. For example, it was suggested that knowledge management needed to be very directly tied to the winning of business. However, the majority of interviewees did not explore means of fulfilling this role. Indeed two members of distributed knowledge management staff indicated outright that they believed that responsibility for generating knowledge management support should *not* be driven by knowledge management staff. One felt that the role belonged to senior staff. The other was disappointed that end-users had not taken the initiative to come to the knowledge management staff to learn about the value knowledge management:

Nobody has bothered to take the time or the energy or the effort to talk to the people who deliver that service to the business, who can actually say, 'Well, hang on, yes, it's costing you that. But in the scheme of things, it's not actually costing you an awful lot, and this is what you get for it'. And they don't, they're not having those conversations, which I think is a shame. I think it's really short-sighted.

The distributed knowledge management staff appeared to recognise that if their main business were not promoted, this made them weak actors in the firm, yet they did not make many active efforts to address this. The failure to take responsibility could be accounted for by the split of knowledge management activity across the firm. However, an actor-network analysis may point to other reasons. For example, the failure to act could be a symptom of the recognition of the interviewees' weak actor power outside the knowledge management implementation network. This would explain the remarks that generating knowledge management support should be in the hands of non-knowledge management staff. There was a belief that the local efforts would remain paralysed until other significant actors were recruited from the wider communities of end-users and senior staff into the knowledge management implementation network.

4.2.2.3 Provision of knowledge management training to end-user staff in the business units

The goal of knowledge management training for end-users was to enhance their knowledge-sharing capabilities. Interviewees readily acknowledged the need to provide knowledge management training to staff in the business units, for example to prevent wasting resources through the duplication of work already completed, i.e. the third of the three main purposes of knowledge management activity, as identified from the literature in Chapter 2. The amount of

training provision led by the distributed knowledge management staff varied from unit to unit. It was acknowledged that the functions were more active than the markets. These units with established track records in knowledge management training were experimenting with innovative approaches. For example, those working in Tax exhibited characteristics of a community of practice:

The Tax Knowledge Management people were getting the partners to mentor the students. Because the students knew how to work all the systems... they did the mentoring the other way round and got a student to sit down with a partner and teach him how to get into KWorld and how to use it properly.

At the other extreme one market representative admitted that his unit offered no knowledge management training at all.

The general feeling amongst the interviewees was that they needed to be more proactive in their training efforts, to generate more publicity and ensure that their end-users were able to make best use of all the tools available. This main focus revealed tension where the direction from above was to channel end-user training towards knowledge management best practice, when in reality it was being delivered at the level of introducing tools for information handling. In effect, at their point in the production lattice (Kling & Scacchi, 1982, pp. 20-21) the distributed knowledge management staff were making compromises on the delivery of support for the implementation on the basis of perceived local needs. This also provided further indication that KPMG's knowledge management strategy was mainly concerned with codification of information: the interviewees made observations that the main purpose and treatment of UKnow was as a silo or information store. These align with the problems of "silo mentality" (Kelleher & Levene, 2001, p. 40) or "stock approach" (Huysman & De Wit, 2002, p. 151) as identified in the literature. Offering training at the level of introducing information-handling tools did not help the cause of distributed knowledge management staff as actors operating in demanding roles. It associated them with low-level technology training, rather than activities that could help win client business. In addition, it is highly likely that end-user awareness of this type of training provision served to perpetuate the view that knowledge management was another term for either 'information management' (see pages 82-82) or UKnow (see pages 83-84), thus weakening the status of knowledge management in the firm.

Training provision of this type may have been born out of a frustration to encourage staff in the business units to attend *any* courses. A Knowledge Manager complained:

I don't think {this resource} is particularly difficult to use at all. But the interesting point is that we've always provided people with training in how to do it. And everybody that we tend to bump into who says they have got a problem with using it almost invariably has *not* done the training.

He later suggested that some people were not prepared to invest time in their own development. This view was also confirmed by his colleagues. Three interviewees explained how offers of individual training made by e-mail failed to generate interest. For example:

Everybody... who joins KPMG {and} is aligned to {my market group} is sent an e-mail from us saying, 'Hi, 'We're Knowledge Management... The following links are going to take you to some things that are really useful. If you need any more help, then give us a shout'. We never hear from any of them.

In terms of actual training conducted, two interviewees saw the introduction of end-users to tools as the first step to introduce them to knowledge management, with the ultimate goal of addressing knowledge-sharing behaviours:

Why would {end-users} want to hear the theory behind knowledge sharing? Why would our professional staff want to hear that? ... But 'How do I do it?' They're really interested in the *how*. The rest might come afterwards, but you've got to get the *how* first.

It is evident that individual features of knowledge management were not seen as separate training issues, even though some distributed knowledge management staff were beginning to think that more abstract aspects of knowledge management should be addressed through training:

We probably need to concentrate more on the less tangible knowledge sharing and move our people away to not just thinking about, 'Oh, we've got a really good intranet, so we're really good at Knowledge Management', because they don't understand that the two are not necessarily synonymous.

As regards the timing of knowledge management training and its audience, the data collected from the interviewees confirms that the main efforts contributed to general induction courses, often to junior staff. A Knowledge Manager explained:

In the induction day they have an hour on knowledge sharing {where it is explained} to people that there are knowledge repositories and it's really good if we all share our knowledge openly and proactively.

A Presence Producer found the system unsatisfactory due to the limited amount of time allotted to knowledge management staff on induction days, thus drawing attention to a limitation of the infrastructure of the knowledge management implementation (Kling & Scacchi, 1982, p. 18):

It's a very... off-the-cuff affair. It's something that now has actually begun to happen... I'm presenting on Knowledge Management, {but} bear in mind, that's 30 minutes... and I'm trying to go through not only our intranet, the sources and things that we use on the Internet {but also} our global Intranet (KWorld), plus the knowledge repositories, CV systems...

It was suggested that such timing was inappropriate:

How many training courses can a new employee go to? Some of them are coming in on a four week training course – Belgium, or wherever it is they go. So how much can you throw at them that they're actually going to take in?

A Knowledge Manager was of the opinion that training was being directed at people of too low a level in the firm to benefit the knowledge management implementation. In terms of an actor-network analysis of the knowledge management implementation she was right. Thirty minutes worth of supposed "knowledge management training" as part of an induction course - that in itself was only part of a set of induction courses – was unlikely to have any lasting impact on the participants. In addition, if those participants did not have much influence within the firm

because they were new (and possibly at low grades) and not yet well networked, then any positive messages about knowledge management garnered from the training would reach an organisational dead-end.

4.2.2.4 Knowledge brokerage in the business units

The responsibility of knowledge brokerage came across clearly in the descriptions of the distributed knowledge management staff's main roles. The *level* at which this was executed is of interest to research into the role of the intranet in knowledge sharing. According to some of the interviewees the role of knowledge broker was often extended to that of intranet proxy, where colleagues rejected the idea of consulting the official repository of codified corporate information in preference for contacting a local colleague who had visible responsibility for the repository. This observation articulates with warnings related to the identification of staff with specific knowledge management responsibilities as highlighted in the literature (for example, Huysman & De Wit, 2002, p. 147). Attitudes to this behaviour amongst the distributed knowledge management staff varied from accepting it as an inevitability of the gatekeeper role to frustrations at the laziness of others. One interviewee felt that it verged on abuse, where she was being treated as some form of "hyper-secretary":

I feel that I'm this individual sitting at this desk of knowledge and they come to me and they pick my brain and then they bugger off!

This is another activity that raises questions related to the status of distributed knowledge management staff. Knowledge brokerage at a high level, where, for example, an individual may be involved in detailed research or repackaging complex information for a client, is well-respected work. However, fetching material for others who are too lazy to carry out a basic task of which they easily capable, can be regarded as demeaning. The variety of attitudes to the knowledge brokerage role evident in the interview data shows the range of perceptions. Willingness to execute such tasks, and to be seen to do so, has the potential to lower the external perception of those prepared to accept menial work. Here the member of staff who was particularly aggrieved by inappropriate requests was one of the "out-of-box" Knowledge Managers who normally occupied the role of Consultant. It is clear that she was well aware of the danger to her own status in being "used" in this way. The low status also limited the distributed knowledge management staff's potential to act as boundary people (as described in Chapter 2). They would not be empowered to seek out opportunities to work at the boundaries with other groups of employees within the firm, nor would these people think it appropriate to welcome them, if they were regarded as unimportant colleagues.

4.2.3 Lines of work: specific responsibilities of distributed knowledge management staff related to the UK intranet

The distributed knowledge management staff had specific responsibilities related to the firm's UK intranet, the main artefact of its knowledge management implementation. A consideration of these provides further indications of the role of the intranet in knowledge sharing. The main

activity of the distributed knowledge management staff with relation to the intranet was intended to centre around three broad areas:

- (1) addition, ownership and co-ordination of UKnow resources;
- (2) editorial control of UKnow;
- (3) promotion of UKnow.

Within each of these activities the distributed knowledge management staff performed two types of work. Some were curatorial duties, where the distributed knowledge management staff took care of the intranet as an information store. Others related to making it possible for the intranet to be a focus of knowledge-sharing activity in the UK firm. The discussion of the intranet responsibilities of the distributed knowledge management staff considers each of the three areas in turn.

Adding content to, and making information resources available on, UKnow was a fundamental part of the Presence Producers' work as custodians of the intranet. All of them spoke explicitly about this core duty. Such duties also fell within the remit of all the Knowledge Managers, although some more than others dwelled on this role in the interviews.

The findings of the interviews with distributed knowledge management staff contradict the intention of the Knowledge Management Directorate that the main role of distributed knowledge management staff be rooted in the ownership of material belonging to their business units. In just two units was it claimed that content ownership officially rested in practice with the distributed knowledge management staff. In one further unit on-going discussions indicated content ownership would become an official role of the Knowledge Manager in the future. However, the majority of staff interviewed claimed that it was *not* they who owned intranet content. Eight explained that colleagues other than knowledge management staff, such as an industry manager in the case of markets, or a professional specialist in the functions, held ownership responsibility for resources on UKnow. These people were most commonly referred to as "content owners". The comments below typified the feelings of the majority who would not be happy to have the responsibility for the resources, especially in cases where they lacked expertise in the subject domain of the resource content:

It's helpful... because then people won't come directly to me as Presence Manager if there's an owner.

Once you have a content owner there, at least the responsibility might lie with that person rather than with yourself.

Indeed, there was evidence that the "genuine" content owners were also keen to be protected from being approached about resources. It was explained that they often used the names of secretarial staff in place of their own.

Three interviewees developed the theme of content ownership further, pointing to ambiguity in its designation across the firm. One said "The line isn't clear where our role stops and theirs starts". It was believed that this approach need not lead to confusion, but actually counted as an

advantage in an organisation where the staffing of teams is fluid. This practice was promoted as a desirable feature of knowledge management:

The team put their own stuff up...But I don't own any of it really... Well, I'm content owner, but I'm not really... just because it's Knowledge Management.

One interviewee felt very strongly about this ambiguity having "inherited" a portion of the intranet where there was "no bloody ownership anywhere!". She complained:

However many times you say, 'It is not my web site, it is our web site', they say, 'Yes, but you write the content'. No, I don't – you write the content!

This ambiguity related to ownership is significant to this research given strong messages from company documentation (to be explored in the next chapter) that it rested with the distributed knowledge management staff. It is indicative of several features of the incomplete knowledge management implementation: messages on strategy from the centre did not reach those responsible for implementation in the business units, and distributed knowledge management staff took deliberate actions that lowered their status, such as admitting a lack of expertise and rejecting responsibility. However, given the negative views of UKnow (see pages 73-73) a more generous analysis might be that the distributed knowledge management staff were distancing themselves from a flawed system because they did not want their own reputations to suffer from being too closely associated with it. Alternatively they felt that ownership should be spread out across the firm so that everyone had a stake in the knowledge management implementation. However, if these were genuine strategies they should be regarded as unconscious since in none of the interviews did those questioned indicate that they sought to disassociate themselves from UKnow, nor that they were pursuing a deliberate set of steps to recruit content owners.

Editorial control, including attention to information risk issues, may also be counted as an intended curatorial duty of the distributed knowledge management staff. A mixture of responses showed confusion over responsibility for editorial control of intranet resources. Several interviewees declared that there was no editorial control whatsoever on the system, despite anything KMG said to the contrary. What the firm lacked was:

one over-riding set of criteria that {defined} what is content... {a} check list that you could sort of say, 'Yeah, it meets that, that, that, that. It adds value. It provides an insight into what we do. It can help... a future pitch'.

A Knowledge Manager's conviction that nobody had ever being asked to remove a site from UKnow was proof to him of the lack of editorial control. The questioning on editorial control prompted the distributed knowledge management staff to consider whether any policy had ever been formulated:

There might be documentation about, but I've not seen it, nor am I answerable to it. That's how I take it. {It} is probably quite worrying to me to have actually said that, because it makes me wonder where the control is.

This ignorance of the possible existence of policy documentation on editorial control adds to the argument that documents were not significant players in the knowledge management implementation actor-network, nor provided adequate infrastructural support for the implementation (see page 62 above).

The general impression was that UKnow had formed rapidly from “web sites popping up here, there and everywhere” in “a cottage industry style”. This free for all had generated a corporate intranet comprising a “hot potch” federation of resources with the feel of World Wide Web. Concessions to creativity - permitted so that communities would build sites with their own feel – had resulted in a mixed set of resources, the quality of which could not be guaranteed:

It's a typical garbage in, garbage out scenario... The loop isn't closed in terms of making people submit quality, relevant stuff. So it's quite hit and miss what you get out of systems.

Those who believed that there was no editorial control on UKnow were in favour of the introduction of a policy. This would address the common complaints of dead links, inconsistent navigation and out of date or duplicated material. Guidelines would also help settle questions on the degree to which data should be stripped of sensitive material prior to being mounted onto the system. This was the main information risk issue that concerned the interviewees and, as an external factor that impacted the work of those concerned with the deployment of this particular implementation, might be considered as a “macrostructure” (Kling & Scacchi, 1982, p. 16). The distributed knowledge management staff were conscious of the need to guard against problems related to the mishandling of data held on external clients and employees of the firm. (Indeed, one of the Presence Producers felt that the term “editorial control” was misused in her unit where it was understood merely as the process by which material was sanitised for the sake of client confidentiality prior to uploading). However, the distributed knowledge management staff were also concerned that an over-zealous approach to maintaining confidentiality weakened the intranet resource. It imposed a delay on the sharing of news, enforced the removal of the most interesting data from the files, and sometimes rendered a “resource” useless. This problem of balance had implications for UKnow as an actor in the knowledge management implementation actor-network. UKnow might have been better supported within the actor-network had intranet content quality issues been addressed by strict adherence to a set of editorial policy rules. However, the likelihood of this approach resulting merely in cosmetic changes, for example in terms of improved presentation of information and better house-keeping, with the possible sacrifice of content value due to more careful attention to sanitation procedures, was equally prone to weaken the intranet’s role in knowledge sharing. This is because the benefits of using the resources that it held would not be obvious to the business at large.

Just two interviewees were confident that there was editorial control on the system, explaining that it was delegated to the local level on the basis that it would not be relevant to filter resources through a central group, indicating the importance of the understanding of local benefits. These two Knowledge Managers made reference to their own practices. For example, one explained:

We have a taxonomy... Within our guidelines we have asked our content owners to think about relevance, to think about currency and to make sure that all of our submissions are short and snappy as possible, and that people aren't wading through reams of information to find out what they need. We have a Professional Practice Group (PPG) who set guidelines for all technical documentation. So, before any of that is published, it goes through the sort of KM protocols, but then it goes through all the PPG protocols as well.

As was the case with content ownership, some of the interviewees exhibited attitudes towards editorial control that showed a desire for responsibility to rest with practitioners in the business units rather than with the distributed knowledge management staff, particularly in terms of content provision. One of the Presence Producers was happy that this could work in practice:

The process usually is it has to be signed off by a partner. So if it's been signed off, we can assume that it's of a very good quality and of the right standard.

The mix of responses to questions about editorial control is similar to that exhibited in the discussions of intranet content ownership (see page 70 above). This is worth further discussion given that all the distributed knowledge management staff were meant to be implementing (the same) knowledge management policy as determined by KMG in their business units. A number of reasons for the variety of perceptions and practice can be proposed. First, it has already been noted that the UK Director of Knowledge Management Operations had reservations of the appropriateness of some appointments to knowledge management roles in the business units. A contributing factor could be that some of the interviewees were not sufficiently qualified to implement the firm's knowledge management policy, i.e. this was an infrastructure issue (Kling & Scacchi, 1982, p. 18). The naïve view that whether or not a partner was willing to sign off a web site was an adequate check for intranet content quality may support this argument. The diversity of distributed knowledge management staff backgrounds, and their remit (see page 56 above), was also evident in the responses. For example, the interviewees who raised copyright as an information risk issue came into knowledge management work through library and information services work. The maturity of each local knowledge management implementation is also significant. The claims of good practice came from interviewees located in two of the functions where the KPMG UK's first knowledge management efforts had been initiated in 1998. The interviewees who had the most complaints about the lack of editorial control were from the markets, where the knowledge management implementation was more recent. This implies that concerns about, and means of, addressing editorial concerns became evident over time. An analysis of the relations between the actors here – KMG as the originators of policy, documents that held policy statements and the distributed knowledge management staff as the group charged with implementing policy – furnishes further explanation. The weakest actors in the chain were the documents. Indeed, they were so weak that several members of the distributed knowledge management staff were unaware of their existence. Thus a significant link in the production lattice (Kling & Scacchi, 1982, pp. 20-21) – KMG's main tool to convince distributed knowledge management staff of their responsibility to exert editorial control over UKnow resources – was broken. Added to this was the distance between KMG and the distributed knowledge management staff, and the distributed knowledge management staff's interests in actor-networks other than that concerned with the firm's knowledge management

implementation (as explained on page 65 above). Finally, since the system in operation was, in effect, delegated to individual units, it could be conceived of as a mesh of local systems.

Another of the distributed knowledge management staff duties related to the intranet was its promotion. This role involved combating negative views of UKnow: when asked about buy-in to UKnow, the majority of interviewees stated that it was either good or mixed. Four interviews declared buy-in to UKnow as poor. A comment illustrates the prevalent view that staff in the business units were supporters of UKnow, but often their so-called “support” was not manifest in their behaviour:

In theory, they're very supportive of the intranet development, but... In practice, I think they're rather busy and there is a resistance.

In effect, these colleagues had greater incentive to work as actors helping to sustain networks other than that concerned with the knowledge management implementation. This constraint of the macrostructure of the environment in which UKnow was deployed is discussed in greater detail below with reference to the priorities of the individual business units (see page 88).

The distributed knowledge management staff's efforts to encourage *general* intranet use were therefore focused on awareness raising from a relatively low level, with the simple intention of explaining that the intranet could be used as an information store. This highlights again the possible role of the intranet as a repository boundary object (Star & Griesemer, 1989, p. 411). (Encouraging intranet use for active knowledge-sharing purposes is treated separately on page 84 below.) For example, a Knowledge Manager said “They will not even bother looking at it until I mention it to them”. A Presence Producer showed the extent to which she had to push some colleagues to remember to use the intranet to meet their information needs:

I have to baby people sometimes about the use of the Intranet. It's there. It's *there!*

Awareness of UKnow was also promoted through knowledge management training sessions as described on page 67 above.

In contrast to the information provided on buy-in to the UK intranet, not a single interviewee had anything positive to say about buy-in to KWorld. It was reported that poor KWorld buy-in had a negative effect on the efforts of distributed knowledge management staff to promote UKnow:

It's difficult because no matter how much you sort of try and 'big' {UKnow} up, to market it, if people go in and get that kind of {poor} performance, that makes me look bad. {It} also means that when I say something else is good next time, they'll think, 'Well, he showed us that other thing and that... was useless'... For the Knowledge Managers, the technology's giving us a bad name.

Thus KWorld can be seen to have destabilised the knowledge management implementation actor-network as a rogue actor that persuaded others *not* to participate.

As with content ownership and editorial control duties, some of the distributed knowledge management staff did not want sole responsibility for generating intranet support. With

reference to knowledge management, one Presence Producer suggested that senior management endorsement was seen as the best means of growing true support for UKnow. A social analysis of this view strengthens the argument that the distributed knowledge management staff were not politically aware. They were liable to make decisions on how to spend their time at work that lowered both their status and, with it, that of the knowledge management implementation within the firm.

One way of gauging the success of efforts to promote the use of UKnow was the consideration of usage statistics. From July 2000 monthly intranet measurement statistics were issued by the firm's Information and Communication Technologies (ICT) department. A member of KMG staff responsible for measurement and monitoring gathered the statistics from the ICT records. He reformatted the statistics into reports that were presented to the committee charged with developing UK intranet policy, the KWorld/UKnow Editorial Panel (also known as the UEP). The reports listed the number of hits to the main resources on UKnow, including the knowledge repositories and engagement summary databases, and, to a lesser extent, details on material submitted for uploading. The theory was that high-quality statistics could be used to calculate UKnow uptake, and to promote the knowledge management implementation further throughout the firm. According to the distributed knowledge management staff, however, the measurement system in use was not comprehensive enough for these purposes:

Everybody sort of recognises that there needs to be something, but nobody can work out how to measure it right, properly. And if you can't measure it properly, there's no real way to then tell people that they're not doing it properly.

The system of measurement was inadequate because it focused simply on hits to web pages: it did not measure knowledge sharing. Usage of non-web material was ignored; it was not possible to tell who was using the resources for which there were statistics, nor the reason why they were accessing these resources; and the routes that people were taking through the material were also unknown:

What I can't do, and what I'd like to do, is to be able to see... what happens once you've been on the home page. Do we lose you or do you stay? And it's really hard to do that because of the way our web trends work.

The only way of accessing this type of information was in person from the end-users who would occasionally provide feedback on how particular resources helped them in their client work. There were also fears that the figures produced were inaccurate. A Knowledge Manager stated that he passed them on to the senior management in his group. He had recently noticed some discrepancies. He suspected that his contacts did not actually look at the figures. In a way he was relieved that they were ignored:

Things begin to contradict month on month. And if anyone starts to pay attention then we start to look like fools.

Added to the inadequacies of the statistics themselves was how they were interpreted and acted upon as measures of the success of the knowledge management implementation in each of the business units. These figures, although recognised as very basic and of little use for

service development, assumed a great importance when they were presented each month as the biggest component of the monthly knowledge management reports for KMG. Even though, as a Knowledge Manager put it, “A knowledge management success story is not ‘We had 2000 hits on our home page this week’”, the way that the statistics were published motivated thinking, and action, that aligned with this misconception. This points to the role of the intranet as a barometer of the “success” of the firm’s knowledge management implementation. It was argued that the over-emphasis on the codification of information in KPMG’s approach to knowledge management was encouraged by staff who hoped to see their web page statistics top the polls. It made sense to them to disseminate information through web pages for the sake of improved statistics, even if there were a business case that suggested that a different method would be more appropriate. A Knowledge Manager even suggested that “you could sit and hit your own site all day” as a strategy to demonstrate the success of your efforts to promote UKnow in your business unit. The feeling amongst the distributed knowledge management staff was that a different form of measurement should be adopted. Suggestions had been made that the measurement should be based around document submissions, but this, it was argued, had similar drawbacks to the system that relied on counting hits:

Well, so what? If you measure it on the number of things you submit, you will get a lot of submissions. Whether, they'd be of any use or not, is another matter.

The story of someone in another firm who had simply submitted the phone directory in response to feedback that he had not reached his target number of submissions to the corporate intranet was recounted to warn people off such an approach. The most compelling argument was that any new system implemented should measure business impact. At the time that interview data were collected none of the distributed knowledge management staff offered a solution that could provide an accurate measurement of the efforts to promote UKnow in the UK firm.

In an actor-network analysis of the knowledge management implementation within KPMG in the UK the statistics gathered for UKnow measurement for may be counted as actors. Their role is an interesting one, especially in the light of their treatment by the other members of the network. They held a reasonable amount of actor power in that they were commissioned by UEP, the panel that directed intranet policy in the UK. With the panel membership, those in knowledge management roles, both at the centre and in the distributed positions, treated this form of measurement as a problematisation tool to convince others to subscribe to the knowledge management implementation actor-network. Whilst the distributed knowledge management staff privately discredited the system of measuring UKnow impact, they were prepared to make a trade-off in not publicising their feelings. They accepted this compromise for the sake of the longevity of the actor network, and this helped perpetuate a regime of truth as part of the complex of power relations centred around knowledge management in the firm. So, although there were more “deserving” actors in the knowledge management implementation network – such as the documents that held knowledge management policy statements – the statistics assumed greater importance due to their potential to influence others beyond the boundaries of

the actor-network. The statistics were therefore knowingly granted undue status and power by other actor-network members for political reasons.

4.2.4 Lines of work of the distributed knowledge management staff: conclusions

It can be concluded that the main preoccupations of the distributed knowledge management staff related to the intranet and knowledge sharing at KPMG in 2001 were tied to their principal line of work as custodians of intranet resources on behalf of their local business units. This was especially true of the Presence Producer role. There was greater diversity in the activities of the Knowledge Managers, whose work had an additional emphasis on the support of knowledge sharing, and in most cases was executed as a higher level than the largely administrative load of the Presence Producer. However, some Knowledge Managers admitted that a proportion of their general activity overlapped with that of the Presence Producers.

The nature of the work that the distributed knowledge management staff were expected to complete was also determined by type of business unit in which they were based. For example, distributed knowledge management staff in the functions had better developed roles as trainers than their peers in the markets or infrastructure groupings. When examined more closely it is evident that the actual work practice of the members of distributed knowledge management staff, especially the Knowledge Managers, was particular to their home business unit. This indicates that the nature of knowledge management work at KPMG was highly localised in 2001.

It is also worth drawing from the discussion of the lines of work elements from the interview data that reveal what the distributed knowledge management staff considered *not* to be their priorities. Although the distributed knowledge management staff acknowledged that they occupied a position in which they were expected to act as knowledge brokers, there was disagreement over the extent to which they should respond to the requests of their "customers" in the business units. This demonstrates some reservations about the curatorial duties of the posts, further evidence of which is exhibited in the attitudes to content ownership and responsibility for editorial control of intranet resources. In addition, there are also indications that some distributed knowledge management staff were reluctant to embrace aspects of the job that would support knowledge sharing throughout the firm. For example, they were not all convinced that it was their function to lead efforts to generate intranet support. Equally, although they complained about behavioural issues that hindered knowledge sharing, they did not appear to be proactive in addressing these through, for example, discussions with the HR department, as was originally envisaged when the distributed knowledge management roles were formulated. The discussion on pages 60 and 65 has also revealed the problems of local implementation of policy designed at the centre when the policy itself has a low profile, and links between staff in the centralised function and the decentralised business units are looser than those internal to the business units. This analysis shows that, in general, the distributed knowledge management staff favoured working on (sometimes mundane) projects as individuals at the level of their business units, rather than as the firm's representatives of *Hazel Hall PhD 2004*

knowledge management at a strategic level. This strengthens the argument that knowledge management practice is local, and infers the same for knowledge-sharing practice.

4.3 Going concerns: Knowledge Management, Information Management, UKnow and knowledge sharing

As a concept in its own right, knowledge management can be regarded as an actor in KPMG's knowledge management implementation actor-network. In 2001 knowledge management was also an overarching "going concern" to the KPMG's business at large: it was constituted by a mesh of activities, and supported multiple lines of action (Kling and Scacchi, 1982, p. 17). In the analysis presented here there are two aspects of knowledge management as a concept that can be treated as individual going concerns of relevance to the role of the intranet in knowledge sharing. These are the confused perceptions of (1) information management as knowledge management, and (2) the intranet as knowledge management. In addition, the practice of knowledge sharing through multiple channels is considered as a going concern. Analysis of these three knowledge management related going concerns helps furnish further explanation of the role of the intranet in knowledge sharing.

Prior to examining the perceptions of knowledge management as a concept in detail, it is worth highlighting the source of data on which this discussion is based, and the interviewees' own working definitions of "knowledge management". Interviewees were not asked explicitly about their, nor the firm's, "take" on knowledge management. Data gathered on these topics were offered without prompting. The interviewees who made significant contributions on the understanding of knowledge management within the firm were "career" Knowledge Managers. None of the Presence Producers offered opinions on how knowledge management was perceived across KPMG UK, nor did either of the two "out-of-box" Knowledge Managers. It would appear that only with deep engagement in knowledge management work as Knowledge Managers were individuals motivated to make sense of knowledge management as a concept within the firm. That some members of distributed knowledge management staff did not articulate their understanding of knowledge management adds to the argument that they may have been under-qualified for their roles. In an actor-network analysis this lack of understanding indicates that the links between some staff and knowledge management as a concept were fragile, and thus reveals potential points of fracture.

It is also noteworthy that few attempts to define the term "knowledge management" are evident in the company documentation examined in this research. Definitions that were put forward were unfocused. This was in spite of KPMG's high external visibility as a site for good practice in knowledge management, and promotion of knowledge management expertise as part of KPMG's portfolio of advisory services (see Chapter 3). This is also indicative of a regime of truth that KPMG was prepared to present to the outside world, even if it did not closely reflect its internal reality. For example, knowledge management was defined in the *Knowledge centres briefing pack* as "the purposeful management of knowledge, know how and best practices within an organisation" (UK Knowledge Management Group, 1998, October). The third element in this

definition – “purposeful management of best practices” - is wide-ranging, and assigned to knowledge management in the firm a very broad agenda.

References to the lack of focus in KPMG’s interpretation of the term “knowledge management”, as well as its impact, also featured in the interviews. An interviewee indicated the breadth of the appreciation of knowledge management as a concept at KPMG in the UK:

Throughout the UK firm, there is a ... {range} in understanding of what KM is and the value that it can bring.

This range in understanding of the term “knowledge management”, and the value of knowledge management at the level of the firm, influenced levels of support of knowledge management as a concept.

As further confirmation of the lack of consensus on what knowledge management meant, or of its value at the level of the firm, a wide range of explanations of what knowledge management represented to interviewees as individuals, and what it meant to KPMG as a whole, were offered by those questioned on the subject. Of the three main purposes of knowledge management identified in the literature – organisational learning, knowledge creation and innovation, and knowledge reuse - the emphasis fell on the third. For example, one of the Knowledge Managers defined knowledge management as “the e-enabling of knowledge-sharing in response to the business challenges of today” whilst another equated knowledge management with general “good practice”. Early in his interview a third offered two definitions: (1) “Knowledge Management is about either reducing your risk or improving your efficiency”; (2) “what we’re saying is what we want people to do is to exploit knowledge, exploit the information sources we have and to build knowledge for themselves”. Later this Knowledge Manager concluded that knowledge management was, in fact, knowledge sharing. He pondered over this definition as he considered how complex a task it was to support the networked elements of a knowledge-sharing environment:

You think, you know, you can sort out Knowledge Management. It's sharing. But you then find that it's intertwined with personnel issues and cultural issues, budget issues, promotion issues, management issues... All and each one of them is having its own side-effects that you don't even think of at the time. You know, people just don't register them as being an issue.

It is interesting that two of the most experienced Knowledge Managers hinted that knowledge management equated with knowledge sharing. This tallies with the claim that knowledge management is merely “the management of knowledge-sharing processes” (Huysman & De Wit, 2002, p.27) as highlighted in Chapter 2.

None of the interviewees referred to any of the KMG published documents that provided definitions of “knowledge management”. Nor did the definitions that the distributed knowledge management staff proposed equate with what existed in the documentation. This low awareness of the firm’s *published* knowledge management policy adds to the evidence that the documents themselves were weak actors in the knowledge management implementation actor-

network, and that communication of knowledge management policy from KMG to the distributed knowledge management staff was not entirely effective.

Four of the Knowledge Managers (but none of the Presence Producers) had strong opinions on how perceptions of knowledge management as a concept needed to be changed at the firm. One saw this as a priority given her suspicion that senior management was keen to drop knowledge management initiatives. It was argued that the problem laid with the label "knowledge management". For example, it was declared that the term was "completely wrong" on the grounds that only information can be managed. Similarly, there was the view that if knowledge in isolation is valueless, it then followed that knowledge management was without value. The Knowledge Manager who made this remark suggested that the term should be abandoned for something more meaningful:

I think... you {should} re-label Knowledge as a core value with "Community Knowledge" or "Community" or "Organisational Learning"... because there's an understanding {of these concepts}.

Two of the longest serving knowledge managers put forward the notion that, as far as was practicable, knowledge management activity should be focused on doing business as an "invisible" component of the revenue generating processes. Their arguments indicated a desire for embeddedness that would strengthen knowledge management as a concept's position in the firm, as is argued in the literature (Huysman & De Wit, 2002, p. 163). The contradictory nature of this argument was explained:

Knowledge Management shouldn't be about knowledge management! Strange, but it should be a way to do business, and that's all.

The fear was that if knowledge management and the business processes were not integrated closely enough, knowledge management as a concept would be rejected. Preservation of the Knowledge Manager role was highlighted with this warning:

Let's forget about having a separate Knowledge Management process, forget about having all this kind of stuff. What you have is... business management... and then we build on top of that. Otherwise it's just going to die and you sit in the corner.

These suggestions to "get rid of" knowledge management, and the associated risks show that some members of the distributed knowledge management staff were prepared to suggest modifications to strategy in the form of trade-offs and compromises in order to sustain the knowledge management implementation actor-network. Some of these, such as dropping the term "knowledge management", were extreme in the context of the own career interests of those making the proposals. However, it is worth noting that the two Knowledge Managers who advocated extinguishing knowledge management as a term, were two of the longest serving staff interviewed and were likely to feel quite secure as employees at KPMG, whether or not they continued in knowledge management roles. Added to this, they had professional backgrounds in engineering and accountancy. It would have been more remarkable had other distributed knowledge management staff, notably those with LIS backgrounds, had expressed

such a radical suggestion, since their professional “home” and futures were more closely tied to knowledge management.

4.3.1 Going concern: Information Management as Knowledge Management

Perhaps one of the reasons why the distributed knowledge management staff struggled to explain the concept of knowledge management at KPMG was because they did not believe that what was being practised actually represented knowledge management. Four Knowledge Managers were of the opinion that what was labelled knowledge management at KPMG was in fact *information* management. It irritated them that they were engaged in a practice that might be regarded as dishonest. As one of them put it:

We are not doing knowledge management at the moment. We're doing *information* management.

Their justification for this conclusion was that the systems set up by distributed knowledge management staff were built around information sources with the expectation that the common resource-base would be enlarged through the contributions of further information by employees in the business units. Whilst some distributed knowledge management staff demonstrated a strong desire to shift from information management to knowledge management (for example, one declared that she was “not willing to do this as an information management thing”), others questioned the extent to which distributed knowledge management staff could manage the firm’s knowledge at all:

Really what we're doing, is we're managing information. We're providing information and the user's what turns it into knowledge in their head.

When considering the health of knowledge management as a concept in the actor-network, this lack of agreement amongst those most intimately involved in the knowledge management implementation as to what knowledge management represented to the firm is an issue of concern. Efforts to sell the concept could not have been helped by supposed knowledge management experts unable agree an articulation of the term “knowledge management”. Further problems were evident in the discovery that those charged with managing the knowledge management implementation had doubts over whether they were principally engaged in knowledge management or information management activities. This raises questions about knowledge management as an actor’s true identity, including the suspicion that the term “knowledge management” was actually employed within the firm to glamorise standard information management procedures. Whether or not this was intentional is difficult to gauge. A simple explanation is that the under-qualified distributed knowledge management staff, the majority of whom (12) came from information management and IT backgrounds and who were unaware of KMG knowledge management policy, practised what they could practise, rather than extended their work into true knowledge management roles. Recognition of this, whether conscious or unconscious, by the wider community at KPMG was likely to discredit knowledge management’s standing in the actor-network, as well as the standing of the knowledge management implementation as a whole.

4.3.2 Going concern: the intranet as knowledge management

A number of distributed knowledge management staff raised the problem that there was a widely held misassumption in the firm that the intranet equated with knowledge management and vice versa. The extent of the problem was demonstrated in responses to interview questions given by two Presence Producers, staff intimately involved in knowledge management and intranet development work. In her answers the first found it difficult to distinguish between intranet buy-in and knowledge management buy-in. When questioned about the intranet, a second Presence Producer's replies related to knowledge management. That even members of the distributed knowledge management staff cohort had problems separating out these two aspects of the knowledge management implementation highlights two issues. First, those devising and implementing the firm's knowledge management strategy had a serious communication problem to address. Second, some distributed knowledge management staff in post required additional training (or perhaps should not have been appointed in the first place).

Those who noted the confusion that the intranet equated knowledge management and vice versa referred to the negative effect that this had on knowledge management as a concept. For example, a strong supporter of UKnow, argued that the incorrect association between a good intranet and knowledge management was detrimental because it reduced the impetus to further develop knowledge management initiatives, most notably those which might have nothing to do with the intranet. Thus the confusion reduced knowledge management as a concept's actor power. One of the Knowledge Managers was concerned that the largest component of the monthly knowledge management reports was the report of hits on UKnow. Her point was that a system branded as measuring firm-wide knowledge management activity was actually only measuring one aspect of the implementation. Not only did it give the wrong impression of activity, but it encouraged the view that knowledge management at the firm began and ended with the intranet. In this instance the disproportionate actor power of web statistics (as introduced on page 77 above) was detrimental to the knowledge management implementation actor-network since it served to reinforce the incorrect assumptions prevalent within the firm.

It can be argued that the confusion between knowledge management and the intranet resulted from a systems-led knowledge management implementation: UKnow grew from an intranet project led by IT staff in 1995 (Goody, interview 7 November 2002). Several Knowledge Managers did state outright that knowledge management at the firm was systems-led. Some developed this theme in drawing attention to the problems that a systems-led knowledge management implementation brings with reference to knowledge sharing. For example, one referred to the failure to appreciate users' needs for straightforward information retrieval by systems designers primarily interested in technical sophistication. In this instance two actor groups – members of the UKnow team located in KMG, and the distributed knowledge management staff – exerted too much power over the end-user actor group. They put at risk the support that they needed for the long-term survival of the knowledge management implementation network.

We tend to be driven by technology and by the knowledge people... How they want to set it up, how they want to make it look... Rather than being directed by the guys who actually go in there to retrieve information. If we could make that transition and start looking at it from the user experience, I think we'd make big steps forward. At the moment, they're too flash.

These comments align with findings of previous research which argue that systems for knowledge sharing need to be usable (for example, Jarvenpaa & Staples, 2001, p. 31; Huysman & De Wit, 2002, p. 90). Others felt that the firm was missing out on opportunities to derive greater benefit from its knowledge assets independent of the intranet. They regretted in particular that it was not officially recognised that knowledge could be shared through interpersonal relationships (even though it was the strength of interpersonal relationships that "subverted" the official knowledge-sharing platform in the firm system, as will be discussed below on page 105). These comments highlight how undue attention to a privileged network actor (in this case UKnow) can undermine the position of another (here knowledge management) and unbalance the actor-network as a whole (the knowledge management implementation). They hint that KPMG had fallen into Huysman and De Wit's "management trap" (2002, p. 9) as discussed in Chapter 2.

These findings reveal the resulting difficulties in encouraging multiple means of knowledge sharing when an intranet is mistakenly perceived as the embodiment of a knowledge management implementation. In these circumstances the intranet's role in knowledge sharing is that of an inhibitor since it is repelled by employees for the purposes that it expected to achieve.

4.3.3 Going concern: knowledge sharing across multiple channels

4.3.3.1 Understanding and levels of knowledge sharing

Evidence from the interview data reveals that a lack of commitment to knowledge sharing using "official" channels endorsed by knowledge management staff weakened knowledge management as a concept as an actor in KPMG's knowledge management implementation actor-network. This type of "behind the scenes" knowledge sharing has been identified in previous research (for example, Huysman & De Wit, 2002, p. 165).

There appears to have been a slightly skewed view of what "knowledge sharing" meant amongst those charged with delivering knowledge management strategy in the business units across the firm. The term "sharing" normally implies acts of giving, balanced by acts of taking, conducted across relationships. It is also largely understood that knowledge (in the form of experiences and insight embedded in people or organisational practices) cannot be easily codified. Strictly speaking, codified "knowledge" is information. In this research the main understanding of the term "knowledge sharing" amongst the interviewees was the act of adding codified material, such as contact information, engagement summaries and descriptions of methodologies employed in client work, to shared resources. The distributed knowledge management staff did acknowledge that these resources might be reused in the future. However, their main interests lay in the act of giving (adding), rather than that of taking (reuse). The management of the process of establishing intranet content for individual constituencies was of greater interest than the means by which these resources were exploited. The

interviewees therefore employed the term “knowledge sharing” in a non-standard way: the term “information submitting” would have been more appropriate. Given that the majority of distributed knowledge management staff, especially the Presence Producers, described their main duties as focused on acquiring information for UKnow (see page 56 above), and their apparent lack of ability in articulating the meaning of the term “knowledge management” (see page 79 above), their interpretation of the term “knowledge sharing” is not surprising. However, it did mean much of what was reported in the interviews focused on the one-directional dimension of giving to the common resource, rather than any form of exchange.

It is also worth highlighting that the firm’s original intentions were for knowledge sharing to be achieved *within* business units. This was evident from the details of the *Knowledge centres briefing pack* (UK Knowledge Management Group, 1998, October), and is in line with KPMG UK’s corporate feel of a “boxed” environment of a federation of units, as discussed further below on page 96. The review of documentation (elaborated in Chapter 5) did not uncover any change to this policy in the period 1998-2001. Thus in 2001 KPMG UK’s “knowledge” was officially intended to be shared only at a local level, and not across business units. This was despite the recognition amongst some of the distributed knowledge management staff that innovative applications of what the company “knew” would come through cross-unit work. This was most obvious at the intersection of individual markets with individual functions (for example, Industrial Markets and Tax), where simple intersects for on-going work could be supported by intranet resources.

The firm’s intention to make knowledge sharing prominent is evident in its Values Charter. Here knowledge sharing features in one of the ten statements: “We will openly and proactively share knowledge”. This could be regarded as an attempt to promote knowledge sharing as a responsibility, as identified as an enabling condition of such practice in the literature. Five interviewees made direct reference to this official line on knowledge sharing. Given their job specifications, it is not surprising that the distributed knowledge management staff were supportive of the stated value in particular, as well as knowledge sharing in general. For example, from a broad perspective they were keen to see knowledge sharing feature in the Values Charter as a validation of the importance of their roles: one demonstrated this as he argued that knowledge sharing was at the heart of knowledge management. At a more mundane level, another interviewee regarded a commitment to knowledge sharing as a means of incorporating distributed knowledge management staff into the work of the teams, and as a way of giving them an opportunity to learn from the specialists that they supported.

A number of interviewees, however, complained that although this value was published and visible on posters throughout the firm’s premises, and the declaration that “the KPMG executive - the people at the very top - they always stress the importance of knowledge sharing”, it was more an *aspiration* than a statement of actual practice. As a Knowledge Manager put it: “It’s written on the wall. It’s not lived”. The prevalent view was that it took more than a mere statement to motivate knowledge sharing:

Certainly, {knowledge sharing} features and it's mentioned... often enough, but that's not enough... I think it needs more than that... The company hasn't taken the step it needs to take it yet.

Active, as opposed to notional, commitment to knowledge sharing was required to support knowledge management as a concept as a strong actor, and by association, the knowledge management implementation network. Although widely disseminated, the Values Charter was not as influential an actor as had been hoped in the efforts to promote knowledge sharing.

Some explanations were offered as to why the firm had not implemented mechanisms to enable it to meet the goals of the stated value. It was not necessarily the case that employees were hostile to knowledge sharing. One of the Knowledge Managers was of the opinion that the firm simply did not know how to transform the intention behind the value into regular activity, thus hinting at the need for appropriate infrastructural supports for knowledge sharing, as highlighted in Chapter 2:

Right, {the value statement is} the party line. We still haven't figured out how to do that.

Other interviewees were less generous. One, for example, doubted that the stated value represented a genuine desire, but was rather a "token gesture". Such lack of conviction amongst the distributed knowledge management staff, namely those expected to be enthusiastic for such moves due to their vested interests in the success of knowledge management, indicated fault lines in the knowledge management implementation actor-network.

The interviewees also discussed the general levels of knowledge sharing in the firm, independently of consideration of the firm's Values Charter. Only one interviewee indicated that there was a strong knowledge-sharing culture at KPMG, and even she admitted to severe problems in persuading people to submit content to the intranet, the firm's official knowledge-sharing platform. The majority of the remainder of interviewees who expressed opinions on the general level of knowledge sharing stated that it was low. Some of the interviewees' comments on interest in and support of knowledge sharing were very negative. For example:

Knowledge sharing is not something that {employees} really see as being particularly important... It really, frankly, doesn't get done anywhere.

Attention was drawn to the particular difficulties of persuading people both (1) to contribute to intranet content development and (2) to use existing content on the intranet. Two interviewees highlighted that any knowledge-sharing activity on the part of end-users tended to focus on the "take" element, rather than on the dynamic of both give and take. Even where giving had been encouraged in the form of intranet submissions, interviewees were cautious about the worth of what was provided. The content needed to be valuable content, rather than something simply supplied to meet a target. Otherwise, UKnow - as an actor in the knowledge management implementation network – would lose support as soon as its users realised that it was not a useful resource.

Just lobbing things over the fence {is not} a good idea, I'm not interested. It serves no purpose other than clutters up the database.

The danger of this kind of camouflage behaviour is that individuals may appear to be contributing *something*, when what is *not* contributed is more important, has been noted in previous work on motivating knowledge sharing, as discussed in Chapter 2 (for example, Dyer & Nobeoka, 2000, p. 142; Von Krogh, 1998, p. 143).

A Knowledge Manager was of the opinion that so much more could be achieved simply by exploiting existing material. Motivating further intranet contributions might not be a good strategy:

It's almost that if we shared no more information for the next two years... and just exploited... the stuff we have now... we'd be fine... We would be doing a better job because we have... such large volumes of information available.

Another fear of those in distributed knowledge management roles regarding efforts to increase intranet contributions was expressed. There were concerns that increased interest in knowledge sharing would lead to intolerable work-load burdens for those in knowledge management roles. These comments hint at the problems of the codification strategy employed for knowledge management at the firm. For them knowledge management as practised was becoming an information overload (i.e. an information management) problem. The fear of increased work-load may have been linked to the reluctance of distributed knowledge management staff to embrace intranet content ownership as discussed above on page 72.

High-level support to knowledge sharing also varied across the firm. Although some interviewees were able to point to instances of the good knowledge-sharing practice of senior staff, the general conclusion amongst the interviewees was that some senior staff were willing knowledge sharers, but the majority were not. Senior level support for knowledge sharing has been identified in the literature as a factor for motivating organisational membership at large to adopt such practices. The knowledge management implementation actor-network at KPMG needed senior support of knowledge sharing. A Knowledge Manager outlined the problems suffered within his unit due to lack of such support at a senior level. When asked whether senior staff were seen to be knowledge sharers themselves, he responded:

No, absolutely not. That's one of our big problems... We need to get them using the systems. We need to get them promoting them within their teams. We need them open to suggestions on what works and what doesn't work, what to try and what not to try. It's very, very difficult to get them to do that. A prime example is collaboration at the moment, which is an element of knowledge sharing, and it's been very difficult to get the lead partners of some accounts to take that on board.

Despite giving the impression that there was a poor commitment to knowledge sharing in the firm, some interviewees were able to highlight instances of interest in knowledge sharing and the benefits of such activity. In addition three interviewees admitted that they had contact with colleagues in the business units who they could label as "inherent" knowledge sharers, i.e. those identified in the literature who share knowledge for the soft reward of personal satisfaction. The prevalent view was summarised by one of the interviewees as:

{Knowledge sharing} doesn't happen all the time, but when it does happen, it's actually really, really valuable.

The general lack of interest in knowledge sharing from the firm at large had implications that went beyond stalling the daily work of the distributed knowledge management staff. It also hindered knowledge management strategy design. For example, one of the Presence Producers spoke of a user survey that would help inform future developments of the work of her business unit. Sample selection was to be based on the likelihood of individuals selected completing the questionnaire, rather than an attempt to gather data from a range of users. In effect she was planning to gather data from the "converted" to determine service direction. Given concerns about support for knowledge management across the firm, this was a flawed strategy: this work would do little to add critical mass to the knowledge management implementation actor-network. However, her approach was politically important. She needed to make a case on the basis of user opinion. If she put effort into sending out a survey that returned no results she endangered the legitimacy of her work. For the sake of her local needs, the planned action was a sensible compromise in the short-term, even if its impact on interest in knowledge sharing and the wider knowledge management implementation network would be minimal in the long-term because it had been aligned to a regime of truth rather than to reality.

4.3.3.2 Resistance to knowledge sharing through the official channels of the knowledge management implementation

The interviewees identified three main forms of resistance to knowledge sharing using official corporate platforms such as UKnow. These were related to three factors.

- *KPMG's priorities and the working environment*: bottom line, time and core responsibilities; "box" mentality; emphasis on individual success and the resulting creation of cliques; respect for status.
- *The nature of knowledge to be shared and the systems to support this*: knowledge held by KPMG staff; systems for knowledge sharing.
- *The level of senior management sponsorship of knowledge sharing*.

These factors are discussed below with a commentary on the *actual* knowledge-sharing economy at KPMG in 2001.

(a) KPMG's priorities and the working environment

The interviewees explained that all activities at KPMG were geared towards one main goal: "Success in this business is bottom line", the dominant element of the firm's macrostructure (Kling & Scacchi, 1982, p. 16). Membership of, and interest in, the knowledge management implementation actor-network were insignificant in comparison with those built up around client work. Adding to this bottom line came through billing clients for services. An interviewee comment illustrates the emphasis the firm put on the processes that led directly to revenue gain:

KPMG puts an incredible amount of... pressure on people to bill and to be client-facing.

As well as client work being the overriding priority, KPMG staff (in general) were under a tremendous time pressure. Every interviewee spoke about extraordinary demands on staff time. Many of the comments made were straightforward references to staff in the business units having very little time in which to complete their work. More specifically the interviewees spoke of certain factors that contributed to the sense of time pressure. These included information overload, particularly due to e-mail misuse, the frustrations of attempting to extract information from an intranet that was difficult to navigate and over-dependence on face-to-face meetings. The distributed knowledge management staff, although not client-facing themselves, also suffered from a lack of time, particularly those who worked mainly on their own.

It was concluded that a focus on revenue-generating work in any time-pressured environment means that “client stuff will always take priority”. A Knowledge Manager provided an illustration of how the priority of billable client work dominated individual time management decisions. This was to the detriment of knowledge sharing, a non-billable activity² according to six of the interviewees:

You just don't really have the time {to knowledge share} because it's all about utilisation... Your time sheet reflects how much time you spent doing stuff and you have to account for every hour... If your utilisation is below 80%, then they'll start asking questions - and you might want to spend the other 20% doing something a bit more useful like filling in two months' worth of expense claims.

These findings are entirely in line with Lamb and Kling's designation of the computer user as a social actor, as outlined in Chapter 2 (Lamb & Kling, 2002, para 4). The staff in the business units regarded themselves as professionals who earned their salaries in exchange for the completion of client work for which they could charge fees – rather than for using computers. Due to their different affiliations, they did not share the distributed knowledge management staff's perceptions of UKnow as essential to their work, but chose to organise their limited time around work that obviously generated revenue for themselves and their local units.

In addition, they recognised that engagement in knowledge-sharing activities could be detrimental to career progression for those whose appraisals depended on revenue generation. This was a disincentive to participate in the knowledge management implementation actor-network:

The structure of billing discourages knowledge sharing because if you are a more active knowledge sharer, you will be spending more billable time sharing knowledge which doesn't get any revenue.

This decision on how to spend time at work illustrates Kling and Scacchi's proposition how narrow incentives and opportunities motivate choices (Kling & Scacchi, 1982, pp. 30-31) and shows how attending to knowledge-sharing duties can be a distraction from activities that help individuals up the career ladder. This implicates the intranet in career blocking.

² Three interviewees mentioned on-going experiments with time codes for knowledge sharing, but at this stage it was not clear how they could work.

Some senior staff endorsed the view that it was not valid use of staff time to contribute to knowledge-sharing initiatives, such as sending content to Presence Producers for putting onto the intranet. It was explained:

Some members of senior management, while being perfectly personable... {and} not hostile in any way... just clearly don't see knowledge sharing as either a useful or sensible {way} for them or their people to spend their time. {They} just haven't bought it at all.

The great emphasis on success of client projects sometimes meant that opportunities to knowledge share, although obvious to the distributed knowledge management staff, were ignored by the wider business community. For example, in cases of a significant business win, the win would be celebrated, but the chance to share what was learnt from the win would be ignored:

The way that {success stories} are shared, they forget to put in the learning points. {They} just go on in all the detail about how a certain project was won and 'Oh, isn't that great? Isn't that marvellous?' {They} forget to include what people can learn from it or how people can do it themselves.

It can be seen then that the focus on the completion of billable client work in a time-pressured environment distracted staff at KMPG away from knowledge-sharing activity. In such an environment "knowledge and information preparation, information gathering, usually falls to the bottom of the 'to do' list". Some interviewees were more accepting of this than others. For example:

It is difficult to remember that if you're working like stink to achieve particular goals, it's difficult. If someone says, 'Look, I haven't got time to deal with this this week', it's like "Ohhh!" But they're right because they're off earning money, and if they don't earn money, then I don't have job any longer.

Equally a Presence Producer was convinced that the problem of time pressure was real and that members of her community were not making excuses for their lack of participation in knowledge-sharing work. She explained:

There's an element of, not laziness, but *disinterest* - but they really are pushed quite a lot of the time.

Others did detect laziness, as well as excuses. The following comment typified the view of five interviewees:

You know, they can be incredibly busy people, when they want to be... A lot of the time, they are {busy} and there's no doubt about that. I don't deny that in any way, but {it's too easy for them to say} 'Oh, yeah, all right, later, another time'.

The only Knowledge Manager in this set of five distributed knowledge management staff who spotted laziness, added to the debate by considering that those who refused to participate were guilty of failing to invest in their own development. His view was that staff were missing opportunities, for example in learning how to use new tools that would benefit them in the future. He also believed that reluctance of the firm to invest in online discussion space was wise given the required time investment for them to be successful. He argued that if even modest attempts

to encourage people to knowledge share failed, anything more ambitious would be a waste of time and effort.

The well-understood core responsibility of KPMG staff to sell products and services to add to the bottom line, for which there were significant personal rewards, dominated decisions on how staff spent their working hours within the firm. There were obvious reasons to be well-connected to the actor-networks related to client work, such as pay and career advancement. In such an environment it is not surprising that other activities, such as knowledge sharing, were relegated, as has been observed in other studies (for example, Newell et al., 1999; Orlowski, 1996). With the exception of one Knowledge Manager, the majority of interviewees were of the opinion that knowledge sharing was not adequately promoted as a responsibility amongst the firm's staff. Interviewees backed up these claims by making reference to the lack of prominence of knowledge sharing as a component of discussions in recruitment and selection exercises and at appraisals, and to patchy evidence of knowledge-sharing behaviour attracting financial or career-related rewards.

The majority of interviewees said that the issue of knowledge sharing would not feature as a priority when assessing the suitability of candidates for jobs with KPMG. Rather, the priorities of the interviewers would be to ascertain whether or not the candidates could sell KPMG products and services based on industry experience and technical skills, and the degree to which they could contribute to attempts to meet revenue targets of the teams. A Knowledge Manager explained that although knowledge sharing should be considered at recruitment stage - because knowledge was one of the firm's values - the reasons for employing a particular person would always be based on a business case. Another interviewee argued that knowledge sharing should be discussed at interviews. An extension to this was the suggestion that HR should become involved to sanction such practice, thus making it more obvious within the firm that knowledge sharing was a core responsibility of all staff.

Interviewees who spoke about the role of knowledge sharing as a feature for discussion in the appraisal process stated that it was supposed to be considered, and that individuals were meant to be scored according to their involvement in knowledge-sharing activities. However, the implementation of this system did not appear to be successful. For example, a Knowledge Manager explained that although it worked well in his team, he doubted that this was universally the case. Others indicated that sharing capability was not always taken seriously at appraisal meetings:

If you speak to people within KPMG then you will discover that by the time you get to the knowledge-sharing bit of your appraisal everybody's a bit bored. You've been there for a couple of hours and you need to get out, so it's swept under the carpet.

Again, the over-riding priority of revenue generation was believed to dominate discussions at appraisal time. There was a degree of cynicism about the stated process:

I've not looked at other people's appraisals - nor am I able to - but I wonder how much their actual work is judged on {knowledge sharing}? They're judged on how much money they bring in.

Reference was made to KMG's efforts to make knowledge sharing feature more prominently in the appraisal process:

{KMG} is working really hard with HR to really get it into the appraisal system, so that people have to... actually *show* that they are sharing knowledge, that they are keeping their electronic CV up to date, that they are doing certain things... That way we will embed it in what people do on a daily basis, but we're not there yet.

Others were in agreement with this view that once knowledge sharing was a firm commercial objective stated in appraisal documentation, people would be more likely to fulfil the desire for it to become part of everyone's work. This aligns with some of the prescriptive messages of the literature on making knowledge sharing an explicit responsibility for which individuals would be rewarded (for example, O'Dell & Jackson Grayson, 1998, p. 157). One interviewee was hopeful that the firm's change management programme might help KMG with the push to encourage knowledge sharing to be taken more seriously at appraisal time.

The interviewees showed confusion as to whether or not KPMG staff were rewarded for knowledge sharing through the provision of economic or career benefits. This matches with findings from the company documentation that will be elaborated upon in Chapter 5. Material prepared for induction training by knowledge management staff stated explicitly that it was the case that staff were rewarded for knowledge sharing. In fact, it was not until June 2001 that the recommendation was made that rewards for knowledge sharing should become official company policy. This recommendation had not been implemented by the time that fieldwork with the interviewees had been completed. However, some interviewees thought that it was already company policy to reward staff financially for knowledge sharing, or that this was soon to be the case. This group included a Presence Producer who said:

Our senior members of staff are starting to say that {your career advancement will be aligned to your willingness to knowledge share}. So we're... in the process of {developing mechanisms for this}. And people haven't really begun to hear it yet. God, you know, whether you have to be really nasty and take peoples' bonuses away before they'll {take notice}! I dread to think what might happen if we start getting really hard line.

Those who knew of KMG's input into such discussions were concerned at the enormity of the task:

People were going to be reviewed on how much time they put to knowledge sharing, rewarded – how do you reward them?... I think {KMG is} going to struggle tackle that.

Others weren't sure of current company policy related to economic and career rewards for knowledge sharing. Whether or not it was official policy, the distributed knowledge management staff found it difficult to think of instances in which knowledge sharing might be rewarded through monetary or career gains. At best, the rewards were "very, very minimal", and applied so subtly - for example as a factor that contributed to the overall rewards package of the annual

salary - that they were not noticed by the main body of staff. Some interviewees were adamant that not a single economic nor career reward was on offer for knowledge sharing.

Some of the Knowledge Managers explored the reasons why the firm should have a stated goal to reward knowledge-sharing behaviour, yet not follow it through. They referred to knowledge-sharing measurement's status as a mere "nice notion" in an environment where so much was achieved through teams. Knowledge sharing was not measured at the level of the individual, nor was its value to the firm. It was argued that without a sound measurement system it was easy to give the impression of knowledge sharing for the sake of passing a promotion interview, even if you had not bought into it wholeheartedly: "you need to be able to *demonstrate* {that you knowledge share}, but some people live it and some don't". One interviewee despaired that a system could ever be created to measure knowledge-sharing activity. Another broadened out the discussion agreeing that without a sensible measurement system it was difficult to allocate rewards. He added that it was also impossible to chastise those who were not contributing to knowledge-sharing efforts:

Everybody sort of recognises that there needs to be something, but nobody can work out how to measure it, right, properly. And if you can't measure it properly, there's no real way to then tell people that they're not doing it properly.

His view was that until ambitious professional staff could be persuaded that it was to their personal benefit to knowledge share they would not show any interest in this activity:

The problem is that our audit staff don't, generally speaking, really see why they should bother {to knowledge share} when ... there's nothing in it for them, from what they can see - because that is not the way that they get new jobs.

Some other members of distributed knowledge management staff that rewards for knowledge sharing might work best if a link to hard rewards such as financial gains and career progression were made explicit. However, the majority who talked about rewarding knowledge sharing advocated that any system devised should be linked to individuals' desires to see their profile raised within the firm, rather than to a package of more tangible benefits such as increased pay or promotion. In effect they favoured the benefits classified as "soft" rewards in Chapter 2. The distributed knowledge management staff recognised the potential of a deal with their colleagues that would capitalise on their desire to show off:

When people have developed a new methodology, a new solution, they want to talk about it. They want to share how wonderful they are. So we have to let them do that by saying, 'OK, {share it} formally' and get them to share it that way.

In terms of the intranet contributions, the idea would be based on the notion "They want the presence because they want the profile". It was explained that junior staff – those with furthest to travel in career terms – were most enthusiastic about opportunities to raise their profile through being seen as knowledge sharers:

The more junior people that I deal with are tremendously willing and tremendously helpful... I think they see the advantages for themselves because if they submit something to a

knowledge repository or they work with me on a web site, their name gets tossed around and {as a result} they have partners coming to talk to them.

The reason why the distributed knowledge management staff favoured the soft reward of recognition over the hard rewards of financial and career benefits was based on concern that a monitored rewards system would confirm that knowledge sharing was an "extra" rather than an integral part of the job. A Knowledge Manager, who recognised that knowledge sharing could be achieved in many ways, argued:

Everybody recognises that intellectual assets should be shared and that you don't want your knowledge walking out the door. So why should you have to pay people extra to tell you that?

She suggested how a recognition system might work, and how it might tie *indirectly* to other long-term individual benefits:

I think we should reward them in the appraisal. Give them a pat on the back and say, 'That was part of your job, like everything else you do. Because of that we're going to give you 'well done' and you'll get an above average bonus'. I think that would be enough because that is looking at it as part of their whole job.

I don't think a lot of people yet recognise that their career will be advanced, that they will get a good reputation or satisfaction out of contributing to a knowledge repository.

These suggestions indicate that knowledge sharing is most easily sold to practitioners as visibility. Indeed this is suggested in KPMG's employment of the word "presence" for "places" on UKnow.

The interviewees also gave evidence that offering hard rewards did not work. For example, one group had set up a system offering prizes for knowledge sharing at a local level and the effort had flopped. This problem has also been identified in previous research which has shown that such "small gesture" reward systems are difficult to sustain (Huysman & De Wit, 2002, p. 137). Similarly, it was pointed out that so many staff were brought in from outside to fill posts at higher levels of the firm that a set of rewards system related to internal career advancement would not look genuine.

The interviewees may also have favoured recognition as reward because it matched their own desires and they expected others to be motivated by similar means. Some explained that they gained personal satisfaction from knowledge sharing. They spoke of how they appreciated being recognised for their own good work and of annoyance when their work went unnoticed. One complained of a particular instance when his contribution was ignored: "Got to the end and somebody else took all the credit for it, which made me absolutely livid". It can also be seen that interviewees who valued recognition the most were the lower-paid Presence Producers and a Knowledge Manager who admitted that he was not particularly ambitious (see page 112 below). This suggests that bestowal of reputational rewards may be more significant in cases where other forms of incentive are not available, or where there is further to travel in career terms.

Given the lack of promotion of knowledge sharing as a responsibility within the firm, as outlined above, it can be seen that there were few cues to the staff at KPMG that they should count knowledge sharing as part of their daily work. Indeed, interviewees made it clear that the people that they dealt with did not think that their jobs comprised knowledge sharing. This irritated the Presence Producers the most in their quest to extract content for the intranet. However, it has already been noted that these people were not anti-knowledge sharing. Nor could they be oblivious to knowledge as a value and knowledge sharing as one of the statements on the firm's values charter:

Some people just don't see it as their responsibility. It's someone else's responsibility to do that part of the job.

They even recognised where improvements needed to be made to facilitate information flow within the organisation. The problem was that they did not think that this was part of their own specific role. A Knowledge Manager identified what happened in her unit when people saw that enhancements to information provision were identified:

People sometimes look at things {and think} 'Oh, that needs to be improved – not by me!'

The excuse of client priorities and lack of time was invoked when it was pointed out to them that it was one of their responsibilities to update intranet content:

They start swearing, 'Why don't people update this regularly?' ... and I always say, 'Well, you know, it's you that should update your own content, so there you are!' 'Oh, yes, yes, but no time.' So, you know, it's a vicious circle.

That it was obvious that other people were not contributing to UKnow – the official platform for such activity - reassured non-participants that their own non-participatory behaviour was acceptable. Staff in the business units were not concerned that they were not knowledge sharing because they probably thought that nobody else in a similar role was knowledge sharing either. Thus the obvious "incomplete" state of UKnow was a hindrance in the knowledge management implementation actor-network, and pointed to a role of the intranet as an artefact that could inhibit knowledge sharing over official platforms.

The interviewees suggested that instead of regarding knowledge sharing as part of their own roles, it was common for KMPG staff to assume that it was the sole responsibility of their colleagues or teams with titles that included the terms "knowledge" and "manager" or "management". The findings support earlier research (for example, Huysman & De Wit, 2002, p. 147) in suggesting that these people and groups held too visible a position in the knowledge management implementation actor-network. An interviewee explained:

The KPMG executive, the people at the very top... They always stress the importance of knowledge sharing and they do... I mean, people are frustrated by their inability to find the information they need when they want it. And then people say, 'Well, we need Knowledge Management to fix that'. But, I think there's a bit in the middle that's missing. It's what people's individual responsibilities are as well.

At an operational level, incidents in the day-to-day work of two Knowledge Managers demonstrated this. The experience of one was that her colleagues thought "Here's the Knowledge Manager. She'll take care of it. It's not my job". The other felt that he was forced to cover for others who knew that knowledge sharing was a "good thing", but did not have time to do it themselves.

The evidence here suggests that even if the importance of an initiative is promoted, it will not be acted upon unless it is tied in with promoting it as a responsibility of *all*, and affording it the same priority as other responsibilities of staff. There has to be a good reason for staff to participate. This articulates with previous research on the acquisition and dissemination of knowledge as an explicit responsibility and respecting the employee perspective (for example, O'Dell & Jackson Grayson, 1998, p. 157). The low status of knowledge sharing as a component of recruitment and appraisal systems and the failure for it to fit in with existing reward processes, combined with the strong message that there were staff in designated roles to handle knowledge-sharing work, showed a lack of ownership of initiatives to promote knowledge sharing at KPMG. This parallels the problems with content ownership and allocation of responsibility for editorial control as discussed on pages 72 and 74 above.

A large number of the interviewees believed that the way in which staff were "boxed" into business units to meet the priorities of client work had a negative effect on knowledge-sharing efforts and desired outcomes. This has been noted in other studies of knowledge-sharing activity in communities (for example, Kelleher & Levene, 2001, p. 40). At KPMG it was felt that the long-established set organisational structure that supported small groups of workers bound them together tightly. This was explained:

People's perception is that we sit in silos and, if you look at the structure of the way that the firm communicates its infrastructure, that is exactly it... You can see those silos. So therefore why should people think any differently? Because that's what they're fed.

It was possible to account for this set-up by making reference to the big functions of Tax and Assurance:

They've always felt that they provide the firm's bulk revenue. So therefore they are more important, and they've always run themselves independently. They have great strength.

The layout of the intranet replicated the organisational structure as a series of "islands of information" all with their own identities, thus reinforcing the idea that KPMG operated more like a federation of businesses, rather than a single unified firm. An actor-network analysis identifies these as competing networks. The variety in interface design caused practical problems for knowledge sharing because no standard navigation template was employed. This further highlighted the distinctions between the functions and the markets.

The "boxing in" of client-facing "professional" staff according to their function or line of business/market trapped the firm's knowledge within individual business units. Opportunities for connections between people that might have led to new insight were not created, let alone

exploited. This insular feel extended into the firm's "social" as well as "work" space. Ultimately potential sales leads were missed:

You might have someone who's selling... a tax job, into one particular company. They don't always think... of trying to involve other areas and bringing them in to see if there are other opportunities for, say, Corporate Finance... So that's a big area of trying to improve people to think... like out of the box... People tend to think about their own areas... Because of the infrastructure and... the organisation, they won't tend to think broader.

In contrast, one Knowledge Manager observed that the K-staff had greater freedom to move around the firm and were therefore more open to the idea and benefits of knowledge sharing. They could act as boundary people, as noted in Chapter 2. The "professional" staff stuck in their silos did not know the firm as a whole, nor considered the benefits of knowledge sharing. This view on the advantages of a K-staff role, however, was not shared by all distributed knowledge management staff. One of the Presence Producers felt isolated even amongst colleagues in her own business unit:

I don't understand why they aren't telling me about things. I'm finding out about them ad hoc... Then I go back to them and say, 'What are you doing about this?'. 'Oh, well, we're doing this, this and this', and it's kind of like, 'Well, why haven't you included me?'... I find that really strange.

An interviewee extended the discussion of the problems of "boxed-in" staff to geographical regions. She highlighted that teams were now expected to work across borders, yet could barely cope with the differences between members of business units within their own country. This was seen as a major issue to be addressed with regard to knowledge sharing. Her view paralleled that of another member of distributed knowledge management staff who stated that one of the initiatives underway within his market was to encourage people from the different parts of the business to connect with one another. It should be emphasised however, that this was not a point about *physical* distance. Indeed, only two interviewees felt that physical separation of team members might hinder effective knowledge sharing. Equally, there was evidence that physical proximity in open plan offices did not necessarily improve the opportunities for knowledge sharing. One interviewee's experience was that colleagues inhabited their office cubicles as if they were private chambers. Members of this team rarely ventured away from their desks: there was no culture of taking breaks, nor of meeting to eat lunch together.

A social analysis of the "boxing" of staff points to the existence of fixed actor-networks with few opportunities for individuals to hold multiple memberships. It was difficult for those already in the knowledge management implementation actor-network to extend its membership by recruiting people from the competing networks because it was not common for individuals in the firm to work at the boundaries (as is described in Chapter 2).

A further common complaint of the interviewees was that knowledge sharing was hindered by the culture of a firm populated by high-achieving individuals, many of them unique subject specialists, working to their own ambitious agendas to be as successful as possible and ensure that this was reflected in their status. It was not necessarily KPMG that forced people to operate in this way. A Knowledge Manager pointed out that the majority of staff was drawn from a small
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pool of high achievers educated in a system that valued elitism. They had always sought individual merit over that of a group because this was what they had learnt to do in order to gain rewards throughout their entire life to date. Previous research, as discussed in Chapter 2, has highlighted that obvious status differences between individuals inhibit their willingness to knowledge share. This was confirmed in the interview findings.

It was argued by the interviewees that the working practice of such people at KPMG was also driven by goals to enhance personal value, rather than value for the firm as a whole. The interest of staff in knowledge sharing was low because they did not link it to career progression – and given the evidence presented above on appraisals and rewards this is not surprising. They were not used to working for the good of a network. This finding is in line with previous analyses of knowledge-sharing behaviour, cited in Chapter 2, that argue that when individuals hold strong beliefs of organisational ownership of their information and expertise knowledge sharing is more likely to occur because they act for the public, rather than private, good.

The attitudes of one of the Knowledge Manager's colleagues illustrate some of the outcomes of honouring and rewarding individual expertise with reference to knowledge sharing. The individuals with whom this Knowledge Manager worked were amongst the most highly specialised staff in the firm. Her comments indicate that specialists are less likely to knowledge share than generalists. Her colleagues were unused to working collectively in general, so attempts to encourage any degree of co-operation or knowledge sharing were often thwarted:

I work with the whole team but I don't feel that knowledge management... is something that we can all think about as a co-operative thing.

The underlying problem was the preoccupation "with clients and with getting that 60% chargeability in order to get their promotion".

Although one interviewee stated that the firm showed disapproval of deliberate knowledge hoarding, the distributed knowledge management staff spoke at length of colleagues who adhered to the adage of "knowledge is power". KPMG staff hoarded knowledge because they feared that others might steal credit for their work. They believed that they were defined by their own expertise, and felt that their importance would be eroded if this expertise were available elsewhere. The observation of colleagues who were especially reluctant to engage in knowledge-sharing activity (as highlighted above) may indicate that the more specialist an individual's expertise, the less likely that he or she is willing to risk position by sharing it. Some interviewees noticed that older colleagues were also more cautious about knowledge sharing. They enjoyed the power of keeping things to themselves. For example, when talking about the difficulties of the Presence Producer role of adding content to UKnow a Presence Producer said:

The older, the more old-fashioned {colleagues}... see the intranet as putting some sort of presence of their existence... Because they have the knowledge, in there, in their heads, that's how they like it, so that people have to come to them, so that they are... the gatekeeper to the secrets.

This comment hints at the role of the intranet as a proxy for expertise, thus balancing the view that the distributed knowledge management staff could be treated as proxies for the intranet, as outlined on page 70 above.

Some interviewees suggested that colleagues in the business units treated the currency of knowledge as "savings" to spend later on their future career:

Knowledge is power, and you own it and you don't share it because it gets you where you want to go.

There was evidence from the interviews to suggest that the firm was missing valuable lessons from failed projects because staff did not want to embarrass themselves by publicising their part in the failure. In this instance knowledge was held back to guard against damage to personal reputation. The theme of not sharing knowledge for fear of embarrassment has also been identified in previous studies of knowledge sharing, and has been discussed in Chapter 2.

The belief in knowledge as power is also evident in the establishment and operation of cliques within the firm and instances where people set up special relationships to share knowledge. Indeed, it might be argued that these flourished because KPMG staff were cautious about knowledge sharing. Whereas they were reluctant to trust *all* other members of their team or department as a collective, individuals were willing to nurture favoured relationships with particular friends and contacts in a way similar to that described by Sawyer et al. (2000). From the perspective of those charged with managing knowledge sharing across official platforms within the firm, cliques presented a real challenge as almost invisible, alternative knowledge management actor-networks. The problems were associated with identifying the location of knowledge trapped within cliques, capturing it and then releasing it to the wider environment. Once a habit had been established for sharing knowledge through the cliques (whether or not what was shared was of a sensitive nature), the official mechanisms for knowledge sharing were ignored and undermined:

In one sense, they've found their own - a different - route of knowledge sharing, a sort of non-standard knowledge-sharing route, which I suppose is fair enough. But that actually manifests itself by way of them not really wanting to participate with us at all.

It is interesting that whilst complaining about the formation of closed groups around "special" relationships, members of the distributed knowledge management staff had succumbed to this behaviour themselves. This is discussed further on page 107 below.

The confusion over whether or not the firm explicitly rewarded knowledge sharing is explained more fully with reference to stated company policy in Chapter 5. It is worth highlighting here that the confusion may have been over mixed views rewarding individual success at the firm, and an associated dilemma. If employees react well to individual, explicit rewards in general and this leads to increased revenue, then such a strategy might be considered highly appropriate for knowledge sharing. However, this approach perpetuates the culture of the individual, and can be problematic at a time when a company, for a number of reasons, would like to encourage groups of individuals to work together more closely. Offering explicit rewards for knowledge

sharing would reinforce the outdated culture, and the firm would fall into the “individual learning trap” (Huysman & De Wit, 2002, p. 9) as discussed in Chapter 2.

Related to the emphasis on individual success was the issue of status. A large proportion of interviewees felt that undue regard for individuals’ standing in the firm was an inhibitor of knowledge sharing. Only one interviewee felt that status was an irrelevant factor to a person’s propensity to engage in knowledge-sharing activity. His opinion might be considered as exceptional, and can be explained by the fact that he worked with high-status staff with the firm’s most important global clients (see page 59 above). The prevalent view was that junior staff were shy to contribute because they did not know whether what they had to contribute was worthwhile:

They feel reluctant to share {knowledge}, because they probably just don't feel that they're of a level where they could possibly know anything important.

It was the belief that new members of staff suffered from similar reservations. It was suggested that managers did not provide enough encouragement to the junior colleagues to knowledge share and, even if staff on lower grades were willing to do so, they did not have time. This was in contrast to senior staff: “Partners don’t take a lot of encouragement before they can run off a spiel about their expertise”. Two interviewees were hopeful that a change management programme within the firm was beginning to alter attitudes to status difference, and that these would benefit attempts to encourage knowledge sharing from staff at all levels. In the future it needed to be made clear that all contributions were valued:

I think if they knew that what they are putting forward is something new or something relevant {They would be more likely to share it}... They may think... ‘It's so specific to that little job I've done. I can't see what anyone would learn from that, so what's the point?’

These findings are in line with those evident in the literature on status differences and experimentation, as analysed in Chapter 2. In an actor-network analysis of status differences as determinants of levels of knowledge sharing, it can be argued that individuals need to feel empowered to recruit themselves to an actor-network. They have to be welcomed.

(b) The nature of knowledge to be shared and the systems to support this

The actual nature of the knowledge held by KPMG staff influenced willingness to share it. The main problems were concerns about the confidentiality of information and the failure of individuals to realise that they held knowledge that was actually worth sharing. (The highly technical nature of knowledge held was, however, not mentioned by the interviewees.)

Eight interviewees referred to fears related to confidentiality. In cases where distributed knowledge management staff wished to take knowledge from the tacit environment and codify it for inclusion within widely accessible networked resources, confidentiality had become a big issue. Distributed knowledge management staff’s requests for the provision of material for the intranet were sometimes met with refusal on the grounds of confidentiality. The fears were related to unintentional revelations of commercially sensitive client information, and to risks of

information misuse. The first of these was illustrated with reference to a partner who considered his team a self-contained, perfectly functioning unit that did not want to risk other people doing "daft things" with its information. Another comment illustrates the second main reservation:

There's a fear that people will grab things from the intranet and go off and perform a piece of work without the appropriate training or backup - and that's a really core fear.

This issue of trust has also been identified in earlier research on motivating and inhibiting knowledge sharing as discussed in Chapter 2 (for example, Huysman & De Wit, 2002, p. 71).

Whilst interviewees understood that information risk was a real issue within the firm, in some cases they regarded the concerns expressed by their colleagues in the business units as excuses for non-co-operation when they refused to supply material for the intranet. In cases when this reason of confidentiality was invoked (whether or not it was genuine) the distributed knowledge management staff found it difficult to insist that material be provided. This was because there were no guidelines on what counted as confidential. There was also a feeling that repeated requests by distributed knowledge management staff for information to be supplied would appear trivial to professional staff when set against the firm's main priorities.

In cases when sensitive material was actually provided, distributed knowledge management staff employed extensive sanitation and checking processes prior to loading it up to UKnow. This was to ensure that the material was presented in a suitable format. However, the stripping of content in this way lowered its relevance and usefulness. Mindful of this, potential users of the publicly available materials regarded them as poor proxies for the "real thing". Issues of confidentiality thus had an impact on the "take" balance of knowledge sharing as well as the "give". This has been discussed in the wider context of management control of knowledge to be shared in the literature with reference to communities, as summarised in Chapter 2. This is a further instance where the intranet's role may be one of inhibiting, rather than promoting, knowledge sharing.

Another set of issues related to the type of knowledge held by KPMG staff help account for problems met in encouraging people to knowledge share at KPMG. These included the failure of individuals to realise that what they knew was actually worth sharing or sharing extensively, and related instances where individuals suspected that they had something to share, but were apprehensive about doing so in case they were wrong. These issues applied to those in distributed knowledge management roles, as well as the staff that they supported in the business units. One interviewee illustrated the problem, and in doing so highlighted a need for distributed knowledge management staff to understand the needs of their users more comprehensively:

I was reading these newspapers and thinking 'That was quite an interesting story', but I didn't know if it was relevant to people's day-to-day jobs... I'd think. 'Well, everyone else is bound to be reading the newspapers... am I stating the obvious by saying... that BT is selling off its customer arm?'

This factor ties to a potential reward for knowledge sharing that was under-exploited by the firm. Access to a common pool of resources created through the efforts of individuals (identified as a hard reward in Chapter 2) was not promoted as a benefit of individual sharing, even though there was evidence in some quarters that the existence of such a facility helped teams improve on performance. It would appear that the benefits of knowledge sharing were not promoted adequately, for example in the form of knowledge-sharing success stories. Therefore, KPMG staff did not count this activity as a priority. In terms of an actor-network analysis, established members of the knowledge management implementation network failed in translation and problematisation efforts, and as a consequence, did not encourage recruitment.

Data analysed from the interviews also demonstrate that a system that is inadequate, yet has a high profile in the actor-network of which it is a member, can be detrimental to the power and longevity of the network as a whole. Given that their roles were tied more closely to intranet development work than their Knowledge Manager colleagues, Presence Producers views were more prominent in these discussions. Just under half of the interviewee cohort indicated that the systems set-up inhibited knowledge sharing. Their complaints were as follows:

- the technology made available for the creation of systems was inadequate;
- on some parts of the intranet it was obvious that designers valued presentation over access to content;
- much effort had gone into content that was redundant due to the format in which it was presented (for example, the CVs database);
- where useful content existed it was difficult to navigate and search, so people often didn't realise what kind of resources were available;
- confidence in the system was lost whenever there was systems failure, and in some instances distributed knowledge management staff had been forced into advising colleagues in the business units not to use the system;
- failure of the "official" system had led to subversive behaviour, with staff prompted to set up their own private systems for knowledge sharing.

The system itself also represented an obstacle to knowledge sharing when members of the intended user base were not adequately trained in its usage, sometimes as a result of their own resistance to training. Interviewees remarked that user age appeared to have a bearing on whether or not individuals would use the system for knowledge-sharing activity, with the general view that younger colleagues were more likely to embrace it. It should be noted, however, that whilst the interviewees found it easy to complain about the system, social issues were more dominant in their accounts of inhibited knowledge sharing. This is in line with findings of the literature as presented in Chapter 2.

The comments made on the value of UKnow as an official system set up to facilitate knowledge transfer in KPMG UK point to two conflicting roles of the intranet in knowledge sharing. First, it is a detractor because it blocks the official knowledge-sharing channels of the knowledge

management implementation. Second, it is a catalyst because it encourages those frustrated by the official channels to devise alternative means to share knowledge.

(c) The level of senior management sponsorship of knowledge sharing

The interviewees' conclusion on senior-level sponsorship of knowledge sharing was that it varied across the UK firm, but in general it was poor. The distributed knowledge management staff identified four factors that would contribute to a sense that the firm benefited from high-level sponsorship of knowledge sharing:

- (1) evidence of senior managers and partners *actively promoting* knowledge-sharing activity within the business units;
- (2) visible efforts amongst senior managers and partners of *sanctioning* knowledge-sharing activity within the business units;
- (3) allocation of specific *budget* to support initiatives aimed at promoting knowledge sharing within the firm, i.e. "infrastructure" according to Kling and Scacchi's web model (Kling & Scacchi, 1982, p. 18);
- (4) evidence that efforts had been made to build knowledge-sharing activities into *business processes*.

A remark made with reference to encouraging intranet submissions illustrates the importance of sponsorship in convincing others to join the knowledge management implementation network:

Where {distributed knowledge management staff} have got a boss who's very interested in the intranet... they have found it much easier to get people to give them content in a regular fashion. {This is} because they've just spoken to the boss and said, 'Look if people started submitting this rather than me having to go and chase them for it...' and the boss has said, 'Oh, that's a good idea', and started putting pressure on the people.

Those who spoke about senior-level sponsorship felt that KPMG was failing on all four counts identified above. Although knowledge sharing was seen as a "good thing", it was not made prominent enough, especially with relation to official systems for knowledge sharing such as the intranet. It was suggested that the knowledge management staff were unable to recruit strong senior level sponsorship to help forward the cause of knowledge sharing: examples of good practice in knowledge sharing were first promoted within the knowledge management community, i.e. to existing members of the knowledge management implementation actor-network. In cases where it was possible to prove that knowledge sharing delivered business benefit, Knowledge Managers (i.e. not the senior staff who were more likely to be heeded) then disseminated the reports of good practice to the wider business. The findings on weak promotion of knowledge management by senior staff presented here parallel those on the treatment of knowledge sharing in appraisals, as outlined on page 91 above. It was suggested that much more needed to be done to explain explicitly the benefits of knowledge sharing for both individuals and for the company as a whole. In effect, the approach advocated the addressed the knowledge-sharing "management trap" (Huysman & De Wit, 2002, p. 9) as discussed in Chapter 2:

Usually you'll find the people who you want to share the information are the sort of people who'd benefit most from it being shared. So they would benefit from someone in a similar position sharing their knowledge. So that's the challenge we've got is to convince them there's value in doing it. And it's not value as far as they're directly concerned. It's value for the company.

This would bolster support of knowledge-sharing practice:

We need to identify where the end result of sharing someone's knowledge and how it benefited the company or an individual. So, if we can start identifying those examples of best practice, I think that's a big win. I think people will buy in to that. If they can see the benefit then they'll buy in to it. Not necessarily monetarily. Maybe praise is a good one. But certainly the benefit to the company at least... That KPMG, if we actively share knowledge, we can win business.

The disappointing extent to which senior managers sanctioned knowledge sharing has already been discussed (see page 90 above). It was suggested that this could be addressed through the identification of knowledge-sharing champions, or at least by some form of mentoring in which copying examples set by senior managers would prompt others into action. This strategy has been applied in other companies.

A number of interviewees referred to the lack of budget allocated to knowledge-sharing efforts. Some elaborated on the subject of budget by explaining that this was what was holding back the development of more sophisticated means of supporting collaborative work practices across the distributed firm such as e-rooms and discussion groups. In the terms of Kling and Scacchi (1982, p. 18), this shows that there was inadequate infrastructure for the implementation.

Equally, interviewees noted that the firm's way of doing business had been developed over time without heed of the requirement to encourage knowledge sharing. Therefore, even in cases where staff wanted to participate in knowledge-sharing activity using channels set up as part of the knowledge management implementation this was quite difficult, and would continue to be so until knowledge sharing became a component of the regular business processes. Before this was achieved, distributed knowledge management staff would struggle to persuade colleagues in the business units to take any request for intranet content seriously. Rather staff in the business would regard such an approach as a low priority, and few people would be prepared to respond:

From what we've seen, people probably think it's a bit of a chore... It's a Catch 22 really. People that want all this information to be readily accessible need to be the ones that put it in the first place. So there's that problem... It should not be seen so much as a chore.

This comment parallels indications of the importance of systems to generate critical mass, as detailed in the literature. To address this, in short, genuine sponsorship for knowledge sharing was needed:

You really need someone in a senior position to start pushing people, and putting in processes so that people will start working in ways that will be beneficial to knowledge sharing.

The ideal would be that knowledge sharing would become a mandatory part of everyday activity:

I think that's the word: 'sponsorship'. If the department were told, 'Right, when you've finished a job, you submit what you've learnt about the competitor, you put in your proposal documents, you do this'. The rules are saying 'This is the order things'... and then we would get the information.

These comments on active promotion and sanctioning of knowledge-sharing activity, budget and business processes demonstrate that the interviewees understood the potential benefits of recruiting high level sponsors as members of the knowledge management implementation actor-network.

4.3.3.3 The knowledge-sharing economy at KPMG UK: subversion of official systems of the knowledge management implementation through the deployment of multiple channels

It has already been established that the distributed knowledge management staff believed that knowledge-sharing activity within the firm using official channels set up by those charged with the knowledge management implementation was low. Where knowledge sharing did take place it was conducted within closed groups that tended not to use the firm's official knowledge-sharing platforms such as UKnow (see page 99). Thus when concerned with knowledge sharing, the official knowledge management implementation actor-network had to compete with unofficial rivals.

In effect, the colleagues in the business units shunned electronic media as platforms for knowledge sharing in preference for word-to-word communication in the form of face-to-face meetings and telephone conversations. The telephone was singled out as an important tool. In cases where they did use technology, the distributed knowledge management staff reported that colleagues in the business units favoured systems that supported interpersonal and group - rather than organisational - communication. This was demonstrated in their regular use of one-to-one e-mail or e-mail distribution lists that comprised a defined membership, and in the creation of local online resources. An interviewee illustrated this:

I find time and time again, that within teams, people develop their own templates... They store them on their own section of... the U: drive (the shared drive)... So they have their own, as opposed to like a *universal*, knowledge-sharing environment. They do rely on their own bits and pieces a lot.

Knowledge sharing practice in general was, in effect, local, and in cases where technology was used to support it, local strategies were also often adopted. This finding matches with the general conclusions on knowledge-sharing practice identified in the literature review, and with the propositions that (1) technical arrangements do not necessarily reflect technical rationality, and (2) outcomes for computer use and strategies for computing management are context sensitive (Kling & Scacchi, 1982, pp. 39-40).

In practice, the role assigned to the intranet at KPMG by the end-users was the route to establishing interpersonal relationships in which knowledge could later be shared off-line, as

has found to be the case in other large organisations (for example, O'Dell & Jackson Grayson, 1998, p. 164). UKnow's treatment was mainly as an online directory for identifying contacts to approach by telephone or e-mail, and it was very successful in this "yellow pages" role in the same way that a human agent might be regarded as an effective networker or boundary spanner (see Chapter 2). In contrast, it was not used extensively to record knowledge-sharing activity:

We come together and we talk, but then the follow-up or storing it somewhere so that they can find it again, that's another thing.

Deployed in this way, the intranet was used as a boundary object not for the sake of the information that it held as a repository, but rather as a store of meta-knowledge. This role for the intranet has been identified in previous research (Cross, Parker, & Prusak, 2000, August). The users had adopted the computing environment in a particular way, and thus influenced its "operational" evolution. These findings articulate with results derived from Kling and Scacchi's (1982) case studies, most notably that computing systems evolve through fitting and packaging (pp. 36-38), adoption is selective, and outcomes of computer use are context-sensitive (pp. 39-40).

The actual practice of UKnow use both subverted and undermined the intranet as the official platform for knowledge sharing. It shows that UKnow had been adopted by actor-networks other than that associated with the knowledge management implementation for less sophisticated purposes than those for which it was originally conceived. Its under-exploitation in this manner provided arguments for holding back the development of more sophisticated online facilities. These findings are not surprising when previous research is taken into consideration. The literature highlights that the power of interpersonal relationships in supporting knowledge sharing in communities is strongest where community members have a history of collaborations. For many of the professional staff at KPMG this was the case.

The distributed knowledge management staff attempted to account for this "subversive" behaviour. The majority of explanations referred to an established person-to-person culture of knowledge sharing within the firm that drew strength from a healthy corporate grapevine. Staff were simply not used to thinking of the intranet as their primary knowledge-sharing tool:

The real problem is it's a cultural thing. People aren't used to using the intranet ... They're much happier just to pick up the phone and go and see somebody.

Given the findings on staff loyalties (see page 63 above) and the "boxed" environment (see page 96 above), it is evident that the need for codification of information was low. Members of small groups working locally were sufficiently well connected to transfer knowledge without sophisticated information and communications technologies, other than to bridge access to other small groups. These factors confirm again that in this environment, the role of the intranet was similar to that of a large boundary object (as described in Chapter 2) for specific purposes.

The theme of the knowledge market, as identified in the literature, was also discussed by the majority of interviewees. They made comments that recognised that there were knowledge markets within the company in which information and knowledge were exchanged, thus recognising that reciprocal access to information and knowledge was treated as a reward for knowledge sharing between participating parties. In some instances straightforward remarks demonstrated that the distributed knowledge management staff saw trading knowledge as normal behaviour, with the proviso that they would prefer that information that could be re-used by others were also made available on the intranet. Others indicated that such trade was conducted in a calculated manner, where individuals were careful to ensure that they did not lose out on an exchange. In their own work, some of the distributed knowledge management staff, particularly those with heavy intranet maintenance roles, had learnt to manipulate the person-to-person culture in order to extract information from colleagues: they had been persuaded into recruitment to the competing knowledge-sharing actor-networks. A Presence Producer explained that "in a role... like Knowledge Management you're sort of trying to be a friend to everyone... You've got to be because you want something from them". For example, two interviewees demonstrated how they deliberately worked the system:

It's almost like a strategy. If I add a bit of gossip in here, it'll butter them up. Or, you know, make them easier to approach in the future, something like that.

Something that I've been very conscious to try and do is within each team..... get one person... {with whom} I can... develop a good working relationship... In some teams, that has happened now... I know exactly who I'm going to talk to and a lot of the time they're coming and talking to me first... It's {a deliberate strategy}.

This, however, was not an easily managed means of working for staff in the distributed knowledge management staff role. For example, one of the risks was that contacts would move on. For an individual looking after his or her own interests, this would be a minor personal inconvenience. However, for a member of support staff whose work in the production lattice (Kling & Scacchi, 1982, pp. 20-21) contributed to a service for many, the loss of a major resource in the form of a regular informant had a bigger impact. For example, at the time of his interview a Presence Producer regretted that his work had been put back six months as a result of staff departures. Here the external job market acted as a negative macrostructure (Kling & Scacchi, 1982, p. 16) of the production lattice (Kling & Scacchi, 1982, pp. 20-21). Equally, some interviewees worried about the ramifications of relying too heavily on one relationship should the exchange partner suddenly start making "special" demands. Another also pointed out that different individual priorities meant that the trading relationships became rather complex, and did not necessarily help the Knowledge Manager or Presence Producer in his or her role to collect content for the intranet:

The trade is {the end-user says} 'I will take information because I really need it', and then I will say 'Well, I need you to contribute'. And they say, 'Well, I'll do that because I can get a good appraisal if I *can be seen* to do that, and then, as a result of that, I'll have a good bonus'. So they're not equal trade-offs. People don't take away from the knowledge repository because they need the information, and then think, 'Oh, my colleagues may need also, so I will be a good citizen and be completely altruistic and contribute.'

The person-to-person culture of knowledge sharing was bolstered by the difficulties with knowledge sharing already discussed on pages 88-105. For example, interviewees highlighted how efforts to place staff in business units together in the same physical space added to the convenience of person-to-person knowledge sharing:

It's all geographically distinct. So, if your business issues are best dealt with by discussing in real time, real space {that's how you discuss them}.

The desire for recognition of achievement, covered on page 93 above, had a part to play in supporting the preference of individuals to knowledge share person-to-person. A Knowledge Manager elaborated on this when asked whether adding the names of contributors of intranet content to UKnow pages might motivate knowledge sharing online:

I think some people would value being a content owner on a web page because... it gives you a certain amount of profile. {However} I would think that the opportunity to present to your department meeting, or to present to your department, to do something more face-to-face, or to speak at one of the conferences would be the more valuable one.

Fears about confidentiality of information were outlined as inhibiting knowledge sharing using official systems on page 100 above. Less formal interpersonal interaction between trusted parties was regarded as a viable alternative for trading sensitive information.

People are worried about procedures and red tape as it were. And so they'd much rather work informally, which they see as a much quicker way of working.

This finding aligns with the discussion of trust and social interaction in the literature review presented in Chapter 2.

The limitations of the official systems, as discussed on page 102, comprised a second set of explanations for the strength of the person-to-person culture of knowledge sharing. Electronic systems were perceived as too time-consuming to use for finding information in comparison with the ease of approaching a personal contact. An example was provided:

The... market offerings portal... is supposed to tell you {about} our products... and services. You get told there's such and such a service, but you don't get the supporting information behind it all. So it can be a frustrating thing. You've got to go away and try and find out {the further information} through phoning up various people or going to see various people... It's time consuming. So you think, 'Well, why don't I just phone up this person in the first place?'

A lack of trust in the "official" electronic system encouraged different forms of subversive behaviour. Some groups resorted to the creation of the local online resources as described above on page 105. In some cases distributed knowledge management staff were forced to put effort into taking intranet content and repackaging it for particular users, for example as e-mailed bulletins or print-outs, thus perpetuating "subversive" behaviours. Others simply ignored the system on the grounds that it did not meet their needs. For example, one Knowledge Manager admitted that his unit had "washed its hands" of KWorld because of repeated systems failure. Another highlighted that the CVs database was ignored because it did not provide key information on skills which, in contrast, was readily accessible through personal contacts.

Clearly the knowledge management implementation was in trouble if the main actors in the network that supported it resorted to such actions.

Although the distributed knowledge management staff recognised that the person-to-person culture made it difficult for them to promote the official systems for knowledge sharing in the firm, most notably UKnow, they were reluctant to work against it. They recognised that knowledge sharing was a social activity and personal contact was particularly important in the industry in which their colleagues worked. The firm's grapevine was regarded as an asset. The comment below was typical:

I would not dream of doing anything to undermine the grapevine in this firm because it does work.

The interviewees were also aware that efforts towards comprehensive codification of the UK firm's knowledge base were unrealistic:

We're trying to put in place as much opportunity to officially share knowledge as possible, but, I think, undoubtedly, we'll never get to the utopia where every article and every example of knowledge sharing is recorded. And that's fine... The fact that there are some very natural networks occurring is great, so it's not all artificial or imposed.

The main problem as far as the distributed knowledge management staff were concerned was that people who were well-networked thrived in the person-to-person knowledge-sharing culture, but new staff, or staff reassigned to new posts were at a disadvantage:

If you know who to ring, then fine - but we need to help the people who don't know who to ring!

Two interviewees had experienced the difficulties of working outside the established networks: the newest members of staff in the interview cohort complained bitterly about the strong person-to-person culture that they had encountered since joining the firm. They were also the most vocal on the frustrations faced in trying to encourage colleagues to provide content for their intranet sites. For example, one was particularly cross to come across a set of the staff in his unit who were happy to work co-operatively with another group of people outside the UK using a system separate from the official one that he serviced:

I think, 'You've got no content on your UK Intranet site, yet you're willing to collaborate and do all this!'

There was also a feeling of wasted investment in the intranet if it were not being used to its full advantage as a knowledge-sharing tool. For example, excessive time spent in meetings could be cut if staff were persuaded to knowledge share online:

Sometimes it's very annoying. People say, 'Can we have a meeting to discuss this?' and you go there and you think, 'Well, five minutes - that's all it took to sort it out and we could have done it over e-mail'.

The current “subversive” systems had their role, but they were problematic and could be detrimental to future knowledge-sharing initiatives, particularly those that were to centre around communities:

I personally don't think we should get too torn up about trying to codify every piece of information in everyone's head... It's very good that we have got people who can be recognised as experts and you go to them for advice. So we don't need to get too tied up in that... Nevertheless, if we want to put communities of practice and people, teams together, we need to know who to go to. So, the fact that they all know each other very well, creates problems in itself.

In recognition of the multiple channels that were privileged over the intranet for knowledge sharing, the distributed knowledge management staff devised strategies for coping with what they considered to be subversive knowledge-sharing behaviour. These efforts were focused on what they saw as the firm's priority of knowledge sharing (see page 84 above): adding content to UKnow. One interviewee, for example, claimed that the distributed knowledge management staff encouraged “lots of people to contribute {to knowledge sharing} in lots of different ways”. Some of these articulate with the prescriptions of the literature as identified in Chapter 2, such as ensuring that knowledge sharing was mentioned in training course material. Two of her colleagues mentioned simplifying the systems for submitting material for uploading on the intranet to encourage knowledge sharing. However, the means most commonly employed by the distributed knowledge management staff to encourage colleagues to make contributions was simply nagging and chasing for content. The frequency with which this was mentioned is perhaps surprising given few reports of similar practice in the literature. However, the flavour of the material on knowledge sharing and ICTs presented in Chapter 2 should be borne in mind: managerial prescriptions are unlikely to promote seemingly unsophisticated strategies such as basic pestering for intranet submissions. At KPMG nagging was regarded as the most effective strategy in cases where knowledge sharing over the official systems was regarded as a low priority. The distributed knowledge management staff knew that those in the business units did not like being badgered by their Knowledge Managers and would eventually yield to repeated requests. As one Presence Producer put it:

They're keen to get something on and get rid of me, because then that way I don't keep banging on: 'Where's the content?'

In some cases the nagging process had become quite sophisticated, as has been reported in other companies (Huysman & De Wit, 2002, p. 74). For example, a Knowledge Manager activated a system based on regular deadlines to disguise her nagging:

{For} some of my content managers good hard deadlines sometimes work. What I've done for the industry sites - because they've all got a fairly uniform structure - is I've put up an editorial schedule for the year going forward October to September. {I've} put it into a PowerPoint presentation, sent it around to the four of them who have all nodded politely and said, 'Of course, we'll do that', and I just put in various dates.

In recognition of the person-to-person culture of the firm, she also occasionally took it upon herself to arrange meetings with staff in her business unit with the sole purpose of standing over them as they put together the content that she needed:

I'll just keep nagging them. Sometimes, it's simply a matter of setting up a half-hour meeting, get them at the desk and saying, 'Right, it's right in front of me now, and I can make the changes right now. So let's do it'.

Others complemented their chasing with approaches to the bosses of non-compliant colleagues in order to speed up the process of harvesting material.

The distributed knowledge management staff did not enjoy being reduced to "begging" from others in order to carry out their responsibilities related to intranet content provision. From the interview data collected it was clear that such activity wasted their time, and added to the perception of their roles as low status. Many wanted to see knowledge-sharing practice *using the official tools* embedded into daily work procedures, as advocated in the literature (for example, Huysman & De Wit, 2002, p. 163). This, it was hoped, would put an end to such demeaning behaviour. There was already evidence within the firm that such a strategy could work. One of the Knowledge Managers provided an illustration. So long as the people he dealt with had been successful at extracting debrief information from their contacts, he was able to get copies of the material for building his own resources. This was because copying the information to him was part of established procedure. He was also supported by "insiders" within the group responsible for ensuring that knowledge was shared and enjoyed senior level sponsorship that promoted that benefits of the system. The recommendation was that processes should be built to recognise that knowledge sharing over UKnow as the firm's official knowledge transfer platform was a mandatory part of whatever work the teams in the business units were undertaking, and that they were expected to invest time in this official knowledge-sharing component of the job. Three of the Knowledge Managers presented ideas that would give this system bite: to tie it to rewards at appraisal time, to tie it to career progression and to provide a budget to support it: thus taking heed of the macrostructure and infrastructure of the implementation (Kling & Scacchi, 1982, p. 18, p. 16). The evidence on the strength of local loyalties also suggests that these would need to be taken into account, because local loyalties drove the activity of individual business units. For the distributed knowledge management staff's objective for the intranet to play a full role in knowledge sharing to be achieved, however, the stability of the knowledge management implementation actor-network had to be increased as this depended on greater linking, higher recruitment and improved consistency in actor behaviour.

4.3.4 Going concern: power issues

Throughout this chapter allusions have been made to the status of the distributed knowledge management staff at KPMG (see, for example, page 72). The general impression given thus far is that distributed knowledge management staff were of low status, and that UKnow's association with these staff was detrimental to its profile as a facilitator of knowledge sharing in the UK firm. The discussion that follows examines the actor power of the distributed knowledge management staff, and the impact of this on the perceived role of the intranet within the firm.

It was clear that some interviewees had strong personal ambitions, including one who made it obvious throughout her interview that her time as a Knowledge Manager was a defined stage in *Hazel Hall PhD 2004*

a planned career trajectory that would eventually take her out of knowledge management work. Others had more modest aspirations, for example, one admitted that he wasn't "especially career orientated". Whether or not individuals were eager to progress their individual careers, however, there was evidence that the majority of interviewees suffered from general feelings of career anxiety and wanted this to be addressed. For example, early in his interview, a Knowledge Manager talked about his "passion" for sorting out difficulties related to job titles and job descriptions. The main concerns expressed were related to the uncertain career destinations of those in distributed knowledge management roles, especially when they were contrasted with the structured line of advancement of the accountants and tax specialists with whom the majority of the Knowledge Managers and Presence Producers interacted.

The main complaint amongst the distributed knowledge management staff interviewed for this research was that in taking on a knowledge management role they had unintentionally steered themselves up a career cul de sac. The Presence Producers were most concerned about this: two thirds of them made comments that revealed fears that their careers were blocked. The following comments typified the feelings of this group:

I know that there's supposed to be lots of internal career {development opportunities}... But me in my position, I don't see how I could move into certain roles... It's difficult to see how the skills I've learnt working in the library and as a Presence Producer would enable me to try a different job.

On behalf of the Knowledge Managers, particularly those in the markets, an interviewee related that "We all sort of wondered 'What does a Knowledge Manager grow into?' We have had a look at where our career could go". One of her Knowledge Manager peers had recently analysed his team's membership and came to the conclusion that if wanted to continue working with his colleagues, the only long-term option would be to continue in his position as their Knowledge Manager:

I don't see another role for myself within that team. So my role within the team is Knowledge Manager and that's it.

The interviewees offered several explanations as to why they believed that their careers were blocked. One that was voiced most loudly was that the roles of Knowledge Manager and Presence Producer were ill-defined. This was evident at the basic level of job titles. For example, one of the Knowledge Managers referred to the difficulties of his manager deciding upon a label for him when he first joined his business unit:

I'm an Assistant Manager and I work in Knowledge Management. But we never really settled on... We could never quite make Assistant Knowledge Manager, or Deputy Knowledge Manager, or any of those things, work. So we just kind of left it.

Although he had been in post for two years, an official designation for him had still not been established, nor did it appear to be a priority, as he elaborated:

We couldn't really think of anything to call me that seemed appropriate. And there wasn't really anyone in an analogous position as far as we could see. So, we just sort of let it ride. It didn't seem the most important issue out of the list of issues that we had.

Others, who did have job titles, showed confusion over the labels employed. For example, when initially asked about his role, one of the Presence Producers considered that he might be a "Knowledge Analyst/Presence Producer", but admitted that this was not clear. Some interviewees were dismissive of the job titles that they held: one said that he was "a Knowledge Management Assistant – whatever that means".

As a consequence of poor role definition, the more ambitious distributed knowledge management staff felt that their work was unnecessarily bounded. For example, a Knowledge Manager spoke in general of the restrictions of the knowledge management role:

The types of things that I want to do... There isn't necessarily the scope to do that at the moment, so I'll have to go and do that elsewhere.

Similarly another was disappointed that her position focused on support work rather than strategy formulation.

To address the problems of role definition there were calls for competencies for distributed knowledge management staff to be published. Those for Presence Producers were the priority. Devising competencies, it was believed, would help with the recruitment of new staff. For those already in post, there would be some form of benchmark against which they could measure their career success and development. Efforts towards standardisation in the description of duties and levels of attainment for distributed knowledge management staff would balance inequities in grading: reference was made to a case where two Knowledge Managers, apparently fulfilling very similar roles, but in different business units, were graded differently. The first was a grade D and the second a grade B (in a system where staff started on a low of grade E).

Standardisation would address the varying levels of career support. Recognised competencies, it was argued, could also legitimise the efforts of proactive distributed knowledge management staff in extending their responsibilities.

The distributed knowledge management staff also believed their career progression was obstructed because knowledge management work was new. A Knowledge Manager explained:

In our kind of career... it's not seen that you can go through and be a partner in KM. That's probably because it's such a new job.

She had been appointed to a B grade and hoped that she might have set a precedent for others:

What {one of the other Knowledge Managers} can do is go back to her appraisal and say, 'Within two years I want to be a senior manager'. And if they say, 'Well, your job doesn't merit senior manager', she can say, 'Well, how come someone else's does?'

Some of the Presence Producers understood that they had a similar responsibility to show that distributed knowledge management careers had direction. For example, one of the Presence Producers was motivated to do well in her job so that the person working "beneath" her had a career path to follow.

In articulating concerns that taking a knowledge management role within one of the business units at KPMG may have been an ill-advised career move, the interviewees revealed flaws in the broader knowledge management implementation. For example, the view that the knowledge management role lacked scope indicated that future recruitment to the knowledge management implementation actor-network may be jeopardised. If it were well known that knowledge management roles did not provide opportunities for career progression then talented people would avoid such employment. Equally those already in post risked being dismissed by colleagues as unambitious. Non-knowledge management colleagues in the business units would not be attracted to work with a set of staff that were considered to be of low importance.

Incidents reported by the interviewees as minor work irritations could in fact be viewed as more detrimental than realised. For example, the failure to attribute proper job titles implies a lack of interest in the distributed knowledge management roles, especially in a status-conscious environment such as KPMG where the bestowal of titles confers identity and rank. In this case it also harmed the knowledge management implementation as a whole since its professional anonymity of knowledge management had the potential to render it invisible at the level of the business unit.

The interviewees noted a number of benefits that standardisation of their roles could bring. Taken together, these had the potential to unite the body of distributed knowledge management staff and address some of the problems of the diversities of their roles as identified on page 59 above. The argument that the publication of competencies would legitimise the efforts of proactive distributed knowledge management staff in extending their responsibilities is important in terms of a social analysis of the interview findings. Published competencies would provide a durable licence to practise, thus had the potential to increase actor status and the strength of the actor-network.

The lack of a defined career structure and opportunities for progression was emphasised strongly when the distributed knowledge management staff contrasted their position to that of the "professional" staff at KPMG. Accountants and tax specialists had clear career milestones connected, in the early stages of their careers at least, to success in their qualifying exams. These milestones linked directly to the grading system:

When you look at the professional staff, you see them doing sort of three years as a student, then two years at a D grade, then at least two years at a C grade and then into a B grade. And it's all very, very structured.

In contrast:

{Knowledge Managers} don't have a defined career path. And what am I moving onto next as Knowledge Manager is like... I don't know, being a better Knowledge Manager? ... There's no career path as a Knowledge Manager. You can't become a "Senior Knowledge Manager" because it's not established well enough.

The way in which the firm handled its appraisal system favoured the "professional" staff. For example, one of the Presence Producers complained about the difficulties of preparing for her

career review when the forms were obviously designed for this other set of people. Another found the system impractical as a means of career planning:

I've just... come through appraisal and a lot of that was... 'What do you want to do with me?'... It's very much put to you, 'Well, what do you want to do?' Well, you know, I'd like to do lots of things, but are they compatible with what {my business unit} intends to do in the next 12 months? Because, if they're not, then I'm effectively describing myself out the job.

Once the interviewees started comparing their own careers with those of the "professional" staff the discussions widened to cover the negative effect of status differences on the distributed knowledge management role within the firm. The distributed knowledge management staff recognised that the "professionals" perceived themselves as being more important than "infrastructure" or "K-staff". In particular, the distributed knowledge management staff objected to the limited use of the label "professional":

What are we, within infrastructure staff anyway? I think the fact that you might be a Marketing professional or a KM professional or whatever kind of professional, and {yet} you're not called a "professional" causes problems, definitely.

One Presence Producer was convinced that he had been languishing in an E grade role for so long because of a quota system that favoured "professional" staff.

They need to obviously attract the best people to {industry and account manager} roles. So they've got to give those people the higher positions, the higher grades. {There's} a quota of grades they've got to give out to their department... To get the people they want, all the grades are given out and you're stuck on an E.

Resentment of the status difference felt by the distributed knowledge management staff as "poor relations" of the "professionals" was clear from the data collected in the interviews. The knowledge management implementation actor-network was mainly comprised of K-staff and the products that they produced. Thus it was also a "poor relation" in comparison with other actor-networks in the firm.

Despite their career anxieties, or perhaps because of them, a number of Knowledge Managers (though none of the Presence Producers) had identified ways in which to develop their roles.. One of the Knowledge Managers was unique in talking about her deliberate strategy of manoeuvring herself into a position where a key contact with power to influence her career knew about her, was persuaded of the value of what she did, gave her more challenging work, and cared about her future. She said that it worked to her advantage to be employed in a small unit with few managers, where she could build close relationships with people who could support her development. Her highly political strategy of building a strong network around her interests appeared to combat some of the problems of professional isolation and lack of recognition experienced by her colleagues³. At the time of the interviews a sub-group of Knowledge Managers was examining the Knowledge Manager role and working out how they

³ Her strategy of focusing on building her profile for the attention of her immediate colleagues in a small unit again indicates the power of the *local* environment at KPMG, despite its status as a large, distributed firm.

could sell their expertise to external clients. It was believed that their position would be strengthened if they were able to enlarge their contribution to the firm as client-facing staff, aligning their work more closely with that of the other client-facing "professionals". If they were able to carry through their plans, they would enhance the standing of the knowledge management implementation actor-network by linking in further interested parties. Their success would be raised further if a large number of high status actors were recruited. This planned activity showed that a small proportion of the distributed knowledge management staff were beginning to make political moves to guarantee the future of the knowledge management implementation network, even if they did not express their thoughts using political vocabulary. This has also been demonstrated on a smaller scale in the Presence Producer's strategy to extract survey data to further her work (see page 88 above), and the support of statistics in a regime of truth of the knowledge management implementation (see page 77 above).

Ironically, although settling for a knowledge management role at KPMG was regarded as a risky career strategy due to the lack of career structure, taking a knowledge management-related post as an "out-of-box" experience was regarded as a career stepping stone for other types of staff:

Some people go into Knowledge Management as... an 'out-of-box' experience. So you step out of a client-facing role for a while... it's seen as a good way of giving people a higher profile, of getting them access to more people within their discipline or their line of business.

It is interesting that the two staff who complained most strongly about the constraints of the knowledge management role (see page 112 above) were the two Knowledge Managers who were taking an "out-of-box" experience. They made their complaints with the knowledge of what could be achieved if they were not employed as Knowledge Managers, and from the perspective of knowing that they would eventually return to "freer" positions. As staff with strong interests beyond their temporary knowledge management "homes", and with a heightened profile on the basis of having completed a secondment, there was a danger that their disappointment with the role would damage the knowledge management implementation actor-network should they decide to voice it. Others would be dissuaded from recruitment to the network, thus jeopardising its future.

It is also worth noting that although she wasn't officially employed as an "out-of-boxer", the most ambitious of the Knowledge Managers spoke as someone who did not expect to be in the position for longer than it would take for it to propel her into something bigger and better. That the most obviously ambitious of the firm's Knowledge Managers publicly declared that she was "using" the position to move into something of higher status devalued knowledge management as a concept in the knowledge management implementation actor-network.

The main findings presented here reveal that most of the staff positioned in knowledge management-related jobs across the firm's business units were of relatively low status engaged in reactive administrative and support work, and did not contribute to strategy development. The majority was not interested in taking greater responsibilities, especially with relation to intranet

content ownership, editorial control and promotion. In some cases it would appear that the distributed business units had appointed inappropriate staff to knowledge management roles. It is also clear that the wider environment at KPMG imposed limitations on what could be achieved by the distributed knowledge management staff, further restricting their power. The deployment of an actor-network analysis helps explain why the distributed knowledge management staff found it difficult to deliver on the expectations of the role in the execution of their work, and why the main artefact of their work – the intranet - was not regarded highly within the firm.

4.4 Conclusion to Chapter 4

The analysis of the data collected from the distributed knowledge management staff provides a rich picture of how of KPMG UK's intranet was managed across the business towards the end of 2001 as part of the firm's knowledge management implementation. Consideration of the lines of work and going concerns of the distributed knowledge management staff reveals that in many cases they were not operating at a strategic level, despite the original intentions of the roles of Knowledge Manager and Presence Producer. Often distributed knowledge management staff were engaged in low level administrative and/or information management tasks, much to the frustration of particular Knowledge Managers who believed that they had a firm understanding of what knowledge management activity *should* comprise. The identification of weak linkages between the distributed knowledge management staff and KMG across the production lattice (Kling & Scacchi, 1982, p. 20-21) furnishes some explanation of the findings. Many of the problems described can be traced back to the early compromise of KMG when it was agreed that the distributed knowledge management staff would be recruited and managed in the business, rather than from the centre. Implications of this decision, particularly those that influenced the regard in which distributed knowledge management staff were held both in the business and at the centre, had significant impact. In broad terms, they limited the success of efforts to improve knowledge-sharing practice in the firm and eroded the long-term prospects for the health of the KPMG's knowledge management implementation actor-network to facilitate knowledge sharing through the deployment of an intranet.

The way in which the distributed knowledge management staff roles carried out their duties had significant impact on how the role of the intranet in knowledge sharing at KPMG was perceived. The local positioning of individuals in the knowledge management implementation actor-network meant that a variety of intranet roles were understood. In short, UKnow appeared to be treated as a large boundary object, mainly as a repository for information publishing and retrieval. In promoting it as a “place” for employees to make material available for reuse, the distributed knowledge management staff revealed that they regarded UKnow as having potential as a knowledge-sharing tool and, as such, a privileged artefact of the firm's knowledge management implementation. The discussions on the deployment of collaborative online tools also hinted of possible future opportunities for the intranet to take on the characteristics of a standardised

form⁴ (Star & Griesemer, 1989, p. 411). However, the intranet's potential to support collaborative work and knowledge creation online was limited in its primary use by the staff in the business units as a secondary information source, or "pointer" tool. The intranet itself was not the locus of knowledge sharing for the UK firm, even if the distributed knowledge management staff hoped that it would be treated as such. Indeed, the way in which the intranet, and the resources that it held, were managed often undermined its role in knowledge sharing. For example, strict sanitation of resources rendered them of little value for future consultation. For this reason, many in the business at large appeared to ignore UKnow in favour of local strategies for knowledge storage and reuse. The apparent low usefulness of the resources that UKnow held, however, also prompted the intranet to play a more positive role in knowledge sharing. It encouraged people to find workarounds to make up for the deficiencies of the official system, and in this way encouraged off-line knowledge sharing within the firm. This was, in fact, consistent with the firm's efforts to operate a mixed knowledge-sharing environment at KPMG, where the intranet was intended to be part of a suite of facilitators, rather than the embodiment of knowledge management. This practice also fitted with the firm's topology of federated business units, where knowledge sharing was enacted as a local activity in support of initiatives specific to a particular business unit.

Data gathered from the staff at KPMG as discussed above provide examples of how narrow incentives and opportunities motivate choices (Kling & Scacchi, 1982, pp. 30-31), macrostructural patterns influence local computing (Kling & Scacchi, 1982, pp. 32-36) and computing systems evolve through fitting and packaging (Kling & Scacchi, 1982, pp. 36-38). There is also evidence here that adoption is selective and that the infrastructure of computing services is often unevenly developed within an organisation (Kling & Scacchi, 1982, pp. 39-40). Furthermore, in this case it is clear that individuals' career aspirations help determine the shape of an implementation and levels of access to a service determines the type of interaction that users enjoy with it (Kling & Scacchi, 1982, p. 65)

The analysis of primary data collected by interview with the distributed knowledge management staff at KPMG in late 2001 has provided an indication of the role of the intranet in knowledge sharing. To gain a broader perspective relating to this theme attention turns to the evidence held in the company documentation for the period 1995-2001. Through an examination of this material more can be learnt about the infrastructure of the service (Kling & Scacchi, 1982, p. 20), the production lattice (Kling & Scacchi, 1982, pp. 20-21) and the macrostructure of the computing environment (Kling & Scacchi, 1982, p. 16). It also provides further evidence relating to the topologies of the actor-network of KPMG's knowledge management implementation over the period of time examined in this research. This follows in Chapter 5.

⁴ When matched against other incentives in the taxonomy devised in Chapter 2, it can be seen that most effort at KPMG to support knowledge sharing was devoted to technical infrastructure, where the creation of the boundary object was an incidental. No rewards systems were set up by the time that this research was conducted, and any enabling conditions in place appear to have been accidental at a local level, rather than planned.

