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Location and knowledge interaction between head office and KIBS in city areas

by

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Preface

This paper is part of the project "Norske storbyer fra hovedkontorbyer til filialbyer? (Metropolitan areas in Norway: from location of head offices to host of subsidiaries?) and the project "Storbyene som drivkraft for framvekst av 'ny økonomi': En studie av KIFT-næringen (kunnskapsintensiv forretningsmessig tjenesteyting)". Both projects are financially supported by the Research Council of Norway (the program "Byutvikling- drivkrefter og planleggingsutfordringer). The paper analyse the actual importance of the co-location of head offices and KIBS (knowledge-intensive business services) in urban centres by discussing characteristics of the supply and demand for consultancy services in city regions, the importance of proximity between consultants (KIBS) and clients (head office), and outcomes of these relations, emphasizing consultant's contributions to organizational innovation among clients and geographical proximity as a precondition for successful consultancy.

Abstract

The literature argues for a mutual dependency between head office location and the location of KIBS (knowledge-intensive business services) in major cities or capital regions. The locations of KIBS are presumed to be intimately connected to the agglomeration of corporate head offices, and they are often thought of as forming a joint head-office–corporate-service complex. However, less has been said in the literature about the actual importance of this colocation of head offices and KIBS. How important is co-location for head offices and how important is it for KIBS, why is it important, and does co-location affect the potential for knowledge sharing and learning between the actors (e.g., organizational innovations)? Is geographical proximity a precondition for successful consultancy? By 'unpacking' characteristics of the interaction between head offices and KIBS, with special attention to the significance of proximity between the actors, this paper elaborate these questions. Our discussion is based on empirical data from a survey of the head offices of the 198 largest firms in Norway, intensive case studies of 21 of these head offices, a survey of 600 KIBS firms, and intensive case studies of 13 of these firms.

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1. Introduction and principal research questions

Recent decades have witnessed the development of a new and more specialized knowledge-intensive economy, characterized by outsourcing, specialization and a sharply increased growth rate in knowledge-intensive business services (KIBS). Because of the growth of such services, and the increasing intensity of the services sector in economic organization, cities are the preferred production sites for such services, whether at the global, national or regional level. This economy is also characterized by an urban concentration of control function for large companies. Core functions for these head offices are the formulation of corporate strategy, the development of the organizational structure of the company, and the introduction of organizational innovations. KIBS offer specialist knowledge in a rapidly changing, increasingly uncertain, and internationally oriented economic environment (Wood 2002a), and such specialist services are important for head offices to perform their main functions. Sassen (2000) argues for a mutual dependency between head office location and the location of KIBS. The locations of KIBS are presumed to be intimately connected to the agglomeration of corporate head offices, and they are often thought of as forming a joint head-office—corporate-service complex located in major cities or capital regions.

However, less has been said in the literature about the actual importance of this co-location of head offices and KIBS. How important is co-location for head offices and how important is it for KIBS, *why* is it important, and does co-location affect the potential for knowledge sharing and learning between the actors (e.g., organizational innovations)? By 'unpacking' characteristics of the interaction between head offices and KIBS, with special attention to the significance of proximity between the actors, our paper will elaborate these questions. The study uses empirical evidence from Norway, representing both the supply side (KIBS) and the demand side (head offices).

The following issues are discussed in this paper.

(1) What characterizes the supply and demand for KIBS in city areas?

We will discuss this from two different points of view. Firstly, we will focus on the perceptions of the supply side (KIBS) regarding what they offer to their clients and why

clients use their services. Secondly, we will emphasize the demand side, and discuss different reasons for head offices using or not using KIBS.

(2) What are the geographical characteristics of supply and demand for KIBS in city areas—when does proximity matter?

On the supply side, we firstly look into why it is important for consultants to be located in city areas, especially in the capital region, and attributes related to this location. We will also outline the emergence of the co-location of consultants and clients when it comes to the sale of services. On the demand side, we will try to find when and why proximity to suppliers of KIBS plays a role for head offices.

(3) What are the outcomes of consultant–client relations?

Finally, we elaborate on outcomes of consultant–client relations. Do consultants contribute to knowledge transfer and organizational innovations among clients, and is geographical proximity between consultants and clients a precondition for successful consultancy?

The next section presents the paper's method and data used for analysing characteristics of head-office–KIBS interaction (section 2), and then the theoretical approach for our empirical investigation (section 3). The empirical section outlines locational patterns for head offices and KIBS, supply and demand for consultancies in city areas, the importance of proximity between supply and demand, and outcomes of consultant–client relations (section 4). The concluding section (section 5) contributes to the theoretical debate.

2. Method and data

Our empirical analysis of head-office–KIBS relations is based on four datasets: a survey of the head offices of the 198 largest firms in Norway, intensive case studies of 21 of these head offices, a survey of 600 KIBS firms, and intensive case studies of 13 management consultants. In what follows, these datasets are presented in detail.

(1) Head office survey

A list of the largest companies in Norway was constructed from the database of 'Kapital' and 'The Largest Firms in Norway' (Norges største bedrifter). After preliminary screening, the potential sample was reduced to the 200 largest firms by turnover. All sectors are included, but investment companies and 'pure' sales companies—i.e., companies with a high turnover and a low numbers of employees—are excluded. A postal survey of the head offices of these 200 companies, combined with telephone interviews, was conducted. Since two of the firms had been involved in mergers or buy-outs, our operational population was reduced to 198 firms. We obtained 123 usable returns, representing a response rate of 62%. By reflecting the structure of the population according to sector, size and location, our database is representative of head offices of large companies in Norway. The survey consists of questions related to the use of consultants and the importance of proximity. Nearly all of the questionnaires were completed by a respondent who was part of the firm's executive group.

In our head office database 67 (54%) of the companies are located in *the capital region* (that is, the capital city of Oslo and municipalities in Akershus county), 23 (19%) in *other urban regions* (that is, the Bergen-region including the municipality of Bergen and the surrounding municipalities of Os, Fjell and Askøy, the Stavanger-region including the municipality of Stavanger and the surrounding municipalities of Sandnes, Sola and Randaberg, and the Trondheim-region including the municipality of Trondheim, Klæbu and Malvik) and 33 (27%) in *other areas*. Furthermore, 56% of the head offices are in companies with at least 1,000 man-years, and the status of the head office is company head office in 75% of the cases. The remaining cases are national head offices of foreign-owned companies. According to sector, 42% of the head offices are for companies in which manufacturing is the main activity, while the main activities of the other companies are business services, trade, transport and shipping, and information and communications technology (ICT).

(2) Intensive case studies of head offices

To obtain information that is more detailed on the use of consultants, the survey was followed up by 21 intensive case studies. The criteria used to select the cases were geography (head office located in the capital region (11 cases) and head offices in regional centres (10 cases)), sector (head offices of companies in traditional industry sectors and in new sectors), and status/ownership (company head office and national head offices of foreign-owned companies). In all cases, the person or persons interviewed were part of the executive group of the company (e.g., CEO/president or executive vice president).

(3) KIBS survey

The third dataset used is a telephone survey with answers from 600 firms from 'Computers and related activity' and 'Other business services' (NACE 72 and 74). Even though the term KIBS is often used, it is hard to find a precise definition of the term in statistical terms. Practical studies are often based on slightly different adaptations of established classification systems (such as ISIC or NACE). This is not an easy task, since "inconsistency in underlying definitions (of business services) and a lack of available data adds to a picture of a statistical wasteland", as Bilderbeek and den Hertog (1997) say; therefore, the NACE classification of KIBS varies. All classification systems were originally directed towards classifying units of production in manufacturing on the basis of technology, and they were inherently unable to differentiate service activities effectively. The economic role of services is defined not simply by technology, but also by the market they serve (i.e., consumer or business clients). Since official classifications offer a poor basis for identifying KIBS, measures of more aggregated 'business services' are used. However, it seems that the dominant mode of functions provided is mainly to be found within industrial classifications such as 'business services'. In this paper we have decided to include the above NACE classifications as (institutionally) defining the KIBS sector, meaning that there are dominant KIBS elements in these categories. The data includes information on how innovation is carried out in firms, the location of main markets, competitors and competence, how knowledge firms are financed, and whether they experience financial problems. The firms are located in three different types of region: the capital region, other urban regions (Bergen-region, Stavanger-region and Tronheim-region) and a group of medium-sized cities in Norway.

(4) Intensive case studies of management consultants in the capital region

Lastly, we have carried out qualitative interviews with 13 firm leaders in management consultancies in the capital region, including a number of the largest global consultancy actors. The interviews were intended to uncover what types of consultancy activity the firms performed, for what kinds of customers (customer characteristics), to examine how innovation is carried out in the firms, and to investigate what characterizes the client–consultant relationship and the services clients demand.

3. Theoretical approach

3.1 Introduction: Cities in a knowledge-intensive economy

Recent decades have witnessed a decomposition of the Fordist model of development. Gradually, a new knowledge-intensive economy has emerged, where competence, innovation and networking are important factors for the competitiveness of firms. Jones (2002) argues that the economy is becoming informationalized. This shift in modes of production seems to privilege the information-rich environment of cities. In addition, there is the trend towards vertical disintegration and increased specialization of firms, which also favours the return of cities as production sites where agglomeration is helping to reduce transaction costs and increase information flows (MacLeod et al. 2003).

This increased demand for services in all industries is a key aspect of the growing importance of cities (Sassen 2000). The last couple of decades is characterized by a sharply increased growth rate in producer services and increased employment specialization within these sectors. Cities are the preferred production sites for such services, whether at the global, national or regional level. This economy is also characterized by an urban concentration of control function for large companies. Head offices are essentially engaged in information processing, and networking with other actors is important for the collection, interpretation, and dissemination of this information.

The city is offering head offices and business services the advantages of proximity, reducing transport and transaction costs for knowledge, ideas, and people. Urban density also allows labour pooling, technological spillovers and further growth through cumulative causation. There can also be an industrial atmosphere in metropolitan areas, encouraging further knowledge spillovers. In addition, it provides rich market opportunities and the benefits of product specialization (Krugman 1991, Knox and Agnew 1994, Cooke et al. 2002). In the literature, the city is interpreted as a site for competitiveness, where the prosperities of firms are tied to the prosperities of cities.

In this paper we emphasize the interaction between head offices and KIBS in city areas. In the next paragraph, we discuss the city's role as a centre of growth, especially by emphasizing the importance of proximity. The paragraph following that outlines some limits to this perspective

by analysing cities as nodes in a world of flow, which implies emphasizing the external linkages of firms and institutions. We then discuss the position of head offices and KIBS within this urban economy. Our theoretical section is concluded by a discussion of various outcomes of head-office–KIBS interaction, i.e., transfer of knowledge and organizational innovations.

3.2 Proximity and distance in economic transactions

3.2.1 The importance of proximity

With the growing complexity of information and knowledge and the greater uncertainty of the economic environment, the city is seen as an important source of competitive advantage for organizations operating in a globalized economy (Storper 1997, Amin and Cohendet 1999). This also means a more intense focus on geographical proximity to explain patterns of innovation and economic growth (Beccatini 1990, Scott 1990, Porter 2000).

In general it seems that the city prospers in the new knowledge-based economy, and that cities are seen as major centres of innovation. The reason for this is found in the locational advantages that cities provide to business. These advantages lie in the institutional and organizational infrastructure of cities, which makes networking among actors low in terms of transaction cost and high in terms of knowledge spillovers (Cooke et al. 2002). The density of actors and institutions within the city generates a dynamic milieu, and cities are seen as rich sources of tacit and codified knowledge. Tacit and codified knowledge is distributed and achieved through ties of reciprocity and exchange within localized business networks. In general, urbanized regions can be considered as stimulating environments by displaying a complex kind of interrelationship between territorial and institutional properties (Lambooy 2002).

This emphasis on the importance of *proximity* for innovations can be found within cluster theory and evolutionary theory. Porter's (1990, 2000) concept of clusters as the basis for innovation and competitiveness has had an enormous influence on policy makers and on theoretical debates within the literature. Porter stressed that domestic rivalry and geographic industry concentration are especially important in creating dynamic clusters. There will often be fierce rivalry between co-located firms that are able to compare their performance

effectively with that of their competitors, thus stimulating processes of innovation (Porter 1990). At the same time, co-localization can also stimulate horizontal co-operation between firms, which in turn can generate external scale effects (Appold 1995). Studies of processes of innovation have also stressed the fact that the economic practices of business firms are embedded in social relations. In addition, proximity and local ties play important roles in supplying firms with informally constituted assets (Maskell et al. 1998, Fløysand and Jakobsen 2002, Jakobsen and Rusten 2003). The essence of clusters is often found in the presence of specialized knowledge, which develops from spillover mechanisms at the local level. Thus, in these innovation systems, geographic proximity is important in facilitating the personal exchange of new knowledge between firms (Capello 2002).

Studies in cluster theory and evolutionary theory have also emphasized processes of cumulative causation of the dynamic urban production systems. For instance, the existence of knowledge spillovers will decrease the uncertainty of the economic relationship by developing trust, which will lead to collective learning. In turn, this will intensify processes of knowledge spillover, which will stimulate the innovation performance of cities.

While some literature, for instance evolutionary theory, focuses on local ties, knowledge spillovers, and specialized knowledge ('milieu advantages'), other studies emphasize the general advantages related to a large diversified urban system ('urbanizational advantages'), in understanding why cities prosper in a knowledge-intensive economy (see for instance Knox and Agnew 1994). Large metropolitan areas are characterized by an advanced infrastructure, a large 'pool' of highly qualified labour, and the presence of universities and research centres. Knowledge spillovers within the urban system are often related to 'scientific knowledge spillovers', i.e., externalities that firms can profit from, such as being co-located with an agglomeration of universities and research centres. In addition, there can be specialized sectors within the urban system, where informal knowledge spillovers and collective learning are essential for the development of these sectors.

3.2.2 Limits to proximity

These new contributions within urban studies strongly emphasize the importance of the proximity of institutions and knowledge in explaining the high levels of innovation and growth within cities. Recently, a new perspective has been introduced by Amin and Thrift,

which we can label 'the node approach' (Amin and Thrift 2002). These authors are critical of the tendency in recent studies to frame urban economies in terms of lines and boundaries. In such studies, cities are seen as central points and knowledge-based agglomerations, with high intensities of face-to-face contact and strong internal flows of knowledge.

However, according to Amin and Thrift, cities cannot be understood as systems of boundaries, or as bounded economic entities. Instead, they treat an urban system as a "relay station in a world of flows". Cities are structured around flows of people, images, information, and money. They also stress that cities are always both local and global. Their purpose is to limit the strong emphasis on proximity that has characterized recent work on urban development. Proximity does not always matter. They define cities as assemblages of more or less distanciated economic relations, which have different intensities at different locations. Even when economic activities seems to be spatially clustered, for instance, within a city, they rely on a multiplicity of institutions and connections that stretch beyond these clusters and play a role in their construction. Much of the existing cluster and innovation literature focuses on local and regional learning processes, and fails to stress clustered firms' relationships outside a cluster. However, cities do not exist in isolation. Firms and organizations within the milieu depend on external markets, resources, and competence.

Thus, Amin and Thrift are critical of the strong emphasis on local proximity and localized knowledge as the essential source for innovation and competitiveness. They claim that tacit knowledge does not work in isolation from codified knowledge. The advantages of local production systems are a result of the combination of these two types of knowledge (Amin and Cohendet 1999). They also stress that local business networks are not the only source of tacit knowledge. Firms and persons have a rich collection of tight external linkages. There is also a systematic under-recognition of the importance of codified knowledge located in wider corporate and institutional networks. Related to our discussion of head offices and KIBS, firms must be understood as integrated in an internal (within the region) and external (outside the region) flow of knowledge and information. Companies are involved in multi-level linkages affecting their strategy and growth (Amin and Thrift 2002).

3.3 The co-location of head offices and KIBS

3.3.1 Characteristics of head offices and KIBS

As already mentioned, this paper emphasizes the relations between head offices and KIBS in city areas. Sassen (2000) argues for a mutual dependency between head office location and the location of KIBS. KIBS are intimately connected to the agglomeration of corporate head offices, the latter being important clients for the former. They are often thought of as forming a joint head-office–corporate-service complex located in major cities and capital regions. In the following, characteristics of KIBS and head office organization will be discussed.

KIBS are defined as private sector firms providing knowledge-based services to other business and nonbusiness organizations. Wood (2002a) also uses the term KIS (knowledge-intensive services), but says that the terms are more or less synonymous. The knowledge KIBS provide is strategic, technical and professional advice mainly employing the skills of information gathering, processing, and in particular, interpretation of information (Wood 1991). KIBS are significant because they offer specialist knowledge to other organizations in a rapidly changing, increasingly uncertain, and internationally oriented economic environment (Wood 2002a). KIBS are highly innovative in their own right, but perhaps more important is the function of facilitating innovation in other economic sectors because they provide knowledge about change.

KIBS can use their knowledge to produce services as intermediate inputs in their clients' own knowledge-generating and information processing activities (e.g., communication, computer services). These services are intensively tailored to the specific needs of the clients, and client participation is a fundamental characteristic of knowledge-intensive services. The end product finds its form in the making. Terms used to denote the link between the service provider and client are numerous (interface, interaction, co-production, 'servuction', socially regulated service relationship, service relationship), and they can be differentiated from each other by their theoretical substance (see Gallouj and Weinstein 1997 for an overview). KIBS acquire both explicit and tacit knowledge about customer firms. This can potentially enable them to adapt innovative problem solutions to the specific requirements of the organization and to integrate them into the client firm's structure and culture.

Not only are the codification of knowledge and the standardization of consulting procedures important if KIBS are to have effects on clients innovation capacities, but successful transfer also requires KIBS and clients to be amenable to new learning contexts. KIBS can also be seen as typical intermediaries deeply involved in various kinds of tangible and intangible knowledge flows, which is important in the knowledge economy. They have much in common with organizations within the public knowledge infrastructure (Gadrey and Gallouj 2002). It is argued that KIBS develop into an informal (private) 'second knowledge infrastructure', an interpretation in stark contrast to the view of service firms as innovation followers.

A general pattern in Europe is the concentration of KIBS in urban regions. The agglomerational advantages of metropolitan areas include physical proximity to clients and business partners and an information-rich milieu (Brouwer et al. 1999, Aslesen 2003). In these urban regions there is thought to be a particularly intimate relation between KIBS and head offices of large companies, the former providing the latter with new knowledge on marketing, strategy, and organizational issues.

A head office is the top administrative level or the corporate centre of the company. There are three core functions or roles for a head office: the strategy role (formulation of corporate strategy, definition of business portfolio, development of the organizational structure of the company); the co-ordination role (exploiting of synergies between business units, the developing of the core competence of the company and providing expert advice for different units); and the control and policy role (basic control over business units, setting performance targets for units, monitoring their achievements, ensure a positive image for the company, and influencing political authorities) (Chandler 1966, Rusten 1990, Hungenberg 1993, Young et al. 2001, Jakobsen and Onsager 2003). Despite information technology facilitating dispersal, head offices of large companies are still concentrated in urban regions or metropolitan areas where economic and political decisions affecting the rest of the urban system are made (Ross 1987, Healey and Watts 1987, Lyons 1994, Sassen 2000:22).

Head offices can both be spatial separated from other parts of the company ('pure head office') or they can be co-located with other activities, such as research and development or production units ('integrated head office'). Traditionally, studies of large companies have focused on the ability of the head office to control and integrate a number of units at different

locations. The main influence over development was in the hands of top management at the head office (Martinez and Jarillo 1989). This notion of a strong centralized command and control function is a crude generalization that is in fact misplaced. In a knowledge-intensive economy characterized by a more prominent role for knowledge and collective learning, large firms delegate a greater variety of functions and more responsibilities to the subsidiary level, which enables subsidiaries to operate efficient and respond rapidly to changes (Ghoshal and Bartlett 1990, Morris 1992, Amin and Cohendet 1999, Jones 2002). Head offices of large companies are nodes in an internal and external flow of knowledge and information (Jakobsen and Onsager 2003).

Head offices are essentially engaged in information processing, and KIBS have a vital role in providing them with information and competence. They can also assist them in strategy formulation and managerial and organizational changes. In the following paragraph we present analytical concepts for understanding the interaction between head offices and KIBS.

3.3.2 Exchange of knowledge

As already mentioned, knowledge is vital for competitiveness and processes of innovation within firms. Knowledge is about experience, competence, skills, and methods. Nevertheless, it is difficult to clearly define knowledge, since it is an intangible resource. Howells (2002) states that knowledge is a "dynamic framework" for storing, processing, and understanding information.

In general, we can distinguish tacit and codified or articulated knowledge (Polanyi 1967). Codified knowledge can be available to others by means of written or spoken language and is easy transmitted in space, while tacit knowledge takes its starting point from the fact that we do not articulate all we know. Tacit knowledge is 'collected' through experience and practice, and is related to specific ways of doing things. It can both be personalized and related to the experience of individuals, and collective and related to the norms or values of an organization. Accumulation of tacit knowledge involves practice or learning by doing, and dissemination can take place through networking or learning by interaction involving frequent face-to-face contact (Werr and Stjernberg 2003). Superior ways of organizing and producing can be related to tacit knowledge embedded in a local context (norms and values) or in specific firms or organizations (corporate culture, ways of doing things, personal experience). When

codified knowledge becomes commonly available, tacit knowledge attains a more prominent position in deriving competitive advantages (Maskell et al. 1998, Amin and Cohendet 1999).

There is interdependency between codified and tacit knowledge. Tacit knowledge is essential in the interpretation of codified knowledge (Howells 2002). In an analysis of KIBS as knowledge systems, Werr and Stjernberg (2003) claim that we have to view knowledge both as 'theory' (codified) and 'practice' (tacit). The knowledge of an organization includes its methods, tools, manuals, and documents, i.e., codified knowledge. In addition, there is the specific competence and experience of the individuals of this organization, i.e., the tacit dimension. In many ways tacit knowledge is an assumption for the use of codified knowledge. Consultancy firms use their experience (tacit) when adapting their general methods and tools to the specific need and capacity of a selected client.

Internally and externally acquired information is filtered and interpreted within an organization, and through processes of learning this can increase the knowledge base of the firm, which in turn can facilitate technical and organizational innovations (Howells 2002). The new innovation-driven economy builds upon the creation, diffusion, and use of knowledge. Knowledge, in its various forms, has become the vital ingredient in economic growth. Innovation is recognized as a process of interactive learning, characterized by continuous internal and external feedback, which initiates organizational change or the introduction of new products or services. Interactivity in the innovation process refers to internal collaboration between several departments of a company, as well as to external cooperation with other firms (especially with customers and suppliers), knowledge providers (like universities and technology centres), finance, training, and public administration.

Recently there has been an increasing importance attached to *organizational innovations* in raising the competitiveness of firms, i.e., nontechnological innovations, which implies new ways of organizing and managing the firm. A broad movement towards new organizational principles has been observed, principles that aim to create organizations able to cope with rapid changes and pursue product innovations (Lundvall and Borrás 1997, Strambach 2002, Wood 2002a). Successful firms emphasize horizontal communication within the firm, and network relations with KIBS and other knowledge providers. The innovative firm decentralizes responsibility and planning further down the organizational hierarchy, and makes use of internal cross-professional groups (Gjerding 1997). These features come from a

demand for increased internal and external information flows to cope with extended competition.

How knowledge is managed and transferred across the KIBS-client boundary is very complex, and many factors affect the outcome. Important factors for successful 'service package delivery' are linked to knowledge management processes and the innovation processes within and among the KIBS firm and the client firm. The potential of KIBS to influence client knowledge bases and innovation efforts will, therefore, be dependent on factors on both the supply and the demand side. Consultants can support technical innovations within firms, for instance, by facilitating learning, but their most important impact in recent decades has been on nontechnical change or organizational innovations, especially in management, organizational structure, and marketing processes (Wood 2002b).

4. Empirical discussion

As an introduction to the empirical discussion we first present some background statistics on KIBS in Norway, followed up by some empirical findings on the location of head offices (4.1.2). We then analyse supply and demand for consultancy in city areas (4.2), the importance of proximity between supply and demand (4.3) and the outcomes of consultant–client relations (4.4).

4.1 Knowledge-intensive activities in cities

4.1.1 KIBS and city location

Norway has witnessed the same growth patterns as other OECD countries in the 1990s. There has been employment growth in the service sector, growth dominated by KIBS. A general pattern in Europe is the concentration of KIBS in urban regions. Larger KIBS firms are mainly concentrated in capital cities and major industrial centres, and usually have their main units in such cities. The patterns of growth in both Britain and France in the late 1980s suggested a spatial dispersion process at that time, and business service development across Europe reflected a combination of spatial polarization favouring increasingly dominant core regions and spatial dispersion in and around these core regions (Moulaert and Tödling, 1995).

The location of KIBS in Norway clearly follows the same pattern; Table 1 shows that the share of firms and employment of KIBS is skewed towards city regions. As much as 40.5% of all KIBS firms are located in the Oslo region, and one finds 49.4% of KIBS employment in this region. This means that Oslo is in a class of its own, and far ahead of the other urban regions in Norway. The growth of firms and employment in KIBS has also been slightly stronger in the Oslo region than in the rest of the country (Table 2). There were 1.8 times as many firms and 1.6 times as many employees in KIBS in 2001 as in 1995.

Table 1. Regional distribution of KIBS firms, 2001 *

	The capital region	Other urban regions **	Other areas
Relative share of firms (%)	40.5	19,8	39.7
Relative share of employees (%)	49.4	21,2	29.5

Notes: *KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: Statistics Norway's Central Register of Establishments and Enterprises.

Table 2. Growth in KIBS firms, 1995–2001 *

Industries	1995	2001	Index (1995=100)
Growth of firms in Norway	24897	42406	170.3
Growth of employment in Norway	126349	197015	155.9
Growth of firms in the capital region	9370	17160	183.1
Growth of employment in the capital region	60463	97326	161.0

Note: *KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: Statistics Norway's Central Register of Establishments and Enterprises.

KIBS differ in size, ownership and modes of organization. From interviews with management consultants, we found that they could roughly be divided into two main categories: global (national) management consultants and local (regional) management consultants. The global KIBS have extended their presence throughout Europe in the last 20 years through branches and subsidiaries. Many of the largest KIBS are present in Norway. They are established through mergers and acquisitions of regional consultancy activity. These are firms that are specialized in certain main KIBS activities (Boston Consulting Group, McKinsey, A.T. Kearney, Booz Allen Hamilton), or multifunctional firms (like KPMG, Cap Gemini and Ernst & Young). These major players have lately expanded their core skills from accountancy and computing into more general, and often more profitable, consultancy work. They address clients who are often themselves multinational corporations, some of them with headquarters located in the capital region.

Regionally based KIBS have spun-off from existing activity in the city region. The many small and medium sized consultancies, including sole practitioners, are often found within 'niches', based on their 'local knowledge'. Regional consultants have had a positive development the last years. What they lack in their 'service portfolios' is being compensated for by strategic alliances and networks (often with competitors), which make them able to

^{**} In this table the urban regions of Bergen, Stavanger and Trondheim includes the counties of Hordaland, Rogaland and North-Trøndelag.

take on larger projects. Nevertheless, the large global KIBS still have the largest turnover, number of assignments, and number of employees.

4.1.2 Head offices and city-location

As with KIBS, there is strong urban concentration of head offices, especially in the capital region. Head offices of large companies are concentrated in cities at the higher level of the hierarchy system, where economic and political decisions affecting the rest of the urban system are made (Ross 1987, Lyons 1994). In the United Kingdom, 74 of the 100 largest manufacturing firms have their head offices in the London region (Healey and Watts 1987). In Canada, 75 of the 100 largest manufacturing firms have their head offices in Toronto or Montreal (Ley and Hutton 1987). In Australia, 60 of the 100 top Australian corporations, had their headquarters in Sydney in 1989 (Sassen 2000:98). In the United States, the pattern shows more dispersal, although 40% of U.S. firms with at least half their revenue from international sales had their headquarters in New York City in 1990 (Sassen 2000:82). Command functions are still concentrated in major cities, despite information technology facilitating dispersal (Sassen 2000:22).

In 2000, the head offices of 70 of the 100 top companies in Norway were located in the capital region (Table 3). That position has been more or less stable since 1970, with a weak tendency toward increased concentration. In other urban regions, Stavanger has strengthened its position. Stavanger has become the Norwegian petroleum capital, and a large number of companies within this sector, both national and foreign-owned companies, have located their head office in Stavanger. The number of head offices among the 100 top companies has declined in nonmetropolitan (rural) areas, particularly in the early 1980s, a period of marked declined within manufacturing industries, which traditionally had a strong position in rural areas.

Table 3. The location of the head offices for the top 100 companies (in turnover) in Norway. 1970–2000.*

	1970	1975	1980	1985	1990	1995	1998	2000
The Capital region	65	68	64	75	69	70	72	70
Other urban regions	16	14	18	16	24	21	17	17
-The Bergen-region	(9)	(6)	(6)	(9)	(8)	(9)	(7)	(5)
-The Stavanger-region	(3)	(5)	(9)	(4)	(8)	(7)	(8)	(10)
-The Trondheim-region	(4)	(3)	(3)	(3)	(8)	(5)	(2)	(2)
Other areas	19	18	18	8	7	9	11	13
Sum	100	100	100	100	100	100	100	100

Note: * The data includes both company head offices and national head offices for foreign-owned companies. Source: The largest firms in Norway (selected years)

A comprehensive supply of specialized business services (KIBS and others), the possibility of face-to-face contact with important business partners, the location of political institutions and industrial bodies, and a pool of labour with a higher education are important reasons for the concentration of head offices in the metropolitan areas (Hutton and Ley 1987, Edington 1994, Hayter 1997).

4.2 The supply and demand for consultancy in city areas

This section will focus on the supply and demand for consultancy services in city areas. We will discuss this from two different points of view. Firstly, we will focus on KIBS perceptions of what they offer to their clients and why clients use their services (4.2.1). Then we will give an account of interviews with head offices, or KIBS users, focusing on different reasons for their using or not using KIBS (4.2.2).

4.2.1 KIBS perceptions of why clients use their services

According to KIBS, the main reason that clients use their services is clients' lack of relevant competence (Table 4), indicating that consultants provide competence that clients do not possess internally. The reason for this might be that clients have outsourced activities that consultants now offer, and/or that consultants are seen as additional knowledge input to their clients, giving support to the notion of KIBS becoming a 'second knowledge infrastructure' for firms. The consultants indicated quite strongly that their clients buy the services the consultants can offer. The question is then, why do clients choose to externalize certain knowledge-intensive activities? The reasons might be that the service acquired is low

frequency, probably linked to a time-limited project, and therefore linked to services that are especially directed to a certain task (Williamson 1975). Another reason for externalization might be that the service is 'high frequency', but considered peripheral to a client's core activities. Externalization might therefore give client firms the opportunity to concentrate and specialize. KIBS find that another important reason for the use of consultants is that clients have good experience with earlier use of consultants, suggesting that some clients use consultants on a regularly basis.

Table 4. KIBS perception of the main reason for clients to buy their consultants services. Average score (N=600) (1=irrelevant, 6=of major importance)*

	The client lacks relevant specialized competence	The client has a strategy of buying such services	The client lacks capacity	The client has good experience with earlier use of	The client is in need of strategic advice	The project is often time-limited
	·	externally		consultants		
Total	5.3	4.6	4.6	4.3	4.3	4.0

Note: *KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: KIBS survey.

Table 5 shows the breakdown of the kind of services our respondent KIBS provide to their clients. Three out of four consultants say that they provide advice on solutions in a project. The consultant's role as 'sparring partner' in a project was also emphasized in interviews with consultants, suggesting that there is a relatively high degree of knowledge interaction in such relationships. A large number of the consultants (65.7%) report that they carry out specific elements of a project that is lead by client firms. This could suggest less interaction between the consultant and the client, and could be linked to a clearly defined specialist and technical professional task. As much as 41.7% of the consultants report that the consultant sells and implements 'blueprint' solutions, suggesting that the relation involves more standardized tasks. These findings suggest that the consultancy–client relationship cannot always be expected to be an interactive knowledge-intensive collaboration effort.

Table 5. What do KIBS provide to the client firms? (N=600) *

	Provide advice on different solutions in a project	Carry out specific elements of a project that is lead by the client	Develop and implement the consultant's own solutions	Sell and implement 'blueprint' solutions
Total	74.5%	65.7%	47.2%	41.7%

Note: *KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: KIBS survey.

4.2.2 Head offices use of KIBS

Head offices of large companies are large and important clients for KIBS. Why do head offices use KIBS? How do they assess their services? This section will look into these questions.

The use of KIBS varies between head offices and can be triggered by different circumstances. For instance, mergers, buy-ups, and changes in ownership often imply adjustment and redefinition of the organizational structure, generating the need for organizational, legal, and financial expertise. In addition, increased competition in the market, or a weakened market position for a company, can call for a strategic appraisal that can involve KIBS. In general, improvement in the economic climate, and growth processes often increase the demand for KIBS, while downward economic trends, in which firms watch expenditure carefully, seem to involve a more restricted policy regarding the purchase of KIBS.

Through interviews with head offices, we discussed reasons for KIBS use. A representative from the national head office in Norway of a large Nordic financial company told us of the extensive use of KIBS, especially management consultancy and financial consultancy, during the last couple of years. This was a transition period for the company, whereby, through acquistions and mergers, it grew from a Sweden-based financial company into an important Nordic constellation. The respondent said: "It was especially important to involve consultants that had experience with similar merger processes on an international level." He reported both advantages and disadvantages related to the use of KIBS: "Regarding the price we have to pay for them, a consultant has to be more then an 'advanced' secretary. However, the consultant can be a 'sleeping pillow' for the company. They are doing things that we often can carry out by our own. On the other hand, some of the consultants are good at asking important questions. They make us think through important processes. They also contribute in fact finding."

A representative from the head office of another company in banking and finance says that the company did not want to be 'tied up' to certain consultants, and argues for a critical appreciation of consultancy use: "We only want consultants for clearly defined tasks. We do not want them on a more or less permanent basis. We are working continuously with strategic questions, and now and then we have asked (management) consultants to contribute in the

process. We have also involved international consultants to produce 'benchmarks' and give us an assessment of the international situation." He also told about the use of a management consultant in a recent take-over: "We used consultancy to reveal how we could activate synergies, and to give us their opinion on the way forward for our organization. We took notice of some of their points, while we found others less important."

Another example of the use of KIBS is a large food company, with production sites in several European countries, that has recently carried out a strategic concentration of its core area: "We have used the consultants to get information about what similar food companies internationally have done, what they have succeeded with and what they have not succeeded with. The consultants are discussion partners, but still we assess our new strategy as an internal product."

In addition to contributing to processes of organizational change, consultants can also carry out more standardized operations within the organization. They offer a type of human resource flexibility, which is important. A representative of a head office told us: "We use consultants for tasks of limited duration which we do not have the capacity to solve internally. It's better to use consultants than to recruit new personnel."

The use of consultants varies between firms and sectors. It seems to be most frequent within new sectors and in sectors that are characterized by structural changes and ownership concentration. In other sectors, the use of KIBS can be modest. Some of the head office representatives we have spoken indicated a limited use of consultants, especially management consultants. A representative of a shipping company, representing a mature industry, told us: "We hardly use (management) consultants at all. We have a very clearly defined strategy, and our strategical specialization has been a huge success. We do not need a consultant to tell us that we are moving in the right direction. We know this business better then the consultants." A representative of another company, which is involved in shipping, transport, and fish farming, is a little bit more optimistic: "We have used management consultants, but their conclusions did not surprise us. We had expected their answers in the first place. However, the process somehow clarified our thinking on the issue."

In general, the clients emphasize that the use of consultant should be for clearly defined tasks and for a time-limited period. Some of the head offices even argue for a stronger emphasis on a cost–benefit appraisal before engaging a consultant. Especially in a downward economic

trend, clients will be more critical about the use of external services. It is an expenditure that can easily be reduced in periods when cost is a major concern. Our interviews with head office were conducted during a time characterized by a certain economic contraction, which may have produced a bias towards a critical appraisal of consultancy use.

Summing up, consultants and head offices point to several reasons for clients' use of consultancy. According to KIBS, clients' lack of relevant competence internally is the main reason for using consultants. Another important reason is that clients have good experience with earlier use of consultants. According to head offices, KIBS contributed with important expertise on different issues, such as strategy, organization, and legal issues. They also offer a type of human resource flexibility, which is important. However, some of the head offices argued for a more comprehensive appraisal before engaging a consultant. Not surprisingly, this indicates that clients seem to be more critical about the need for consultancy than the suppliers of these services are.

4.3 Geographical proximity between supply and demand of KIBS

Consultant–client relations involve interpersonal ties (personalization), the transfer of intangible resources, and a strong element of customization, i.e., the end product finds its form in the making. They also involve substantial interaction between representatives of the consultant and of the client firm. Co-location can enhance these relations and stimulate learning processes and knowledge spillovers. This section highlights the co-location of KIBS and head offices in the metropolitan areas. How important is geographical proximity between consultants and clients?

On the supply side we firstly look into why it is important for consultants to be located in city areas, especially the capital region, and into attributes related to this location (4.3.1). On the demand side we will try to find when and why proximity between suppliers and users of KIBS plays a role, from the client point of view (4.3.2).

4.3.1 How do KIBS assess the importance of proximity?

Through interviews with KIBS we found factors explaining the importance for consultants of being located in cities, especially the capital. We have divided the importance of proximity into three different factors:

- 1. The importance of proximity to markets;
- 2. The importance of proximity to a relevant labour pool; and
- 3. The importance of proximity to a dynamic competitive environment.

The importance of proximity to markets

In our KIBS survey we asked the consultants to divide their sales into different markets. Table 6 shows the average proportions of KIBS' sales made locally, nationally, or internationally. For all firms the local market is important, but the Oslo-based KIBS have higher average sales to the local market than any of the other city areas (44%, 39% and 36%, respectively). The smaller the city region, the lower the proportion of local sales, which suggests that the market is too small or that these regions do not have a business structure with an extensive demand for knowledge-intensive services. However, even if consultants emphasize the importance of geographical proximity with clients, sales outside the region are more important than sales inside the region (the local market).

Table 6. Average proportion of KIBS sales to different markets, by location of respondent (N=600)*

	All firm	KIBS in the capital region	KIBS in other urban regions **	KIBS in other areas ***
Locally (county)	41%	44%	39%	36%
Nationally	52%	48%	54%	57%
Internationally	15%	17%	13%	13%
N	600	291	159	150

Note: * KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: KIBS survey

Our interviews with management consultants in Oslo, however, emphasized the importance of proximity to main customers, and they said that this was the main reason for starting business in the region. The Oslo region, being the capital of Norway, is populated by a large number of

^{**} Includes the Bergen-region, the Stavanger-region and the Trondheim-region

^{***} Restricted to medium-sized cities

firms and public services institutions, and therefore provides a large and diversified market for management consultants. The clients are often firms that need to change in order to perform better, with a solid capital base, with branches were demand for innovation and development is strong, that are relatively large in terms of employment and turnover, and compete in an international market. Besides being oriented to private firms, consultants are to a larger degree also oriented towards semi-public enterprises that are adapting to becoming private market actors. Management consultants working solely with point strategy must relate to the executive group at headquarters, and will therefore often find their customers in the capital region. This implies much day-to-day exchange, which reflects the importance of close client-consultancy interaction. Through interviews with KIBS it was indicated that the customer—client interaction was often long lasting; either the project extended into another project, or the project itself lasted for several months, and a main criterion of success was that a client returned.

The importance of proximity to a relevant labour pool

The consultancy sectors are characterized by high mobility rates, and mobility of personnel is an important knowledge-diffuser in the economy. In interviews, consultancy firms reported yearly mobility rates between, on average, 15–40%. This high turnover of employees can have a positive effect on the dynamics and knowledge transfer in a region. The consultants often leave to other consultancy companies or to their clients. Long-lasting projects in client firms can lead to easy 'transfer' of consultancy firm employees. Being located in a city region was perceived to be the only locational option for many of the interviewed firms. With such high mobility rates, the consultancy firms needed to constantly employ highly educated personnel or people with long experience in business. The city areas most often have the labour pools that could meet such needs.

The importance of proximity to a dynamic competitive environment

Firms were also asked how they perceived the competition in their respective markets. Table 7 shows the proportion of firms that have responded that competition is strong. Since the KIBS firms mainly sell their products in local and national markets (cf. Table 6), they naturally also experience the strongest competition in these markets. Approximately half of the firms experience their strongest competition nationally or locally (54% and 46%, respectively). Firms in the largest city regions seem to experience a stronger competition

locally than medium-sized city regions. The Oslo region is also characterized by a higher share of firms that perceive strong international competition.

Table 7. How do the firm perceive competition in different markets? Share of firms reported that competition is strong, by location of respondent (N=600) *

	All firm	KIBS in the capital region	KIBS in other urban regions **	KIBS in other areas ***
Locally (county)	46%	47%	50%	41%
Nationally	54%	52%	57%	55%
Internationally	25%	28%	25%	22%
N	600	291	159	150

Note: * KIBS are defined as: 'Computers and related activity' (NACE 72) and 'Other business services' (NACE 74).

Source: KIBS survey

The empirical findings suggest that the density of consultancy in the larger cities means intense competition. The global consultancies, aiming at large companies in the capital region, have a selected range of firms to choose from. This implies that almost all large KIBS are to be found working on projects in firms like Telenor, Norsk Hydro, etc. Through client work the competitors are able to get an insight into how their competitors work, what they can offer, where their own firms might have an advantage and what is missing. This will have an effect on learning and competitiveness among consultancy firms.

If fierce competition among KIBS leads to better consultancy, the regional business environment will gain from this because of local knowledge spillover. Knowledge obtained by a management consultant is typically not contained within the organization, but is used in the next client project, and thereby creates value for other firms and organizations. "Consultancy contributes to competitiveness among its clients through recycling and transparency between firms", said one of the interviewed consultants. This reuse of knowledge will intensify and lubricate the knowledge spillovers from business to business, and from business to public actors, or vice versa. In this way, the sector will play a significant role as a vehicle of spillover in the regional innovation system, and is an important actor in fuelling knowledge spillover among actors locally.

^{**} Includes the Bergen-region, the Stavanger-region and the Trondheim-region

^{***} Restricted to medium-sized cities

4.3.2 When and why is proximity important for clients?

Our discussion has illustrated that in some cases there is geographical proximity between consultants and clients when it comes to the sale of services, while other transactions are characterized by a certain geographical distance between seller and buyer. In further elaborating this issue, we shall, through data from head offices, discuss when and why proximity between these clients and consultants seems to be important from the clients' point of view.

As a starting point for this discussion, it is vital to assess head-office appraisal of the supply of KIBS in their own region. In our head office survey we asked the head office how they measured the supply of KIBS in their own region. As mentioned earlier, there is a strong concentration of KIBS in the capital region, and not surprisingly, the head offices in the capital region appraise the regional supply of KIBS as better than do head offices located outside the capital region (Table 8). This goes for all of the different types of KIBS that have been evaluated (management consultancy, legal services, bank and financial services, and communication consultancy). Representing the highest demand for these kinds of services, the capital region a characterized by a 'thick market' of KIBS (see Table 1). We can also assume a sort of cumulative causation in the capital region, where high demand for KIBS generates an extensive and specialized supply side, which in turn can increase client propensity to use KIBS instead of internalizing these functions.

Table 8. How do you rate the supply of KIBS in your region (firms have measured the supply on a scale from 1 (very bad) to 6 (very good))?

	All head offices	Head offices in the capital region	Head office in other urban regions *	Head office in other areas	N
Management consultancy	4,64	5.29	4.29	3.74	118 (63/17/38)
Legal services	4,99	5.61	4.82	4.05	120 (64/17/39)
Bank and financial services	5,10	5.55	4.71	4.54	120 (64/17/39)
Communication consultancy	4,62	5.38	4.00	3.65	115 (61/17/37)

Note: * Includes the Bergen-region, the Stavanger-region and the Trondheim-region

Source: Head offices survey.

Not surprisingly, our head-office survey shows that head offices in other urban centres evaluated the supply of KIBS in their own region as slightly better than did head offices in the rest of the country. Again our findings are related to the size of the supply side.

A second question concerns the *quality* of the regional supply of KIBS. Our survey indicates a relation between the size of the local market and its quality. In general, head offices in the capital area give the best appraisal of the quality of the local KIBS sector, followed by head offices in other urban regions and head offices in other areas. However, the latter still assess the quality as quite good (Table 9).

Table 9. How do you rate the quality of the regional supply of KIBS (firms have measured the supply on a scale from 1 (very bad) to 6 (very good))?

	All head offices	Head offices in the capital region	Head office in other urban regions *	Head office in other areas	N
Management consultancy	4.55	4.90	4.33	4.06	108 (58/15/35)
Legal services	4.93	5.42	4.69	4.22	112 (60/16/36)
Bank and financial services	5.05	5.35	4.63	4.75	112 (60/16/36)
Communication consultancy	4.52	5.00	4.13	3.91	106 (56/16/34)

Note: * Includes the Bergen-region, the Stavanger-region and the Trondheim-region

Source: Head offices survey

Data from the head-office survey gives an overview of head offices' evaluation and use of KIBS. Through interviews, we have collected information that is more detailed on their use of KIBS and on the importance of proximity.

As already mentioned, consultant–client relations involve the transfer of intangible resources, personalization, and a strong element of customization, which all favour geographical proximity between consultants and clients. Head offices in the capital region of Oslo mainly buy their consultancy services, both standardized and more specialized, from the 'thick' KIBS market in their own region. However, representatives of the head office of some of the largest companies observe a shortage in financial consultancy in the capital region. They say that there is a lack of consultants that have competence and experience in complicated takeovers, mergers, and stock exchange listings involving comprehensive evaluations. Thus, in some cases they choose to purchase these financial consultancy services internationally.

Some of the national head offices of multinational corporations also report a tendency towards joint purchase of KIBS within their group. A foreign-owned company that operates in all of the Nordic countries, stresses, for instance, that providers of KIBS must be able to handle all of the units in the group. A consequence of this is that the KIBS in the capital region of Oslo have to compete for contracts on a Nordic level. In other cases, the national head offices of foreign-owned firms are free to choose their own national providers of KIBS. However, 'the

word goes' within these multinational companies about which consultants have the ability to deliver. There is a possibility that increased information about the international KIBS market makes the firm more disposed to buying consultancy on an international level.

The situation, when it comes to the use of the local KIBS market, is slightly different for head offices outside the capital. In general, it seems that head offices outside the capital region are, to a certain degree, using the KIBS market in the capital region on issues of strategic importance, while suppliers in their own region are used for more standardized operations. A representative from a head office in Bergen, which has units in several countries, makes the following observation of the local KIBS market: "We have used firms in the region on minor changes of our portfolio of legal entities, but when its comes to solving problems on an international level you cannot use the local providers. My impression is that there is a deeper knowledge among consultants in the capital region. They also have a more extensive international experience." Another company agrees with these observations: "If we use a consultant in Oslo, they have a lot of experience and that is a security for us. They have been involved in several companies operating internationally, and they can use their knowledge and experience when solving our problem. If you ask a local firm, they have maybe been involved in one similar case, but that is 20 years ago."

This observation of a more extensive knowledge base among KIBS in the capital region can be further illustrated. One firm told us that they had to "carry out a lot of training of the consultant" when they where using local consultants. Another said that the local consultant could only give them "a status description." If they wanted to get input on the way forward for their company, they had to use external consultants with a more comprehensive knowledge base. Head offices outside the capital region have also observed that the KIBS companies in the capital represent a more specialized knowledge than consultants in their own region. One company told us: "if we are looking for the state of the art when it comes to organizing and project management, then we have to go to the capital".

In some cases, head offices for companies operating on an international level and located both in the capital region or in other areas, choose to engage consultants abroad, especially on highly specialized or industry-specific issues. A representative of the head office of a large shipping company made the following comment: "When financing the building of new ships we have to involve financial consultants internationally and a consortium of finance

companies, since this is a capital intensive operation, and in certain cases we have used American banks in funding the fleet. We have also looked into the Danish and English leasing market, and the American market for bond issues, to find sources that can supply the traditional bank market."

Another company, within the food sector, told us about their use of consultancy abroad when redefining their strategy: "We wanted to benchmark ourselves against the international food industry. That required the use of consultants with major international food companies on their client-list." Even if global KIBS located in Norway can provide this sort of information through their international client databases, clients in some cases decided to go abroad and involved consultants that have hands-on knowledge about international restructuring processes within relevant business sector.

4.4 The outcome of the KIBS-client relation

The final section of our empirical discussion elaborates outcomes of consultant-client relations. Does a consultant contribute to learning and organizational innovations among clients, and is geographical proximity between consultants and clients a precondition for innovation and successful consultancy?

By providing new knowledge, KIBS can influence clients' knowledge bases and innovation efforts. Potentially, KIBS can contribute to organizational innovations among clients in many ways. They are valued for the specialist knowledge they possess and the independence that means that they can provide a 'second opinion' on issues. More specifically, KIBS can supply clients with expertise in different fields, they can facilitate the exchange of empirical knowledge and best practice from different branch contexts, they can offer specific methodologies and tools for change processes within organizations, they can integrate different stocks of knowledge and competencies, they have a flexible mode of operation by which they can cut across the rigidities of formal organizations, they can adapt existing knowledge to specific the needs of the client, and they can produce new knowledge by combining existing knowledge in new ways (Wood 1996, Strambach 2002, Wood 2002b).

Table 10. In what parts of the client's organization do consultants contribute? Share of firms (N=570).

	Share of firms
Development of new or change of existing products/services for	68.9 %
the client	
Introduction of new solutions for the client's daily routines	60.2%
(administration, executive work, etc)	
Competence building among the client's co-workers	44,0%
	·
Introduction of new methods/solutions for marketing and sales for	23.3%
the client	
Development of the client's organization and management	18.8%
Introduction of new methods/solutions for delivery and	18.6%
distribution for the customer	

Source: KIBS survey

In elaborating KIBS contributions to client firms, we asked consultants if they could tell us in what parts of client organizations they provided their services. Results from the KIBS survey show that the largest proportion of consultants answered that they took part in the 'development of new or change of existing products/services for the client' (Table 10). A large number of the consultants also reported that they contribute to the 'introduction of new solutions for the clients' daily routines (administration, executive work etc)' and in 'competence building among clients'. However, only about one in five consultants said that they 'introduced new methods/solutions for clients in marketing and sales' or 'in delivery and distribution'. Through interviews with management consultants, we got the chance to elaborate further on the role of consultants in client innovation activity. In the interviews, we found that the consultant's role in client innovation was linked to the supply of complementary knowledge to facilitate innovation, managing the innovation process, and giving advice on the direction and type of innovation to carry out.

For a start, consultants seem to supply complementary knowledge to facilitate innovation among clients. Answering the question of whether consultants have a direct impact on a client's core competence and therein on their innovation activity, most of the interviewed consultants say "no". Through their work in client firms they often get 'a glimpse' into the core activity and innovation processes. Primarily the consultant applies technical and management expertise around the client's core activities. The client him/herself often possesses the unique technological skills linked to his/her core competence; seldom can a consultant offer valuable input here. The consultant's job is to make the client use his/her own

expertise the most profitable way. One respondent told us: "90% of a consultant's work is related to secondary competence for the client, such as leadership training and organizational development; only 10% of a consultant's work can be linked to a client firm's core competence. In a project, you only get a glimpse of a firm's innovation and core competence." A consultant's giving a client firm competence related to the firm's core activities will provide resources that will help the client firm to develop its own core competence.

Consultants also help clients to manage the innovation process. The consultant seldom has the technological expertise to help a client with developing a product or a service. The client has the best qualification for this. The consultant can, however, be an important actor in leading and managing the process of innovation in the firm. The consultant's participation in the innovation process is then more linked to the administration and organization of an innovation project, rather than with the generation of ideas linked to innovation in the firm.

Finally, consultants give advice on direction and types of innovation to carry out. Consultancy firms, especially working with corporate strategy, can have an effect on which direction a client's innovation effort should take, and by giving advice on what kinds of products and processes would improve its competitive power. Such advice would have an effect on the core activities of a firm, and on what kinds of innovation the firm would focus on. By giving a firm supplementary information on market trends, and through developing different scenarios for the future, the consultant could give the firm an opportunity to benchmark its activities, and thereby to make some decisions on future paths. Consultants can also be seen as carriers of new knowledge, and play a role in transferring existing innovations from one client firm or industry to another. Some management consultancy firms can also draw upon technological resources with the enterprise. These consultancy firms would be able to assist firms in implementing new technology important for their core activities and for innovation activity in the firms. One of the most important roles for the consultant will then be to give advice on what kind of technology the firm should implement and when to do it.

How does a client evaluate KIBS contribution to innovation? When we discussed this issue with the head offices, they often found it difficult to point precisely to the importance of consultants. Some of them even seem to underestimate the value of the consultants by claiming that "consultants only verified things we already know." It is also a fact that a

company wants to be understood as the 'owner' of their organizational change (Bessant and Rush 1995). Extensive use of consultants can also be interpreted as a lack of internal capability and knowledge. However, the fact that there has been a comprehensive increase in the use of consultancy within the urban economy indicates that KIBS are important for knowledge transfer and organizational innovations in the economy.

In the interviews, clients pointed to different types of contributions from KIBS. Head offices especially emphasized the KIBS role as 'carrier of new knowledge'. This involves presenting the client with the experience of other relevant firms, benchmarking the client against international developments within its sector, and general fact finding that could support the client in its decision making process. Our respondents also claimed that consultants were "helping them clear the thought process" and assisting them by "asking important questions about the organization", which, indirectly, is vital for organizational innovations within firms. However, a few of the respondents also indicated a more direct role for consultants in organizational innovation processes. One respondent said: "We use consultants as discussion partners. Not exactly because they provide better answers then we have, but because they can give a verification of our thoughts. They represent a second opinion. In some cases they can also give us new ideas about how to organize and manage the company."

It is the management consultant, especially, that can assist clients on changes in strategy, management, and organization. But the work of other consultants also, for instance, legal or financial consultancy firms, can assist clients in developing new modes of organization. Legal advice can, for instance, involve a new way of structuring and organizing the relations and authority between the mother company and daughter companies. It is also a fact the differences between various types of KIBS have become more blurred. A financial consultant can, for instance, also provide advice on strategy.

Clients want to be understood as masters of their own affairs, making it difficult to estimate precisely the importance of consultants for client innovations. However, as carriers of new knowledge, consultants are important *facilitators* for change and organizational innovations among head offices. This is especially the case when KIBS provide links to international methods and practice. Consultants can trigger processes of change, and assist clients in 'evaluating' their adaptations and strategies, but consultants are seldom the prime movers for organizational innovations. Consultants are more like catalysts for technical and

organizational changes among clients (Bessant and Rush 1995). Our data from consultants confirm these finding. KIBS supply clients with complementary knowledge, they help them manage the innovation process, and they give them advice on direction and types of innovation, but it is the client that plays the decisive role in the innovation process.

Another vital question concerns the importance of geographical proximity for knowledge transfer and innovations. *Is geographical proximity between consultants and clients a precondition for successful consultancies and the facilitation of innovation processes?*

The consultancy-client relationship involves the transfer of knowledge. This includes both codified knowledge in the form of methods, tools, documents and articulated experience from previous projects, for instance, use of the client database. In addition, the consultant-client relationship involves tacit knowledge. Tacit knowledge is carried by the individual consultants, who use their tacit or personal experience when adapting the general methods and tools of the consultancy firm to the need of a specific client.

Since consultancy involves the transfer of intangible resources, and implies a strong degree of customization, establishing close ties between the consultants and representatives of the client is important. Successful consultancy requires sustained interaction with clients, and depends on the relations between the individuals involved (Wood 2002b). Thus, the reuse of consultants and personalization are common characteristics of the consultant—client relationship. It is time consuming for a consultant to get familiar with an organization and for representatives of the organization to get familiar with the consultant. A representative of a head office told us: "Since teaching the consultant about our organization involves a lot of time, it is probably better to use them more than once. Then we also learn more about the consultants, and how they can assist us." If the firm is satisfied with the work of the consultant, it is, to a certain degree, common for the firm to reuse the consultant for related or similar tasks. However, the message also goes when the consultant is only good at "writing the check." It also vital that the client knows how it wants the consultant to contribute. It is important to be a 'demanding client' and have competence on the issue in question. That makes it possible to ask the consultant the 'right' questions.

This reuse also involves personalization. A representative of a head office told us: "It's very much about individuals. You establish a relationship with certain persons, and we agree about

a common understanding of the challenge ahead. A joint understanding also makes it easier to involve the consultants in new projects." A consequence of this personalization is that consultants often take clients with them when they decide to move to another consultancy company, or start up their own businesses. Personalization seems to be a precondition for extensive learning in the consultant–client relationship.

It is common to assume that this personalization and the distribution of tacit knowledge often take place in localized business networks (Cooke et al. 2002, Lambooy 2002). Thus, it tends to decay rapidly with increasing geographical distance between partners. However, even if face-to-face contact and sustained interaction between clients and consultants is essential for successful consultancy, this does *not* mean that only a client–consultancy relationship that is characterized by co-location can facilitate organizational innovations among clients. It is also possible to achieve intimacy in relations stretching over distance. For clients in our study, the quality of the consultant is of greater importance than their location. Head offices, for instance, in the urban centres of Bergen and Stavanger often choose to use consultants in the capital or even abroad on strategically important issues involving extensive face-to-face contact. They assume that these consultants have a more comprehensive knowledge base then the consultants in their own region. They also want international benchmarking and to get advice from consultancies that have hands-on knowledge of international restructuring processes within relevant business sectors. Even head offices in the capital region in some cases choose to use consultants abroad. Even with increasing geographical distance, it is possible to achieve personalization between consultants and clients. However, the cost can be higher since face-to-face meetings in these constellations entails more travelling.

We have no indications from our interviews that increased geographical distance between client and consultant hinders the flow of knowledge or the possibilities for consultants to assist in innovation processes. In fact, our study illustrates that clients can establish tight linkages to externally located consultants. Thus, it is vital not to under-recognize the importance of codified and tacit knowledge distributed in wider business networks. In a modern urban economy, where firms and institutions are 'relay stations in a world of flow', knowledge is distributed in more or less distanciated economic relations, some of them local, others external (Amin and Thrift 2002).

5. Concluding remarks

The literature argues for an intimate and mutual dependency between head office location and the location of KIBS. They are thought of as forming a joint head-office-corporate-service complex located in major cities or capital regions. By using various empirical data, our paper questions the actual importance of this co-location.

The first main issue for our discussion is characteristics of the supply and demand for KIBS in city areas. Around 40% of all KIBS firms are located in the capital region, while head offices, which are important KIBS-clients, are characterised by an even stronger concentration. Head office of 70 of the 100 top companies in Norway are located in the capital region. According to KIBS, clients' lack of relevant competence internally is the main reason for using consultants. Another important reason is that clients have good experience with earlier use of consultants. According to head offices, KIBS contributed with important expertise on different issues, such as strategy, organization, and legal issues. They also offer a type of human resource flexibility, which is important.

A second issue for our paper is the importance of proximity between consultants and clients. For KIBS proximity to main customers is a vital locational factor. A second important locational factor is the supply of labour. Consultancy firms are characterised by high mobility rates and they needed to constantly employ highly educated personnel or people with long experience in business. City areas most often have the labour pools that could meet such needs. Head offices in the capital region of Oslo exploit proximity to a thick' KIBS market, and are mainly using consultancy services in their own region, both on standardized and more specialized issues. Head offices outside the capital region are using suppliers in their own region mainly for standardized operations, while they to a certain degree are using the KIBS market in the capital region on issues of strategic importance. For clients in our study, the quality of the consultant is of greater importance than geographical proximity. In some case head office both in the capital region and in other areas look even further than the national market when purchasing consultancy. They can choose to engage consultants abroad, especially on highly specialized or industry-specific issues. The use of consultant abroad is important for international benchmarking and to achive hands-on knowledge about international restructuring processes within relevant business sector.

The final issue for our discussion is outcomes of KIBS – head office relations, emphasizing consultant's contributions to organizational innovation among clients and geographical proximity as a precondition for successful consultancy. Consultant's role in client innovation was linked to the supply of complementary knowledge to facilitate innovation providing technical or managerial expertise around the clients core activities, managing the innovation process, and giving advice on the direction and type of innovation to carry out. Our data from head offices confirm these finding Head offices especially emphasized the KIBS role as 'carrier of new knowledge'. This involves presenting the client with the experience of other relevant firms, benchmarking the client against international developments within its sector, and general fact finding that could support the client in its decision making process. As carriers of new knowledge, consultants are important facilitators for change and organizational innovations among head offices. Consultants can trigger processes of change, and assist clients in 'evaluating' their adaptations and strategies, but consultants are seldom the prime movers for organizational innovations.

Even if face-to-face contact and sustained interaction between clients and consultants is essential for successful consultancy, this does *not* mean that only a client–consultancy relationship that is characterized by co-location can facilitate organizational innovations among clients. It is also possible to achieve intimacy in relations stretching over distance. In fact, our study illustrates that clients can establish tight linkages to externally located consultants, and geographical proximity is not a precondition for successful consultancy.

Our study gives the following contribution to the theoretical debate on head-office–KIBS colocation:

(1) The quality of KIBS is more important than proximity when head offices choose consultants.

In some cases there is geographical proximity between consultants and clients when it comes to the sale of services, while other transactions are characterized by a certain geographical distance between seller and buyer. Head offices choose to use consultants outside their region when they assume that these consultants have a more extensive and specialized knowledge base than local consultants. Proximity does not always matter.

(2) Location outside the 'thick' KIBS market in the capital region is not considered a major drawback for head offices.

There are, however, some advantages in head offices being part of a head-office—corporate-service complex. It lowers the cost of finding relevant KIBS and the cost of carrying out the consultancy project (meeting face-to-face, etc). Nevertheless, these advantages are not substantial, and are not the sole reason for the relocation of head offices.

(3) Co-location in a head-office-corporate-service complex is more important for KIBS than for head offices.

For the purpose of sales, it is vital for consultants to be located in a region with high demand for their services. For the purpose of innovation and learning on the part of KIBS, it is important to be close to demanding head office customers and close to the buzz of the city. Knowledge and competencies obtained by demanding customers can be reused in related projects for other customers, so closeness means vital knowledge spillovers in this information-rich milieu.

(4) The head-office-corporate-service complex does not necessarily mean learning and innovation between the actors.

Some of the projects between KIBS and head offices are characterized by low interaction and a high degree of standardization of the services, suggesting that many KIBS—head-office relationships are not likely to induce profound change. However, in relationships were collaboration is close and interaction is intense, the interaction might lead to changes in knowledge bases and innovation. But consultants are seldom the prime movers for innovations; they are more facilitators for change. But innovation among clients is more dependent on the internal capabilities of the actors (knowledge management practices and innovation experience) than on external factors such as co-location with consultants.

(5) Geographical distance between the actors does not hinder flow of knowledge and the possibilities for consultants to assist in innovation processes.

Clients in some cases decide to use external consultants on strategically important issues involving core activities in the firm. Such activities are often characterized by high degrees of interaction and close co-operation between the actors. Our empirical findings show that it is

possible to achieve personalization between consultants and clients despite geographical distance. However, the cost can be higher, since face-to-face meetings in these situations entails more travelling, suggesting that being able to use geographically dispersed KIBS is a matter of financial resources and of knowing who, what, and when. These are resources that are scarce among SMEs and businesses in peripheral areas. However, one must keep in mind that head offices are special actors with great resources, with the capability to look for knowledge and competence wherever they are. This is not the case for the largest share of business firms, which often have a limited search radius for the knowledge they need.

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