Use of Knowledge Intensive Business Services by SMEs – some policy implications

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This study examines the use of knowledge intensive business services (KIBS) by SMEs in a regional context in Finland. The study takes the service customer's perspective: it reveals the specific challenges that the firms face in purchasing and making use of services by KIBS. The aim is to identify factors that have influence on effective selection and use of such services, and on this basis the paper also suggests relevant policy measures. The results show that for the SMEs, 'learning by doing' is a primary way of learning how to make effective use of knowledge intensive services. However, it is suggested that an outside actor should not principally encourage KIBS trial, but policies should rather focus on raising SMEs own level of awareness and absorptive capacity.

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INTRODUCTION

Knowledge intensive business services (KIBS) and small and medium sized enterprises (SMEs) are commonly argued to be the cornerstones of the developed economies (OECD, 2005). This is because, KIBS businesses and SMEs are often seen vanguards of innovation and growth and overall economic performance. This paper takes an analytical perspective that includes both of the aforementioned key groups by analysing the interaction between KIBS and SMEs. In particular, how SMEs are able to make use of the services offered by various types of KIBS? Ideally SMEs interacting with KIBS are in situation of effective activation of complementary innovation assets. Hence, KIBS can potentially contribute SMEs innovation capacity through better integration into innovation environment, as well as improved activation of internal and external innovation resources (Muller, 2000, 39-47).

KIBS businesses represent highly dynamic growth sector and they are in the core of the evolving knowledge based economy (OECD, 2006). Typically KIBS enterprises are highly concentrated in the major cities and around capital regions. As a result some concerns are voiced, the assumption being that SMEs in the more distant areas may not be able to benefit from the positive impacts of services offered by KIBS enterprises (Lith et al., 2005). This concerns innovation and as well as wider positive economic impacts that the use of KIBS may bring with them. Also in Finland services are attracting increasing attention, although there are some concerns that the country is not very competitive in terms of KIBS development. This notion is being taken increasingly seriously, since the economic policy in Finland is largely leaning on knowledge based growth and innovations (Government Programme, 2007, 13-14). Table 1 presents the composition of the KIBS sector in Finland.

TABLE 1

The breakdown of the Finnish KIBS sector in terms of business units, staff and turnover (2003)

Type of the service	Business units		Staff		Turnover*	
	Number	%	Number	%	Number	%
ICT related services	4 494	16,6 %	35 573	35,3 %	4 034 798	34,5 %
Research and development	322	1,2 %	2 460	2,4 %	172 585	1,5 %
Legal services	1 557	5,7 %	3 460	3,4 %	454 217	3,9 %
Accounting & auditing	4 524	16,7 %	10 828	10,7 %	790 719	6,8 %
Advertising and marketing	3 276	12,1 %	8 885	8,8 %	1 603 330	13,7 %
Technical services	7 938	29,3 %	30 838	30,6 %	3 436 587	29,4 %
Management consulting	4 977	18,4 %	8 761	8,7 %	1 187 487	10,2 %
TOTAL	27 088	100,0 %	100 805	100%	11 679 723	100,0 %

Source: Industry Report, Ministry of Trade and Industry (2005)

There are at least two main issues that can be seen from the table. KIBS related to ICT and technical services represent the largest segments of the industry. Hence, services that perform strongly in Finland seem to be closely related to technology. Another interesting finding is that research and development related services are the smallest segment of the KIBS sector, representing 1.5 per cent of the turnover. This may indicate a weakness of the innovation system in a country that is heavily relying on research and development as source of innovations.

There are various kinds of links between SMEs and KIBS. However, this paper analyses how dynamic SMEs are capable to make use of services offered by the KIBS. Both SMEs and KIBS are often closely linked to the innovativeness. For instance, SMEs are often argued to flexible and able to respond quickly to the opportunities that emerge on the markets (Georgsdottir et al., 2003). As a result many innovative products and services are initially introduced to the markets by small businesses. However, it is equally well established that typical SME has rather limited resources and they may not be capable to exploit all the potential innovations and growth alone (see e.g., Storey, 1994, 155-59). In such situation flexible resources and specialised knowledge offered by the KIBS may be a great advantage and a critical factor determining the success of the innovation. However, in reality it seems that the potential benefits of the interaction between SME and KIBS is not realised to its full extent. The following analysis will explore what are the possible barriers and challenges for the fruitful cooperation between SMEs and KIBS. Situations where the potential barriers and challenges may emerge include: poor availability of KIBS, SMEs lock-in to a certain practice that prevents the otherwise potential advances, poor communications between SME and KIBS due to knowledge asymmetry, and/or 'different language' (see e.g., OECD, 2006). These are typical situations where innovation policy interventions may be justified. The following analysis will reveal some interesting findings that are relevant for policy makers.

RESEARCH APPROACH: QUESTIONS, DATA AND METHOD

Research questions

This study examines the use of knowledge intensive business services (KIBS) by small and medium sized enterprises (SMEs). The investigation focuses on metal and furniture manufacturing firms in a regional context in Finland. The aim is to explore the specific challenges that the SMEs face in purchasing and utilising services provided by KIBS. Based on the

results of the analysis the paper identifies a number of policy measures that could improve these businesses' ability to make use of such services.

More specifically, the research questions are:

1) How active the investigated firms are in making use of KIBS?
2) How do the firms perceive availability and quality of KIBS?
3) What type of challenges, positive and negative experiences do the firms relate to purchasing and use of KIBS?
4) Based on the analysis of SMEs perceptions and experiences; what kinds of policy measures can be identified that would best support SMEs ability to make effective use of KIBS?

The study can be characterised as a systematic exploration of the SMEs perceptions and current usage of knowledge intensive business services. The analysis seeks to identify factors or issues that currently have a major impact on the SMEs ability to effectively make use of relevant knowledge intensive services. The final research task is to discuss policy implications of the research results.

Data and method

The data consists of 46 interviews conducted in SMEs representing metal (32) and furniture manufacturing (14) industries in five regions in Mid-Finland (Ostrobothnia, Central Finland, Päijät-Häme, Etelä-Savo and North Karelia).[3] The sample was designed to include leading SMEs in each region. The idea was to construct the sample from businesses that already have experience in the use of KIBS, hence they could provide rich data for the analysis. In order to identify such 'lead' SMEs, regional experts, such as representatives of regional employment and economic development centres were consulted. Thus, the sample represents businesses that have experience in the use of KIBS rather than the entire SME population within the regions. It can be assumed that these lead SMEs are more experienced and skilful users of knowledge intensive services that an "average" SME in the industry.

Overall, the firms in the sample are relatively small in size, yet the group entails a considerable amount of variation. When the largest business in the metal and in the furniture manufacturing industry is not taken into account, the average annual turnover in the metal industry

[3] The data has been characterised more extensively in the research report by Saarivirta et. al. 2006, upon which this research paper is based. The interviews were conducted during 2005-2006. In the original research project, in addition to the customer companies, KIBS providers were also interviewed. Here, this provider data is not discussed as the focus is on the clients' perspectives.

amounted to 12.5 million euros, and average number of personnel to 85; in the furniture industry the respective figures were 3.8 million euros and 32 employees.

KIBS firms whose services were evaluated were divided into following four groups: *technical services* (e.g., IT related services, engineering design services), *services related to business development* (e.g., business consultancy, advisory activities in financial planning), *marketing related services* (e.g., advertising and trade fair activities, market research), and *other services* (e.g., recruitment services, book-keeping, legal services).

Face-to-face interviews were conducted on the premises of the respondent firms. The interviewees were managing directors or persons indicated by the managing director. The interviews included both structured questions as well as open-ended themes. Quantitative analysis consists of descriptive statistics of the firms' intensity of use of different types of KIBS, and the SMEs' perceptions of the availability and quality of relevant KIBS. The data analysis was mainly qualitative in nature, and it included the phases of data reduction, data display, and conclusion drawing (Patton, 2002).

RESEARCH RESULTS

The research results section has been organised as follows : First, descriptive data on the SMEs' intensity of use of different types of KIBS, and their availability and quality perceptions of KIBS is provided. Second, the SMEs' use of KIBS is described and analysed in terms of the reasons for KIBS use, challenges that the analysed businesses have encountered in purchasing and making use of KIBS, solutions they have developed to tackle such challenges, and the firms' perceptions of their own role as customers of KIBS. The policy implications will be discussed in the concluding section of the paper.

Intensity of use, and quality and availability perceptions of KIBS

The analysed SMEs report frequent use of KIBS. In the case of technical services, 74 % of the firms had used a KIBS provider[4] more than five times during the past five years period. Most typically, external technical services were related to IT-systems, engineering, production development and maintenance, and design.

In the case of marketing services, 64% of respondents had used a KIBS provider more than five times during the past five years period, and

[4] a separate contract was made between a KIBS and a SME.

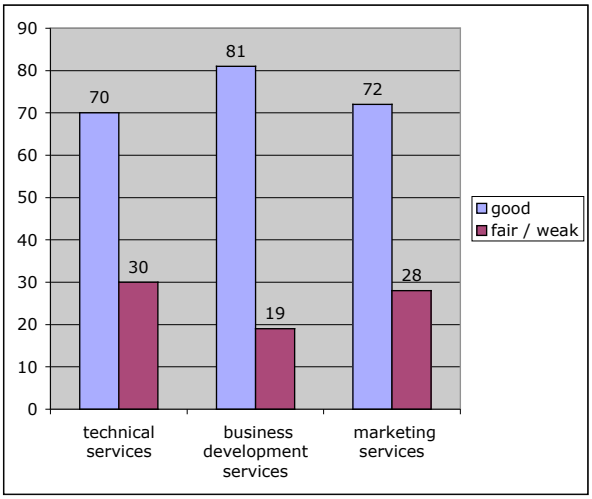
the respective figure in the case of business development services was 43 per cent. The most typical externally sourced marketing services were surveys on markets and marketing communication related activities (advertising agency and trade fair activities). Perhaps not surprisingly, in this sample of relatively small manufacturing firms, few firms reported having used external expertise on more strategic marketing planning. Typically the use of business development services was related to the development of quality systems. Quality related services were followed by various types of financial-, strategic-, and business consultancy services. In the 'other KIBS' category, accounting/auditing and computer related services were most typical, also training, legal and recruitment services were widely used.

Overall, the examined firms made use of a fairly broad variety of external knowledge intensive business services quite frequently. Prior studies suggest that the use of KIBS is most frequent among medium-size businesses, whereas large companies (with more than 500 employees) make less use of external KIBS in relative terms. This is because they are actively building their internal knowledge intensive expertise, and combine it with external resources. The very small firms, in turn, may not either perceive a need for the use of specialised KIBS, or they lack financial resources to use them (Lith et al. 2005, 46). There is a lack of directly comparable empirical data on SMEs' use of KIBS in the Helsinki (capital) region. However, the regional SMEs' positive perceptions on the availability of KIBS (which are reported next) suggest that the distance from the capital does not necessarily create an obstacle for the use of KIBS (also, Viljamaa & Kuusisto 2006, 112). However, it needs to be pointed out that the (frequent) use of KIBS was not a uniform practice even among the lead SMEs. Some of the firms explicitly stated that they aim to minimise the use of external knowledge intensive services, and primarily rely on and develop internal resources whenever feasible.

In general, the SMEs were satisfied with the availability of KIBS. As many as 81 per cent of the firms rated the availability of business development related services as 'good', 72 per cent the availability of marketing services as 'good', and 70 per cent the availability of technical services as 'good' (Figure 1). It is noteworthy that only one of the SMEs used the lowest ranking 'weak' in characterising KIBS availability. However, the majority of the firms brought up some types of gaps or bottlenecks in the supply of KIBS. Typically these concerned a highly specific types of services, or even referred to an individual service provider. For instance, in the case of a highly specific service, the customer easily perceives that they became too dependent on one service provider. For instance, when a customer had invested in a new IT-system, the system provider did not always have capacity to make required

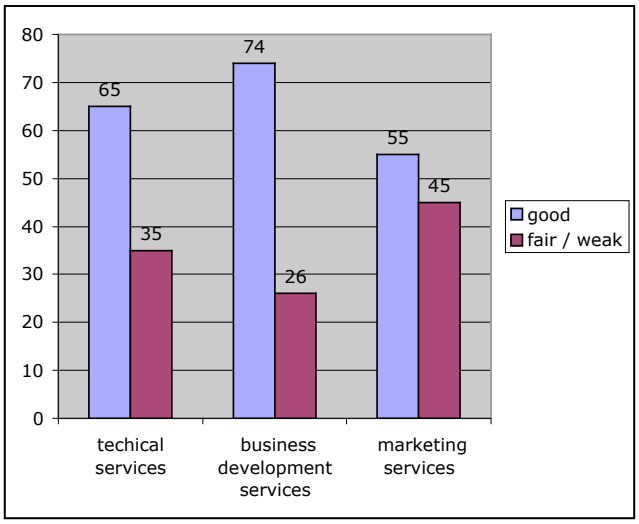
modifications to the system when the customer needed them. Such situation naturally puts SME clients in a difficult position.

FIGURE 1
SMEs' perceptions of the availability of KIBS



SMEs' perceptions of the quality of KIBS were also mainly positive as shown in Figure 2. However, the quality of KIBS was rated lower than their availability; in particular, this was true in the case of marketing related services. Four firms rated one of the three categories of KIBS as 'weak' in terms of quality. However, none of the respondents rated more than one type of KIBS as 'weak' in terms of quality. Hence, it can be assumed that the negative evaluations reflect the firms experiences, rather than an overall negative attitude towards KIBS.

FIGURE 2
SMEs' perceptions of the quality of KIBS



SMEs' challenges and experiences of purchasing and using KIBS

The following themes were discussed during the interviews in order to further probe and analyse the respondents' KIBS usage: the reasons for KIBS use, challenges that respondents had encountered in purchasing and making use of KIBS, solutions they have developed to tackle such challenges, the firms' perceptions of their own role as customers of KIBS, as well as particular cases involving either positive or negative experiences.

Reasons for using external KIBS

Various roles that KIBS can have in customer organisations' innovation processes are well established. Specifically, three roles played by KIBS in supporting innovation in customer organisations have been identified (Miles et al. 1995; Hertog 2002): As *sources* of innovation, KIBS firms inititiate and develop innovation activities in client organisations; as *facilitators* of innovation, KIBS firms support the client organisation's innovation process or infrastructure; and, KIBS firms are also *carries* of innovation when they aid in transferring existing

knowledge from one firm or industry to another so that this knowledge can be applied in a new context.

It is important to stress that not all KIBS transactions are innovation services (Toivonen 2004, 96). The role of KIBS in customer organisations strongly reflects the situation, needs and resources of the customer. In an OECD study (2006, 8) knowledge intensive services were categorised into the following four types: *renewal* services, which are directly related to innovation; *routine* services that contribute to improvement or maintenance of existing systems and activities; *compliance* services which help customers to work within their legal and regulatory environment; and, *network* related services which offer platforms for knowledge exchange.

SMEs interviewed in this study can be regarded as fairly skilful customers of KIBS: the roles of KIBS in facilitating renewal, in supporting routine activities, in providing a special expertise, and in providing a flexible resource where frequently identified by the firms.

Technical KIBS often contributed to innovation related activities: to the development of new products and modifications to existing products, as well as to the establishment of new organisational practices (for instance, when a new enterprise resource planning (ERP) system was introduced). Not all technical services, however, were connected to developing something new. Often technical KIBS providers were primarily considered in terms of providing a special expertise, or they acted as a flexible resource that was not possible, or economically feasible to build in-house. As many as 90 per cent of the furniture manufacturing firms and 70 per cent of the metal firms mentioned that technical KIBS were used to provide high level of specialist knowledge and expertise. Many SMEs, were using some specific type technical KIBS in a routine manner (e.g., electrical engineering design). For some SMEs, external engineering services were primarily a source of extra capacity during peak demand periods. Hence, both available specialist knowledge and flexible capacity seemed to motivate the use of technical KIBS.

Business development KIBS are almost by definition catalysts of renewal. The SMEs sought new ideas and solutions for their business development, financial planning, operations and human resource management from KIBS co-operation. Like in case of technical services, the use of business development services had become a routine in some firms. That is, co-operation with particular KIBS providers was established as a part of normal practice, for instance, the same consultants were repeatedly involved in the firm's annual strategy process. Here the buying process of KIBS becomes less complicated as one supplier provides services on a continuous basis. At the same time, the SME may become somewhat dependent on the suppliers, and lack of competitive

offers may make it difficult to evaluate services against other available sources.

SMEs motivations to use external marketing services were basically of two different kinds: either, they sought a special expertise (e.g., export marketing), or they wanted to have an outside, fresh view of their own marketing planning activities (e.g., brand development). In the case of market research, an external expert provided anonymity that was needed. The value of 'coming from outside' was also relevant in the case of many business development services (organisational and human resource development, in particular). An outside view was often regarded as more 'independent' and/or credible, as well as capable of bringing new insights and perspectives to the organisation.

To sum up here, KIBS seem to play several important roles in the SMEs' operations. They can contribute to improvement of various systems and activities within the firms, they can provide special expertise that is not possible or feasible to build internally, they offer flexible resources, facilitate renewal of business practices and support in new product development. Innovation related external services were perhaps mainly related to specific development projects which were initiated within the SMEs (KIBS as facilitators of innovation). Also, the KIBS role as carries of innovation became clear from the comments on the KIBS potential to bring into the organisation new knowledge and fresh insights.

Prior studies have demonstrated that the ability of firms to make use of KIBS depends on their existing knowledge base and resources in a particular field of expertise (Hertog et al. 1995; OECD, 2006, 13). Without sufficient level of internal expertise and resources, the absorptive capacity of KIBS client firm may be very limited. As a result, even the best external expertise will have little positive impacts in the client organisation. In the case of marketing related KIBS, the use of external services was typically restricted to advice on and implementation of some specific activities rather than on more 'strategic' planning and customer management related development. Based on the present data, the underlying reasons may only be speculated. In some of the cases, it is possible that the SMEs wanted to control and keep such strategic marketing functions in-house. However, for some of the firms, lack of own marketing expertise obviously affected their ability to identify marketing related needs. Highly production and technology oriented SMEs often have the tendency to be relatively weak in terms of marketing, and understanding the markets. Moreover, it is possible that the limited supply of high quality marketing services restricted demand for them: as reported above, SMEs' quality perceptions of marketing KIBS were relatively low in comparison to other types of KIBS.

Challenges in purchasing and use of KIBS

The SMEs were explicitly asked about their information sources on potential KIBS providers. The most important source of information was the firms' own prior experiences of a similar type of service, or purchase situation – this was true for all types of KIBS (technical, business development and marketing related services). 'Information provided by the service suppliers' (in case of technical and marketing services), and 'other businesses' in case of business development services were other important sources of purchasing information. Also, 'searching from Internet' was often mentioned as a way to find information about KIBS. The role of public sector organisations was quite limited, but for some firms it was important as they were looking for business development related services.

The discussion on the challenges the SMEs had faced in finding, selecting and purchasing services by KIBS revealed three key issues: a) difficulties in assessing the price and overall costs of offered services, b) challenges in finding a matching KIBS provider both in terms of expertise and personal chemistry, and c) slow progress of the purchasing process.

There were numerous challenges related to the offer specifications, or the service price. The total price is sometimes realised only after the service has been acquired. Further on, when the customer cannot specify its requirements without extensive help by the service provider, a priori price comparisons may not be feasible in practice; even when the price is known before the service is actually provided, intangible aspects of the service make it difficult to assess whether the service is 'worth its price'. Several firms, however, emphasised that when they were looking for special expertise that they did not have in-house, the price of the service was not a primary consideration. On the other hand, when KIBS are used in the role of providing the company with temporary extra capacity, choice of contract based on best price is typical.

In case of highly specialised services, finding a suitable KIBS provider was often perceived as quite difficult. In general, the more specialised the service was the more willing the SME was to look for the provider nationally and internationally. Not only is it important to find expertise that is fitting in the sense of technical content or substance of the service, the importance of personal chemistry was stressed. This should reflect the SMEs' accumulated experience of the service processes where knowledge intensive services are co-produced in customer-provider interactions (e.g., Gadrey and Gallouj 1998; Bettencourt et al. 2002; Hertog 2002). Having said that, instances of deep co-operation, where the service solution is essentially co-created in provider-customer interaction, are relatively rare in the present data. Often, the customer can

be characterised as a co-performer: the customer provides inputs (information, labour) into the service process that is basically organised by the KIBS provider (cf., discussion in Howells 2006). In any case, substantial interaction between the KIBS and the customer firm is usually needed, which highlights the importance of good personal working relationships.

Finally, slow progress of the purchase process was considered as problematic, unexpected, or even frustrating in some cases. Especially when the service was new to the firm, or an infrequently purchased, service specification could prove to be a surprisingly slow and demanding task. It required thorough internal analysis of what was needed, as well as internal marketing efforts. And, when the service was needed only occasionally, lack of purchase routines led to group decision making, which was time consuming.

The analysed SMEs had developed several ways to tackle the above kind of challenges. First of all, long-term personalised relations with specific KIBS providers were highly important when the service was frequently needed. Obviously, the parties save time and effort when they have already built business and personal knowledge of each other (e.g., Liljander and Strandvik 1995). Secondly, the active role of (general) management was often used as a way to reduce uncertainty related to new or major purchase decisions. The active involvement of the management could support internal situation analysis of the firm's needs and expectations of the service outcomes. Further on, high level management involvement had a positive effect on the firm's commitment to the service process. Finally, service agreements were in some of the SMEs an established way to manage and monitor KIBS interaction. Service agreements specified service objectives, activities, and the pricing principles. The actual use of services was then pending on the actualised needs of the SME client.

Effective use of KIBS: the importance of learning and commitment in customer organisation

The interviewees were asked to narrate both positive and negative experiences of selecting and making use of KIBS. In the analysis, two themes emerged: 1) the importance of learning from own prior experience, and 2) the key role of customer organisation's resource commitment in KIBS interaction.

The study highlights that effective purchasing and usage practices of knowledge intensive business services are to a great extent *learned in the actual service process*. For instance, own prior experiences were the most

important source of information on KIBS providers. Also, critical factors to be specified in the contract were often learned from prior (unsatisfactory) experiences. An example is provided by a case in which the SME acquired a wireless information network solution from a KIBS provider, and only after the solution had been in use for some time, the SME found out that the solution as provided without any security system. It is noteworthy, that negative experiences do not seem to affect the firms' willingness to make use of external KIBS as such, rather, they enhance the firms' willingness and ability to specify the service content in future KIBS transactions.

The respondents brought up several cases where they felt quite positive about the service process and interaction with the KIBS provider. However, as respondents took longer-term perspective, evaluations of service outcomes were not as positive. Some of the SMEs implied that they had learnt more effective allocation of resources as a result of the service delivery process. Finally, the firms' experiences had made their future expectations of KIBS potential more realistic.

The second theme that emerged from the interview data was the SMEs' awareness of the importance of their own inputs and commitment for a successful KIBS co-operation. Importantly, when the firms described their dissatisfaction with some KIBS interactions, they (also) analysed how their own lack of understanding, commitment or resources had contributed to the weak results. Consequently, the respondents stressed the importance of 'hard work' in the early stages of the process, both within one's own organisation (need and resource specification) as well as careful specification of the service with the potential KIBS provider.

The firms also emphasised the critical role of the customer firms' commitment for successful use of KIBS. Three types of commitment were identified: The first type can be called *mental commitment,* which refers to interest and active participation in the service process by management and those employees that are impacted by the service. Secondly, concrete resources need to be allocated to the service process: this can be called *resource commitment.* An issue that kept coming up when the interviewees discerned factors that had led to less successful instances of KIBS use, was inadequate allocation of time of customer firm's employees in the service process. Also, inadequate follow-up by the management was mentioned often. Finally, *commitment to implementation* refers to the fact that, in many cases, the eventual application of the service results remains the task of the customer company. Hence, the customer organisation needs to plan how it proceeds in further developing and making use of the service "after the consultant has left".

POLICY IMPLICATIONS OF THE RESEARCH RESULTS

The role of KIBS in the examined SMEs highlights the variety of functions service providers may have in their customer organisations. In the policy discussion and research literature, one of the central themes is the potential of KIBS in contributing to SMEs innovation capacity. The data reported in this study supports this argument. It shows that SMEs' interaction with KIBS does support innovation activities within customer firms; in particular, by providing specialised expertise in the development projects and by providing the client firms with new knowledge and an outside perspective.

However, all knowledge intensive services are not directly related to innovation. These 'other' roles of KIBS enterprises in the SMEs' operations are well established in a number of manufacturing businesses. The analysis illustrates the important role that KIBS enterprises have as they are providing client firms with specialised expertise that supports their core business functions (e.g., electrical engineering, design services, advertising agency services). KIBS also represent an additional, flexible resource that can be used e.g., during the periods of peak demand. Even here, use of external KIBS can have positive effects that influence the SMEs' development and future innovation potential. For instance, by focusing on their core business activities SMEs can pursue for business growth more effectively. Further on, interaction with KIBS enterprises may lead into SMEs better integration into the surrounding innovation environment.

Supply and availability of KIBS does not seem to constitute a problem for the analysed SMEs. Even though these firms identified gaps in the supply of some specific services, generally only few shortcomings were related to the availability of KIBS. From a regional point of view, these SMEs were both willing and capable of finding the specialised expertise from national and international markets. However, it is possible that the positive perceptions of KIBS availability at least partly reflects the fact that firms may simply be unaware of certain types of knowledge-intensive services. Hence, they are not missing something they do not know about. In particular, this may hold for research and development services, and, for innovation related marketing services. However, there was some indications on the bottle necks in the case of supply of high quality marketing services. Overall, 45 per cent of the respondents rated marketing related KIBS as only 'fair' or 'weak' in terms of quality. This suggests that the firms would expect higher quality from marketing related KIBS. Here, development policies could target marketing related KIBS and seek to improve availability of high quality services across the regions.

Overall, there would seem to be more pressing need for policy measures that are seek to stimulate demand for KIBS among the SMEs. At the same time, the supply of KIBS does not seem to be a significant problem. For many SMEs, it is important to become more aware of knowledge-intensive services, as well as the potential benefits of the use of external services. For instance, SMEs should be informed that the use of external services can be a starting point of building their innovation capacity. Building awareness is closely linked to the firms' existing knowledge base and resources. When the level of internal knowledge-intensive activities is low (e.g., in innovation management, or business development), public policy measures should first target at stimulating firms internal competences, thereafter measures can be taken which aim to help SMEs in building links with relevant KIBS providers (OECD 2006).

The experiences of investigated SMEs highlight the importance of client organisation's ability to manage service specification at the early stages of the process, and later on the management and follow-up of the service process and its outcomes. Specification of the customer organisation's needs and requirements, articulation of objectives, allocation of resources that carry out interaction with the KIBS provider, close follow-up of the service process, and early management of problems with the KIBS provider – are all elements of a successful use of external expert services. The present study also highlights that effective purchasing and management of knowledge-intensive business services is very much a 'learning by doing' process. Hence, outside actors (public policy measures) should not only encourage KIBS trial, but policy measures should also address building of customer awareness and competences in specifying their needs and requirements, making their expectations explicit, evaluation of KIBS suitability for their needs, as well as improving capabilities related to resource allocation and management of external expertise. To sum up, measures to stimulate demand for KIBS should raise the level of awareness and absorptive capacity within the SMEs. The following suggests possible avenues for such measures:

1. Supporting the work of (public) intermediate organisations[5] . Well-established intermediate organisations are relatively stable actors in their regions and they maintain 'an infrastructure of linkages' between regional businesses and knowledge intensive service providers. These organisations not only collect and provide information on services and

[5] For instance, regional employment and economic development centres (TE-Centres in Finland), regional centres of expertise (there is a special 'centre of expertise' programme co-ordinated by several ministries in Finland), and educational institutes.

services providers, but they can have an important role in reducing SMEs risks related to the selection and use of KIBS. Ideally, public intermediate organisations can stimulate the effective use of specialised KIBS services by reducing risks related to new purchase situations, by transferring good practices and by sharing SMEs user experiences of KIBS suppliers.

2. *Making effective use of formal and informal industry organisations in raising awareness of KIBS and the benefits of external expert services:* Often industry organisations are highly important information channels. Information provided by industry's 'own' organisations is typically perceived credible, relevant and timely in nature. Industry organisations can be highly useful in sharing user experiences of specific services and service providers. Less experienced firms in particular can benefit from such peer to peer information sharing. Hence, public actors might outline ways to support industry organisations in raising the level of awareness of the significance of knowledge-intensive services amongst less experienced businesses. Further on, industry organisations can also form channels through which member businesses make known their changing needs and situations. Public actors should actively gather such first hand information to be better aware of the SMEs' evolving needs.

3. *Public policy should promote the wider and more effective utilisation of SMEs existing relations with KIBS. The idea is that SMEs and KIBS firms may gradually extend the variety of services they jointly perform.* Some services offered by KIBS enterprises are not linked to innovation and renewal, but basically help the customer business to run its routines, or comply with regulations. Many SMEs are only interacting with the providers of 'routine' types of KIBS, e.g, accounting services (see OECD 2006). Hence, public actors could support KIBS enterprises: a) in offering high quality services, b) in developing wider service offering, and in some cases, c) to encourage and help their SME clients build linkages to a broader range of external expert service providers.

4. *Facilitating the use of highly specialised KIBS available only from outside of the region.* Often public supports for SMEs are regionally based supporting only the use of KIBS available within the region. However, it would be most useful if public supports could encourage SMEs to use of the best available services, even if they are delivered by KIBS that are located outside of the region.

References

BETTENCOURT (L.A.), OSTROM (A.L.), BROWN (S.W.) & ROUNDTREE (R.J.), 2002, « Client co-production in knowledge-intensive business services », *California Management Review,* 44(4), 100-128

GADREY (J.), GALLOUJ (F.), 1998, « The provider-customer interface in business and professional services », *The Services Industries Journal,* 18, 1-15

GEORGSDOTTIR (A.), LUBART (T.) & GETZ (I.), 2003, « The role of flexibility in innovation», *in* Shavina (L.), *The International Handbook on Innovation,* Oxford, UK, Elsevier.

Government Programme Document, 2007, Government Programme, II Cabinet of Mr. Matti Vanhanen, April 2007, Helsinki, Finland.

HERTOG (P. DEN), 2002, « Co-producers of innovation : on the role of knowledge-intensive business services in innovation », *in* Gadrey (J.), Gallouj (F.), *Productivity, innovation and knowledge in services – New economic and socio-economic approaches,* Cheltenham, UK, Edward Elgar, 223-255

HERTOG (P. DEN), ROELANDT (T.), BOEKHOLT (P.) & GAAG (H. VAN DER), 1995, « Assessing the distribution power of National Innovation Systems. Pilot study : the Netherlands. », *Report prepared within the framework of the National Innovations Systems project of the OECD,* TNO Centre for technology and policy studies, Apeldoorn, Netherlands.

HOWELLS (J.), 2006, « Where to from here for service innovation? », Paper presented at the Knowledge Intensive Services Activities (KISA) Conference, Sydney, 22 March 2006

LITH (P.), KAUTONEN (M.), HYYPIÄ (M.) & KUUSISTO (J.), 2005, « Uusimaa osaamisintensiivisten liike-elämän palvelujen keskittymänä » Culminatum Oy, Helsinki.

LILJANDER (V.), STRANDVIK (T.), 1995, « The nature of customer relationships in services », *in* Swartz (T.A.), Bowen (D.E.), Brown (S.W.), *Advances in Services Marketing and Management,* 4, Greenwhich, CT, JAI Press, 141-167.

MILES (I.), KASTRINOS (N.), BILDERBEEK (R.), DEN HERTOG (P.), FLANAGAN (K.) & HUNTIK (W.), 1995, «Knowledge-intensive business services: Their role as users, carriers and sources of innovation », *Report to the EC DG XIII Sprint EIMS Programme,* Luxembourg.

MULLER (E.), 2000, *Innovation interactions between Knowledge-Intensive Business Services and Small and Medium-sized Enterprises,* Fraunhofer Instititute (ISI), Physica-Verlag, Karlsruhe, Germany.

OECD, 2005, *Growth in services – Fostering employment, productivity and innovation,* Directorate for Science, Technology and Industry, IND/STP, Paris.

OECD, 2006, *Innovation and Knowledge-Intensive Service Activities,* OECD Publishing, Paris.

PATTON (M.), 2002, *Qualitative Research and Evaluation Methods*, 3rd edition, Sage, Thousand Oaks, CA, USA.

SAARIVIRTA (T.), VILJAMAA (A.), PÄÄLLYSAHO (S.), VÄNSKÄ (J.), KOTALA (S.) & KUUSISTO (J.), 2006, « Alueellisen innovaatiojärjestelmän vaikuttavuuden vahvistaminen. Tarkastelussa osaamisintensiivisten asiantuntijapalveluiden

(KIBS) käyttäminen ja tuottaminen », *Report for KISA-MET Project,* SC-Research, Lapua.

STOREY (D.), 1994, *Understanding Small Business Sector,* London, UK, Thomson International.

TOIVONEN (M.), 2004, « Expertise as business: long-term development and future prospects of knowledge-intensive business services (KIBS)», Helsinki University of Technology, Department of Industrial Engineering and Management, *Doctoral dissertation series 2004/2,* Espoo

VILJAMAA (A.), KUUSISTO (J.), 2006, « Public sector organisations' involvement in co-production of knowledge-intensive services from client's perspective », *Services Governance and Public Policies, Proceedings of the XVI International RESER Conference, Lisbon, September, 2006*, 103-123