Knowledge Management Approaches of Small and Medium-Sized KIBS Firms: a Descriptive Analysis of Four Countries

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Structured Abstract

Purpose –There is evidence that small and medium sized enterprises (SMEs) do not manage knowledge the same way as large firms, and that they approach knowledge management (KM) in various ways. However, the literature on this topic is still scarce and fragmented. In order to fill this gap, the paper aims to single out and discuss the different features that characterize the approaches to KM adopted by small companies.

Design/methodology/approach – The paper examines the KM approaches followed by companies of various KIBS sectors in 4 countries (Italy, Poland, Spain, and Romania) as they emerge from the findings of a quantitative survey which involved 223 small KIBS firms. KIBS companies were investigated because knowledge and its management are their distinctive elements, as highlighted in past studies.

Research results - The study confirms that small KIBS firms regard knowledge as a key competitive resource, and transferring/sharing knowledge is a key KM process. However, their approaches to KM are firm-specific and differ in several aspects, e.g.: number and kind of adopted KM practices; motivation and promoters of implementation; obstacles encountered in introduction; strategic and operational aims of such practices; level of formalisation and use in the company. Despite this variety, some regularities also emerge: the study shows that companies that implement KM activities as a response to knowledge-related problems coming from the daily practice follow a substantially different approach from those that implement them after a strategic analysis by the management.

Originality/value –The paper contributes to a better understanding of KM strategies followed by small KIBS companies with a diversified number of employees and belonging to different sectors. Also, it provides an evidence-based survey of different countries, which helps to highlight regularities in KM approaches even across multiple national contexts.

Practical implications – The study provides useful insights into possible KM approaches in the KIBS sector; also, it contributes to a better understanding of KM in small enterprises in general. This can be of use to company executives for revising their KM approach, for implementing more suitable strategies in their organizational settings and, more generally, for developing awareness of KM-related problems and possible solutions.

Limitations –At this stage, the study encompasses a descriptive examination of the data gathered by the investigation. This will serve as a preliminary basis for a further and more sophisticated analysis which is currently underway.

Keywords – Knowledge Management Strategies, KIBS, international survey

Paper type – Academic Research Paper

1   Introduction

This study addresses two main issues. The first one regards the implementation of knowledge management (KM) in small and medium-sized enterprises (SMEs). Although there is evidence that SMEs do not manage knowledge the same way as large firms (Wee and Chua, 2013), and that they implement KM in a number of possible ways, the literature on this topic is still scarce and fragmented (Durst and Edvardsson, 2012). Therefore, to contribute to fill this gap, the paper intends to single out and discuss the different features that characterize the implementation of KM by SMEs.

The second issue concerns the different possible approaches that companies and, particularly, SMEs can adopt when it comes to KM. Notably, after more than two decades of research, there is no consensus among scholars or practitioners on a universal or "best" approach to KM for all organisations. Indeed, different categories of possible KM strategies have been identified, based on the distinctive context of application (e.g. Choi and Lee, 2003; Hansen et al., 1999; Leidner et al., 2006; Maier and Remus, 2002; Schulz and Jobe, 2001; von Krogh et al., 2001). In addition, while KM has often been considered to be a deliberate activity based on formal plans, predefined processes and explicit resource allocation (Razmerita et al., 2016), other studies (Bolisani et al., 2016; Van den Hoff and Huysman, 2009; Zięba et al., 2016) show that, not rarely, informality and occasional problem-driven solutions may prevail. Therefore, there is still the need to achieve better understanding on this point and, particularly, to make an attempt of classification of the different possible KM approaches and their traits.

The paper discusses the findings of a preliminary analysis performed to detect and examine the possible distinct approaches to KM planning, especially in the context of SMEs. In particular, the paper aims to analyse two opposite approaches here referred to as *deliberate* and *emergent* KM strategies. The distinctive traits of the two KM strategies are investigated by means of a survey focused on aspects like: origin, restraints, promoters, scope, universality, formality, and adaptability of KM actions carried out in the examined companies. KIBS companies were considered due to their high potential dependency on knowledge and its proper management (Mangiarotti, 2012; Palacios-Marques et al., 2011).

The structure of the paper is as follows. In the next section, we briefly present the main characteristics of the two considered KM strategies. Section 3 describes the research goal and method. Section 4 illustrates the findings of the empirical investigation, showing particular distinctive traits of KM strategies, and section 5 discusses them. Study implications for managers and scholars, as well as limitations and future research avenues are listed in the last section.

2 KM strategies and planning approaches

In recent decades, KM has been an important area of innovation of management practices (Inkinen et al., 2015). While it is usually perceived as a deliberate and planned activity (e.g. Coakes et al., 2010; Wong and Aspinwall, 2004), recent studies (Paiola et al., 2013) suggest that companies can follow different strategic approaches for their KM activities. Particularly, it has been argued that not always a KM strategy is or can be completely planned and defined *in advance* but, rather, it may *emerge* and develop progressively from the day-by-day practice (Bolisani et al., 2016; Sparrow, 2005; Van den Hooff and Huysman, 2009). Pursuant to Bolisani et al. (2016), these two opposite approaches to KM have been defined as *deliberate* (planned) and *emergent,* and characterized as follows.

Deliberate or planned KM approach is an approach where practices, tools and methods of managing knowledge are linked to the general strategic orientation of the company, are deliberately designed at a top management level, KM goals are based on a rational analysis of company's needs, objectives and resources, and are later implemented and spread across the company with deliberate efforts and investments.

Emergent KM approach is an approach where practices, tools and methods of managing knowledge originate from the daily practices and learning processes of company's employees. In substance, employees develop their own methods of learning, storing, retrieving and sharing knowledge in relation to their actual needs and practical problems to solve. The methods and tools that prove to be effective, useful and/or compatible with the daily business practice are later developed and become established practices, and later can be recognized as "the KM approach" of the company.

The findings of an empirical investigation of two companies adopting these opposite approaches have offered a preliminary identification of some of their distinctive characteristics (Bolisani et al., 2015). As Table 1 shows, key features of the emergent strategy are: focus on daily practice and local problems, little resources to invest in KM, informality of management, voluntarism, no use of pre-defined KM models. Conversely, key aspects of a deliberate KM strategy are: strong connection with a company's competitive position and strategy, effort to pre-define formal plans, large resources to invest in KM, formal assignments and procedures, strong role of top management as a promoter of KM plans.

Table 1: A comparison between deliberate vs. emergent KM strategic approach (from: Bolisani et al., 2015)

Characteristics	Emergent KM	Deliberate KM
Origin	Real (practical/working) knowledge needs	Strategic analysis of company's situation. Systematic identification of knowledge gaps/needs
Restraints	Limited resources	Need for a critical mass of users
Promoters	Employees or management	Management only
Planning horizon	Short-term	Long-term
Scope of action	Local problems	Enterprise-wide problems
Role of ICT	ICT as opportunity to implement KM	ICT as a tool that can be used to support KM programmes
Use of KM concepts	Ex-post	Ex-ante
KM strategy	Exploitation & Personalization	Exploration & Codification
KM processes involved	Sharing/creation	Sharing/creation
Familiarity with KM language	Poor to medium	Medium to high
Degree of formality	Low	High
Involvement	Voluntarism	Formal assignment
Universality	Often case-specific	Less case-specific
Architecture	Puzzle-like, fragmented (i.e. building blocks that may be or may be not connected to one another)	Uniform, monolithic (i.e. introduced for the whole organization or significant parts of it)
Adaptability	KM solutions survive if they are flexible and can change over time with company's needs	KM solutions are designed in advance along with the re-structuring of the organisation (when needed)

In addition, an emergent approach seems to better fit with a personalisation strategy while a deliberate approach with a codification strategy (Hansen et al., 1999), because it is unlikely that an effective coding activity can be carried out without adequate planning and in the absence of clear guidelines. Also, both approaches can be adopted regardless of the particular KM processes that the company intends to support. Lastly, the emergent approach appears to be more flexible, as a result of fragmented system architecture, or a possible proliferation of solutions that may or may not be of use in the specific case or at a particular time.

3   Research goal and method

Considering that two case studies can be not enough to draw general conclusions, it was decided to carry on a survey on a wide sample of companies to investigate how they approach KM. In addition to examining the features of KM approaches adopted by companies (and especially, SMEs), it was decided to investigate how these different

approaches can be characterized, and if it is possible to detect the same general traits that were identified as a result of the case studies illustrated in Table 1.

In short, the survey analysed the characteristics of KM approaches followed by the investigated firms with regard to several aspects about their KM practices, the decisions that led to their adoption, and the ways they were implemented. The focus was on KIBS companies, because these businesses are, by their intrinsic nature, based on the use of knowledge as a core resource and, therefore, KM becomes, explicitly or not, a distinctive ingredient (Kock and Strotman, 2008; Tuominen and Toivonen, 2011).

Given the exploratory aim of the study, a "convenience sampling" approach was adopted. The survey was conducted between 11.2016 and 10.2017, and involved 223 KIBS firms from the SMEs sector located in different European countries (i.e. Italy- 65, Poland- 42, Spain – 65, and Romania- 51), and operating in different sectors. The average age of the surveyed companies is 15 years: about 63% of the companies are more than 10 years old. Tables 2 and 3 give a summary description of the sample.

Table 2: Sample composition (# of companies)

Sectors	Size class (n° employees)					Av. size
	1-9	10-19	20-49	≥ 50	Total	
ICT	14	21	41	31	107	47.8
R&D	0	2	2	1	5	30.6
Technical	5	4	7	14	30	65.0
Professional	5	8	12	9	34	39.7
Marketing/Comm.	9	9	12	10	40	34.5
Other	0	2	1	4	7	54.4
Total	33	46	75	69	223	46.3

In the next section, due to space reasons, a selected part of the findings is illustrated. In tables where data are shown by sector, sectors 'R&D and Other' are omitted since they include too few companies.

Table 3: Sample composition by country (% of companies)

Sectors	Country				
	Italy	Poland	Spain	Romania	Total
ICT	64.62%	14.29%	73.85%	21.57%	47.98%
R&D	1.54%	0.00%	3.08%	3.92%	2.24%
Technical	1.54%	40.48%	9.23%	11.76%	13.45%
Professional	9.23%	26.19%	4.62%	27.45%	15.25%
Marketing/Comm.	21.54%	14.29%	9.23%	27.45%	17.94%
Other	1.54%	4.76%	0.00%	7.84%	3.14%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Av. size	33.4	49.4	41.8	50.2	46.3

4 Empirical findings

The first examined issue is the relevance of knowledge for companies. We used a 1-to-5 Likert scale to collect responses where 1 meant a strong disagreement and 5 a strong agreement.

As expected, knowledge is widely considered the most important competitive resource by the respondent firms independently on their sector, size and nationality. Despite this, they did not pay an equally high attention to its management, and particularly they did not devote specific employees to such an activity. This regards all companies but primarily the smallest ones (Table 4). Among the different sectors, ICT stands out for taking better care of its cognitive assets. Considering the different countries, a special case is Poland, whose companies responded below the average values of the entire sample.

Table 4: Evaluations about company's knowledge (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
K* is our most important competitive resource	4.16	4.50	4.35	4.16	4.29
K sources have been identified and analysed	3.30	3.76	3.81	3.78	3.72
Ways in which employees must manage K are clearly defined	3.36	3.63	3.67	3.45	3.55
Problems related to management of K are known	3.42	3.76	3.83	3.49	3.65
Solutions to K management problems have been adopted	3.53	3.46	3.67	3.59	3.58
There are people devoted to managing the company's K	2.58	2.72	3.05	3.09	2.92

*from now on, K stands for knowledge

To manage their knowledge, the surveyed companies have introduced several practices in the last five years. In particular, the average number of adopted practices is equal to 6.26 out a maximum of ten. There are no significant differences among companies belonging to different sectors or size classes, and a slight difference at national level (with just Spanish companies apparently lagging behind the others in the total number of adopted practices). "E-mails for sharing knowledge" is the most employed practice (86%), followed by "capturing and storing knowledge in repositories" (79%), "taking care of building and maintaining employees' expertise" (77%) and "organizing meeting to exchange information" (71%). Generally speaking, "rewarding employees who share knowledge" (32%) and "communities of practices" (35%) are scarcely used. The larger companies adopt rewarding practices and regular meetings more frequently than the smaller ones, which may be easily expected. In terms of sectors, rewarding practices are used less by marketing and ICT companies, which leads to think that in

those sectors knowledge sharing is so taken for granted in the daily activities that there is no need to reward it. A result that is more difficult to explain is that technical services pay little attention to the creation of a "supportive environment for knowledge sharing".

Regarding the reasons of adoption of these practices, the answers generally underline that their introduction was more the response to practical cognitive problems encountered in the daily operations (59% of respondents) than the result of a strategic analysis of knowledge gaps made by executives/owners. This approach prevails in almost all size classes, with the only exception of the class 10-19, where the two approaches are equivalent (Table 5).

Table 5: Reason for having implemented KM-related practices (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
A perception of problems in managing knowledge from the ground	62.50 %	48.84 %	64.38 %	57.97 %	58.99 %
A deliberate strategic analysis led by owner/executives	34.38 %	48.84 %	35.62 %	42.03 %	40.09 %
Other	3.13%	2.33%	0.00%	0.00%	0.92%

Interesting differences emerge across sectors. Specifically, ICT companies show a balanced subdivision between the two responses, while a "problem-driven" approach prevails in technical and professional services (Table 6). This could be related to particular ways of organising and performing the cognitive work that denote each sector, but it is a point that requires further analysis. In Italian companies a "owner-driven" approach tends to prevail (50.8%), but to get an explanation for this additional research is necessary.

Table 6: Reason for having implemented KM-related practices (by sector)

	Sector				Total
	ICT	Tech	Prof	Mktg	
A perception of problems in managing K from the ground	50.49%	72.41%	66.67%	57.50%	58.99%
A deliberate strategic analysis led by owner/executives	48.59%	27.59%	33.33%	40.00%	40.09%
Other	0.97%	0.00%	0.00%	2.50%	0.92%

Even though the practices were introduced to face daily issues, the key promoters of their implementation are mainly executives and owners (Table 7). This denotes all size classes, but, especially, micro companies. It is worth to notice that owners/managers of micro firms are usually engaged in firm's everyday issues, so that they can easily detect the need to adopt such practices and promote their introduction. Conversely, the fact that

employees of larger companies are more involved as promoters can result from a greater delegation of duties that generally characterizes these companies.

The role of the workforce is particularly relevant among technical services, and this is congruent with their problem-driven approach. On the contrary, the role of employees is really marginal in Italian companies (10.8%), which confirms their more owner-driven approach previously recalled.

Table 7: Key promoters of the introduction of practices (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
Almost exclusively regular employees	6.06%	8.70%	4.11%	2.94%	5.00%
Mainly regular employees, with involvement of executives	6.06%	8.70%	17.81%	19.12%	14.55%
Regular employees and executives or owner in the same	27.27%	26.09%	36.99%	33.82%	32.27%
Mainly executives/owners, with involvement of employees	33.33%	45.65%	34.25%	38.24%	37.73%
Almost exclusively executives/owners	27.27%	10.87%	6.85%	5.88%	10.45%

Then, the survey investigated the barriers to the introduction of the KM-related practices. According to respondents, barriers like e.g.: limited financial and human, lack of specialists, insufficient number of people and resistance of employees, have not played a significant role. Lack of time to devote to the management of knowledge has been considered a barrier, but not so significant (Table 8). There are two further points to note. First, and not surprisingly given their technical background, ICT companies did not consider resistance of employees (2.06) and lack of specialists (2.59) as barriers at all. Second, employees were not considered a potential element of resistance to the introduction of KM practices especially in micro companies.

Generally speaking, the fact that even micro firms didn't perceive significant barriers to KM deserves further attention. A potential explanation is that small firms more seldom implement formal KM practices and, therefore, more rarely face barriers.

Table 8: Barriers to the introduction of the practices (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
Limited financial resources	2.42	3.00	3.08	2.90	2.91
Limited human resources	2.58	3.57	3.23	3.17	3.18
Lack of specialists	2.21	3.13	3.03	2.83	2.87
Insufficient number of people	2.09	2.59	2.28	2.30	2.32
Lack of time to devote to the management of K	3.30	3.57	3.48	3.54	3.49
Resistance of employees	1.70	2.48	2.24	2.61	2.32

The circumstance that the practices were implemented to solve daily problems also reflects into the short planning horizon for their introduction (only 15.1% of companies was indicated "long term"). 22.8% of firms answered that the horizon was not set in advance, and 23.7% that it was a short-term horizon (up to one year). This can be explained by considering that most of the investigated practices can be implemented (and changed) relatively quickly. Generally speaking, the answers did not signal a clear relationship between the length of KM planning horizon and the size or sector of a company.

Coming to the strategic reasons of KM practices, many companies affirmed that they aimed both to exploit the existing and to explore new knowledge. A smaller share was interested especially in the exploitation of the possessed knowledge, while very few companies were oriented to the exploration of new knowledge (Table 9). As regards sectors, technical services appear to follow a more unbalanced strategy; as regards nations, Romanian companies tended to adopt a more exploration-oriented approach.

The next two questions aimed at investigating the operational goals of KM practices.

A first question examined if practices were introduced to diffuse or to store knowledge. Again, a balanced approach prevails where both activities are carried out at the same time, with a lower number of companies that declare an orientation towards a diffusion of knowledge rather than its storage (Table 10). Technical services is the sector that claims to adopt the less balanced approach, thus confirming what emerged from the previous point.

Table 9: Strategic aim of the introduced practices (by sector)

	Sector				Total
	ICT	Tech	Prof	Mktg	
Almost exclusively to exploit existing K	9.43%	6.90%	14.71%	5.00%	8.60%
Mainly to exploit existing K, and a bit to explore new K	13.21%	27.59%	11.76%	22.50%	15.84%
Both to exploit existing K and to explore new K	66.98%	48.28%	55.88%	55.00%	61.54%
Mainly to explore new K, and a bit to exploit existing K	4.72%	13.79%	14.71%	12.50%	9.05%
Almost exclusively to explore new K	5.66%	3.45%	2.94%	5.00%	4.98%

Table 10: Operational aim of the introduced practices (by sector)

	Sector				Total
	ICT	Tech	Prof	Mktg	
Almost exclusively to diffuse/circulate K	12.26%	24.14%	8.82%	10.00%	12.67%
Mainly to diffuse/circulate K, and a bit to document/store K	17.92%	13.79%	14.71%	22.50%	17.19%
Both to diffuse/circulate K and to document/store K	56.60%	31.03%	58.82%	47.50%	52.94%
Mainly to document/store K, and a bit to diffuse/circulate K	10.38%	24.14%	11.76%	12.50%	12.67%
Almost exclusively to document/store K	2.83%	6.90%	5.88%	7.50%	4.52%

The other question was about the supported KM processes, as they are commonly identified in the literature (Holsapple, 2003). Responses are consistent with the previous results, and confirm that knowledge transfer/sharing is the most performed KM process, as the literature has always recognised (Ribière and Walter, 2013). Micro-companies focus more on creating/acquiring new knowledge than the others: probably due to their size, they need to resort to external knowledge sources (Table 11). ICT companies emerge from the others for a wider use of the practice to transfer/share knowledge (58.9%).

Table 11: Knowledge processes supported by the introduced practices (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
Creating/acquiring new K	27.3%	13.33%	19.18%	17.39%	18.64%
Storing/retrieving existing K	18.2%	11.11%	13.70%	17.39%	15.00%
Transferring/sharing K	39.4%	44.44%	42.47%	43.48%	42.73%
Applying available K	15.1%	31.11%	24.66%	21.74%	23.64%

Another group of questions investigated specific aspects of the introduced practices, i.e.: level of formalisation, voluntarism in their use, level of integration with other practices, breadth of use, and flexibility. The results are presented in Table 12. It is interesting to note that the largest firms differentiate from the rest of the sample in some aspects, i.e.: the use of practice by employees is less voluntary; practices are more integrated with the others and less flexible. All these aspects can be explained by the fact that big companies are in general more structured and formal, and this affects also KM-related practices. As expected, flexibility is the highest in case of micro companies.

Table 12: Characteristics of the introduced practices (by size)

	Size class				Total
	1-9	10-19	20-49	≥ 50	
Their level of formalization is very high	3.09	2.72	3.09	3.06	3.00
Their use by employees is voluntary	2.91	2.93	3.15	2.71	2.93
They are closely integrated with the other practices	3.33	3.57	3.76	3.38	3.54
They are used throughout the whole company	3.33	3.50	3.47	3.39	3.43
They are flexible	3.88	3.65	3.64	3.31	3.58

As regards the sectors, ICT companies show higher levels of integration and of widespread use, while technical services distinguish themselves for a higher level of formalization to which a less voluntary use and smaller flexibility are associated.

The final questions were intended to examine if and how much the investigated companies consider themselves "familiar" with notions and concepts of KM, and consequently if they were able to provide a definition of KM. The responses to the first question indicate that concepts and notions of KM are not so diffusely known (3.3/5). This limited awareness concerns all size classes, and especially micro companies. All this is also confirmed by the responses to the other question (Table 13).

Table 13: Companies able to provide a definition of KM (by size)

	Size class				Total
	ICT	Tech	Prof	Mktg	
Yes	51.89%	33.33%	42.14	52.50%	47.75%
No	48.12%	67.67%	55.88%	46.50%	52.25%

At the sectoral level, ICT and marketing services companies were able to provide a definition of KM, but, at least in the first case, this can be ascribed to the fact that the term KM inside the sector is often associated with particular software packages.

5   Discussion

The survey presents some useful insights about KM adoption by SMEs. First of all, the investigated companies introduced practices and tools to face knowledge-related problems, but, in most cases, the adoption did not stem from a deliberate and planned strategic analysis about cognitive gaps, but was the prompt response to specific and localized operational issues, as was confirmed by the usually limited (when not absent) planning horizon. This also explains why a balanced approach to KM prevails, both in terms of knowledge exploring vs. exploiting, and of knowledge storing vs. diffusion. Second, the survey confirms that knowledge transfer/sharing is the process that companies aimed to support mostly. Furthermore, since those practices can be introduced

relatively quickly, their adoption does not encounter particular barriers. Lastly, the investigated companies have a rather limited knowledge of the concepts and application of KM, which can further explain the prevailing of a bottom-up approach.

What is remarkable is that it is difficult to discriminate different approaches of companies based on their size, country, or sector of operation. To some extent, ICT and technical services show some peculiarities, but this does not lead to a clear characterization in terms of a specific KM behaviour. On the whole, the findings may suggest that the KM approach of a company is not connected with its sector, size, or country, but probably with other factors, like e.g. the underlying motivations of KM-related practices. In this regard, the investigated companies were subdivided between: a) those that declared to have implemented KM practices on the basis of a perception of problems coming from the ground; and b) those that declared to have implemented KM practices as the result of a deliberate strategic analysis led by the owner/manager. Companies of the first group can be denoted as adopters of an emergent KM strategy (as defined in section 2), while those of the second group as adopters of a deliberate KM strategy. Data in Table 14 (that includes only the answers where the two groups differ significantly) show that the two groups differ in several aspects, and that these differences are congruent with many of the points that had already emerged from of the case-study analysis earlier proposed in Bolisani et al. (2015) and illustrated in Table 1.

Table 14: Emergent vs. deliberate approach to KM

	Approach	
	Emergent	Deliberate
% of companies	59.5%	40.5%
% of small companies (≤ 50 employees)	60.3%	39.7%
% of companies more than 15 years old	57.5%	42.5%
K is our most important competitive resource	4.29	4.30
K sources have been identified and analysed	3.66	3.83
Ways in which employees must manage K are clearly defined	3.53	3.57
Problems related to management of K are known	3.56	3.77
Solutions to K management problems have been adopted	3.48	3.72
There are people devoted to managing the company's K	2.76	3.21
Capturing and storing K in repositories or written documents	76%	85%
Rewarding employees who share K	24%	46%
Using Communities of Practices to share K	29%	44%
Average number of introduced practice	6.06	6.62
Promoters of the introduction (mainly) were managers and executives	44.7%	54.3%
Barriers: limited financial resources	3.01	2.84
Barriers: limited human resources	3.34	3.00
Barriers: lack of specialists	3.02	2.69
Barriers: insufficient number of people	2.38	2.29
Barriers: lack of time to devote to the management of K	3.63	3.28

Barriers: resistance of employees	2.41	2.26
Planning horizon: not set in advance	24.4%	19.5%%
The practices were introduced almost exclusively to exploit existing K	11.8%	4.6%
The practices were introduced to exploit existing K, and a bit to explore new K	15.7%	17.2%
The practices were introduced to exclusively to diffuse/circulate K	15.1%	8.1%
The use of introduced practices by employees is voluntary	3.09	2.69
The introduced practices are closely integrated with the other company's practices	3.50	3.65
The introduced practices are used throughout the whole company	3.36	3.57
The introduced practices are flexible	3.53	3.65
In our company concepts and applications of KM are known	3.21	3.48

The first four lines of Table 14 confirm that size of the company, age, and declared importance of knowledge for the business do not influence their different adoption of a specific approach. Instead, it appears that:

- companies with a deliberate approach devoted more efforts to KM-related activities, including assigning specific people to KM;
- companies with a deliberate approach introduced a larger number of practices (with a higher use of rewarding employees and communities of practices);
- executives/owners of companies with a deliberate approach played a substantial role as promoters of the adoption of KM-related practices;
- companies with a deliberate approach encountered lower barriers to KM introduction;
- companies with a deliberate approach had often set a planning horizon;
- companies with a deliberate approach aimed more at exploring new knowledge and less at diffusing it;
- companies with a deliberate approach pursued a less voluntary use of KM practices; within these companies, practices are more integrated, more diffusely used and more flexible.

6   Conclusions

The study contributes to improve our understanding about how small and medium-sized KIBS companies manage their knowledge. It also lays the grounds for further examination on the distinction between deliberate and emergent KM strategic approaches. This distinction is relatively new in the literature and not so well examined (Bolisani and Scarso, 2015; Bolisani et al., 2015; Zieba et al., 2016) and therefore, the study is beneficial both to researchers and practitioners.

Even though the analysis does not allow to a more sharp characterization of the specific traits of the two approaches, it gives indication to how to proceed with this study. In particular, the variegated picture that emerges suggests that a potential research avenue would be to examine empirical data by means of cluster analysis: this, indeed, would facilitate a better identification of typical KM strategic approaches. Another direction of study would be to examine the effectiveness of particular KM strategies and their contribution to the company's growth and success. The aspect of cultural differences and the way they potentially influence the selected approach could also be a promising research avenue.

From a managerial perspective, the study provided food for thought about how companies handle their cognitive assets. Specifically, it makes them aware of the differences that denote various possible KM strategic approaches, so that it becomes possible to detect how their approach can be placed in comparison to other firms.

A major limitation of the study is that data were not analysed by means of specific statistical methods. However, as already stated, this limitation is going to be overcome by the performing of a more detailed analysis. Another potential issue concerns collecting data from various countries – it can on one hand provide a better insight, but on the other hand, it makes the picture even more complex.

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