

# Knowledge Management Approaches Among KIBS Companies and Their Determinants: Case Study Analysis

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**Abstract:** This paper aims to present knowledge management (KM) approaches manifested by knowledge intensive business service (KIBS) companies together with their potential determinants (company size, type of services offered, and organizational structure). In particular, two types of approaches have been selected and examined, i.e. emergent KM approach and deliberate KM approach. Indeed, although KM approaches have been abundantly investigated in the literature, there are still not many studies comparing emergent KM approach with a deliberate one, especially with regard to the determinants of the two. Hence, the paper contributes to a better understanding of the differences between these two approaches and their influencing factors. The list of their potential determinants was established on the basis of literature review. Further on, ten case studies (from companies of various sizes and offering various services) have been examined to verify the factors determining the selection of KM approach. Although it is not possible to generalize, and such an assignment cannot be taken as a golden rule, the paper advocates that emergent KM approach is determined more by being a small company, while deliberate KM approach is determined to more extent by being a medium-sized one. As the analysis shows, the emergent/deliberate approach can also be determined by the type of service offered – if the service is not somehow regulated, then emergent approach is more common (e.g. IT services); while if the service has to conform some legal regulations and laws (e.g. legal/accounting services), then deliberate approach is more probable to be detected. Finally, in many cases being a hierarchical organization determines choosing deliberate KM approach, while having a flat structure – choosing emergent KM approach. The findings of both literature review and case study analysis indicate that there is a need to further analyse emergent and deliberate KM approaches with regard to their determinants. In addition, from the practical point of view, the paper shows that the two different approaches towards KM can be chosen by managers depending on the characteristics of the company (e.g. its size, offered services and organizational structure).

**Keywords:** knowledge management (KM), emergent KM approach, deliberate KM approach, KIBS, Poland

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## 1. Introduction

There is no agreement among scholars on a universal or “best” approach to KM to be applied in all organisations. The research has singled out different typologies of strategies for KM, based on distinctive dimensions that can characterize the specific context of application (Bolisani and Bratianu, 2017; Paiola et al., 2013). Similarly, while KM is often considered to be a deliberate activity based on formal plans, predefined processes and explicit allocation of resources (Razmerita et al., 2016), other studies (Bolisani et al., 2016; Van den Hoff and Huysman, 2009; Zieba et al., 2016) highlight that, at least in some contexts, informality and occasional problem-driven solutions may prevail. These two approaches have been defined as deliberate and emergent. Although notions and implementations of KM strategies have become the focus of extensive investigation (Donate and Canales, 2012), few studies compare deliberate and emergent KM approaches. Nevertheless, this analysis is important especially because the adoption of these two opposite approaches to KM could be, to some extent, correlated to some key characteristics of the company and the operational circumstances.

To fill this gap, this paper contributes by investigating the approaches shown by knowledge intensive business services (KIBS) companies together with their potential determinants like e.g. company size, type of services offered, and organizational structure. KIBS firms are a particularly fruitful field of study since knowledge is their core asset (Miles et al., 1995) that they all manage, more or less intentionally. The paper first characterizes both types of approaches to KM (emergent and deliberate) and then discusses their potential determinants. In the next section, the paper presents research methodology and sets the research question: *What are the potential determinants of a deliberate and an emergent strategic approach to KM?* In the following part of the paper, the results of 10 case studies are presented with regard to their organizational structure, size and type of services offered. The last two sections are devoted to the discussion of results and conclusions.

## 2. Deliberate vs. emergent KM strategies

Many authors underscore the deliberate and planned nature of KM, arguing that only systematic practices directly and evidently targeted to managing knowledge should be intended as KM (Coakes et al., 2010; Holsapple and Jones, 2006; Wong and Aspinwall, 2004). On the other hand, some studies (Bolisani et al., 2016; Ferguson et al., 2010; Van den Hooff and Huysman, 2009) suggest 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. Referring to the work of Mintzberg and Waters (1985) in the strategic management field Bolisani et al. (2016) denoted these two opposite approaches to KM with the term deliberate (planned) and emergent respectively, and proposed the following definitions:

*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.*

In the view of Mintzberg and Waters (1985), pure deliberate and pure emergent strategies can be conceived as two ends of a continuum along which real-world strategies lie. This happens also for KM strategies, even if some preliminary empirical investigations have identified situations that come quite close to the two extremities. This is what results from the study by Bolisani, Scarso and Zieba (2015), where the characteristics of the two approaches have been identified and compared (Table 1).

**Table 1:** A comparison between deliberate vs. emergent KM strategic approach (from: Bolisani, Scarso and Zieba, 2015)

Characteristics	Emergent KM	Deliberate KM
<b>Origin</b>	Real (practical/working) knowledge needs	Strategic analysis of company's situation. Systematic identification of knowledge gaps/needs
<b>Restraints</b>	Limited resources	Need for a critical mass of users
<b>Promoters</b>	Employees or management	Management only
<b>Planning horizon</b>	Short-term	Long-term
<b>Scope of action</b>	Local problems	Enterprise-wide problems
<b>Role of ICT</b>	ICT as opportunity to implement KM	ICT as a tool that can be used to support KM programmes
<b>Use of KM concepts</b>	Ex-post	Ex-ante
<b>KM strategy</b>	Exploitation & Personalization	Exploration & Codification
<b>KM processes involved</b>	Sharing/creation	Sharing/creation
<b>Familiarity with KM language</b>	Poor to medium	Medium to high
<b>Degree of formality</b>	Low	High
<b>Involvement</b>	Voluntarism	Formal assignment
<b>Universality</b>	Often case-specific	Less case-specific
<b>Architecture</b>	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)
<b>Adaptability</b>	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)

Even though it is not possible to generalise, the study suggest that that the characteristics of each KM strategic approach may be compatible with the different organisational settings of companies and first of all with their size: undoubtedly, some features of the emergent strategy (i.e. focus on daily practice and local problems, little resources to invest in KM, and no use of pre-defined KM models) appear to be consistent with the characteristics

of small businesses, while the traits of the deliberate KM strategy (namely, strong connection with a company's competitive position and strategy, large resources to invest in KM, a medium-high familiarity with KM language) better fit with large corporations.

In addition, other features of the emergent strategy (i.e. short-term planning, voluntarism, low degree of formality) appear congruent with a flat structure, while those of the deliberate KM strategy (i.e. formal assignments and procedures, strong role of top management as a promoter of KM plans) seem consistent with a hierarchical structure.

Lastly, an emergent approach looks more suitable for a personalisation strategy while a deliberate approach for a codification strategy. Indeed, it seems unlikely that an effective coding activity can be carried out without adequate planning and in the absence of clear guidelines. In this regards, the need of codifying the possessed knowledge can be related to the kind of business activity performed by the company, which may depend on specific context like e.g. the level of regulation or other standardization requirements to which the business is subjected.

In short, the mentioned study provides clues as to whether there may be a relationship between the characteristics of a business and the KM approach that the company follows. However, given that the notions of emergent and deliberate KM strategy have been introduced recently, further investigation is needed about the potential determinants of each specific KM strategic approach followed by a company. In this paper, based on the mentioned studies, we analyze the existence of a possible correlation between the characteristics of a company and of its business (namely: size, organisational structure, kind of business activities - regulated vs. non-regulated) and its KM approach.

### **3. Research methodology**

Based on the previous discussion, this paper addresses the following research question:

*What are the potential determinants of a deliberate and an emergent strategic approach to KM?*

To answer this question, we applied the case study methodology. This choice was made due to the fact that there is no previous research devoted to this topic and therefore, the study needs to be of exploratory character (Yin, 2003). Furthermore, the concepts of emergent and deliberate KM approach are rising ones and there is not much research on it (Bolisani, Scarso and Zieba, 2015). Due to the above, an inductive methodology involving a multiple-case study method seemed to be the best choice (Eisenhardt, 1989).

For the purpose of the study, we interviewed managers or owners of companies offering knowledge intensive business services. Managers or owners were selected for interviews, as they are perceived as key informants in companies and were examined in some previous studies devoted to KM (Wong and Aspinwall, 2005; Palacios-Marqués, Peris-Ortiz and Merigó, 2013; Zieba, Bolisani and Scarso, 2016).

All the companies were located in the Pomeranian region of Poland and they were selected from a database with all such companies in the region. The companies were contacted by phone with an invitation to take part in the study. For those who agreed to take part, a convenient term was arranged, normally at their premises. The interviews were conducted during the period from September to December 2017. Selected companies varied with regard to the type of services they offered and the number of employees. Companies operated in sectors like financial and legal services, advisory services, design services, software services, etc. Before each interview, the purpose of the study was presented and the anonymity was guaranteed. All the interviewees *a priori* had to sign an agreement to participate in the study and to be recorded (all the respondents agreed to these conditions). The interviews were semi-structures and based on a list of questions concerning selected aspects of KM approaches and their potential determinants. Afterwards, interviews were transcribed with scrutiny and collated with field notes and information available on companies' websites. All this supported the validation of the obtained data (Suter, 2011).

The cases were based on the information delivered by the key informants from particular companies and on the documents gathered from other sources (i.e. websites of the companies, field notes, and materials delivered by

companies). The selection of case study methodology indicated that it is not possible to place some generalizations, but more to give further insights for the examination of the topic.

#### 4. Case study analysis

This section summarizes the findings of the ten case studies examined. In Table 2 one can find the characteristics of the companies, with their services description and declared number of employees.

**Table 2:** Characteristics of the examined companies

Company	Offered services	No. of employees
Firm A	Tax advisory services and accounting services	13
Firm B	Advertising services	9
Firm C	Services for the production of dedicated software	15
Firm D	Software development and implementation services	12
Firm E	Advertising services	7
Firm F	Accounting and management services	7
Firm G	Technical design services	20
Firm H	Management services	440
Firm I	Technical design services	40
Firm J	Scientific and research services	70

As it can be seen in Table 2, most of the companies examined were of small size, one was a medium-sized company and one was a large one. It is not surprising, as the dominating type of companies in developed economies are small ones (Miles et al., 2018). One company (Company I) was a small one, but approaching the medium-sized one (had 40 employees). As far as the characteristics of the services is concerned, the examined companies offered tax advisory and accounting services, software services, advertising services, management services, technical design services, scientific and research services. All these types of services fall into the category of KIBS services according to Miles *et al.* (1995) and Koch and Strotmann (2008). As far as the kind of approach followed by the investigated companies was detected, it was based on a subjective evaluation based on the answer given by the respondents to some specific questions made during the interviews.

##### 4.1 Organizational structure of the examined companies

The companies were asked about the organizational structure that they possessed, i.e. whether it was flat or hierarchical. One could expect that the structure of a firm offering knowledge-intensive business services should be flat to encourage internal cooperation and exchange of knowledge. However, it seems that is not always the case – some organizations indicated having a hierarchical structure (Firm A, Firm H and Firm J) and some others declared having a sort of mixed (flat and hierarchical or flat and process) structure (Firm C, Firm D, Firm E, Firm I). The remaining organizations stated that they have a flat structure (Firm B, Firm F, Firm G).

The companies having a hierarchical structure gave various reasons for such a case, but mostly it resulted from the responsibility and ability to make decisions:

*"The structure is hierarchical, although we try, regardless of this hierarchy, to create a bit like in the American model, a family, that is, being in such friendly relations. This structure is due to the responsibility and sometimes decision-making."* [Firm A]

*"We are a hierarchical organization in the sense of having 7 various levels."* [Firm H]

Some companies which declared having a mixed structure indicated that they are formally hierarchical, but in the real-life course they function with a flat structure. One organization (Firm I) is partly hierarchical (with the CEO and 3 managers) and partly process (with a pool of resources, which are attributed to particular projects, depending on their availability and skills). Being a hierarchical organization seems to determine the KM approach to some extent – the companies which had a hierarchical structure more often followed a deliberate approach, while the ones with flat structure – more often an emergent approach (Table 3).

## 4.2 Size of the organization

The size of the organization affected to certain extent the KM approach followed by the examined firms. In case of a large and medium-sized firms, both of them followed deliberate approach (Firm H, Firm J). So did two small companies, one of which had 40 employees (Firm I). The CEO of this company said that they are growing bigger and therefore, they need more planning and management. This can justify why they tend to follow deliberate KM approach.

*“At the upper level, however, there is a hierarchy, and later on, when it comes to projects themselves, it is a self-organizing organization. We had a completely flat structure, but this formula with 40 people was not working. I think that self-organizing team is OK up to 15 people, over 15 people, some hierarchy elements had to appear, because it was hard to manage.” [Firm I]*

Some small firms (Firm B, Firm C, Firm D, Firm E) manifested an emergent KM approach and two others (Firm F and Firm G) had a mixed one (some elements of emergent and of deliberate KM approach could be found).

## 4.3 Types of the service offered

The last aspect examined was the type of the service that was offered by the KIBS firms in question. It was established whether the services were subjected to many regulations, legal acts and norms or not. For example, in case of legal or accounting services, they very much depended on legal acts and regulations, while for example advertising services did not. It appeared also that technical design services and scientific & research services depended on many norms and regulations, just like the management services (they concerned management in one of the regulated brands).

This factor seems to determine the KM approach followed by companies to high extent. All the firms which offered non-regulated services (Firm B, Firm C, Firm D and Firm E) had an emergent KM approach. All the firms which had regulated services followed either a deliberate KM approach or a mixed one (emergent & deliberate). It can be connected with the ability to cope with the changes in regulations increased by their constant monitoring – firms which had to be up to date with the often changing regulations were more prone to consider some KM solutions in advance and therefore, more probable to follow a deliberate KM approach. Firms which did not have to search for regulations and which operations were not so reliant on them were more spontaneous in their KM approaches.

## 5. Discussion

The results of the case study analysis show that three expected factors (i.e. size of the company, organizational structure and regulatory character of the service) are able to determine the type of KM approach selected by organizations to high extent. All these factors are collected in Table 3.

**Table 3:** Synthesis of research results

Firm	Organizational structure	Organizational size	Type of service offered	KM approach
Firm A	hierarchical	small	regulated	deliberate
Firm B	flat	small	non-regulated	emergent
Firm C	flat/hierarchical	small	non-regulated	emergent
Firm D	flat/hierarchical	small	non-regulated	emergent
Firm E	flat/hierarchical	small	non-regulated	emergent
Firm F	flat	small	regulated	emergent/deliberate
Firm G	flat	small	regulated	emergent/deliberate
Firm H	hierarchical	large	regulated	deliberate
Firm I	hierarchical/process	small	regulated	deliberate
Firm J	hierarchical	medium	regulated	deliberate

Source: Own, based on research results

First of all, the investigated firms that declared having a hierarchical structure more often manifested a deliberate KM approach, while the ones indicating a flat or mixed structure, more often followed an emergent KM approach. Although hierarchical structure is somehow naturally related to planned activities and appointed to large organizations, this type of structure was detected also in some of the small firms analysed. Second, the size of the company also determined the chosen approach, but to lesser extent. The medium-sized and the large organization examined both followed the deliberate approach, but there were also small firms that had such an

approach. Therefore, not all small firms followed emergent KM approach, which could be a natural choice due to their overall characteristics (e.g. lack of time for planning, lack of resources, lack of strategic analysis, etc.) (Durst and Edvardsson, 2012; Zieba, Bolisani and Scarso, 2016). Finally, the last potential factor (type of service offered) seems to be a promising indication for the KM approach selected by a certain company. All the firms which offered services regulated somehow (e.g. by laws, legal acts, etc.) followed deliberate or mixed approach, while companies with non-regulated services – all chose emergent approach. It may be related to the fact that regulated services are more demanding and the consequence of for example inappropriate service offered can be more severe. For example, if a KIBS firm makes a mistake while implementing an IT system, in most cases it can be removed without severe consequences, but if a KIBS firm offers an improper legal service, it can lead to high fines or even suing a company. Therefore, firms offering regulated service need to plan their activities better and have some solid ways of gathering knowledge about the regulations, legal acts, etc.

## **6. Conclusions**

This study makes an evidence-based comparison of the potential determinants of the two opposite strategic approaches to KM, i.e. the emergent and the deliberate approach. As such, it contributes to the theoretical and practical area. As far as the theory is concerned, the study offers new insights for the knowledge management field, by expanding the concept of KM strategic approach. From the practice point of view, the paper clearly indicates that in some organizational settings it is more probable to choose certain KM strategic approach. For example, a small KIBS firm, having a flat structure and offering non-regulated services will most probably follow an emergent KM approach. At the same time, a large or medium-sized KIBS firm, with hierarchical or mixed structure and offering regulated services will frequently choose a deliberate KM approach.

The study presented in the paper has some obvious limitations. The first one concerns a small sample size and its composition. Ten case studies do not constitute a large research material, although similar number of cases or interviews had been analysed in other qualitative KM research on SMEs (e.g. Bishop et al. 2008; Nunes et al. 2006; Zieba et al., 2016). The second limitation originates from the fact that the study examined companies from the KIBS sector, which reduces the possibility of expecting similar phenomena in for example manufacturing sectors. Thirdly, the study is of preliminary character and further research is required to examine other potential factors influencing the selection of one of the KM approaches.

The potential areas of further studies could be as multiple. Firstly, a quantitative study on the three factors determining the selection of a KM approach could provide broader picture. Secondly, it would be valuable to examine other factors due to which SMEs from the KIBS sector may implement a particular approach. Finally, a classification of various emergent and deliberate KM approaches could be examined and developed. It would help in adjusting KM approach to the plethora of SMEs' needs.

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