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1 The Role of Leadership in Knowledge Management and Knowledge Transfer

Ferenc Farkas

1.1 Introduction

A research team made up of lecturers of the Faculty of Economics and Social Sciences of Rostock University and the Faculty of Business and Economics of Pécs University has been investigating the evolution of organisational competences needed for the economic development since 1998 with the financial support of DAAD/Hungarian Scholarship Commission (József Eötvös Public Funds) in the two countries. The third phase of the shared research in the years 2001/2002 aimed at analysing the specific features of knowledge management in professional service organisations through corporate examples and case studies based upon questionnaires and in-depth interviews.

The chief goal of the research was to examine the role of leadership in the knowledge management and the external as well as internal knowledge transfer of professional service organisations.

1.2 What is knowledge?

At the beginning some clarification of terminology is needed. This especially applies to the concept of knowledge. For some organization theorists it has become customary to turn to philosophy to grasp the essence of the knowledge concept. One possible approach is to use the distinction between know-that and know-how. Regarding know-that, the so-called traditional analysis of knowledge holds that a belief held by a person has to be justified and true in order to qualify for knowledge (Moser et al 1998). There is also a more practical kind of knowledge - know-how - that manifests itself in actions. More specifically, it is about how to appropriately, efficiently and successfully perform actions (Ryle 1949).

Nonaka (1994) used a modified terminology loosely based on the work of philosopher *Michael Polanyi* (1966). According to his view, the ability to express knowledge should serve as a criterion. on the one hand there is knowledge that can be - relatively - easy communicated in language, while the other kind of knowledge, tacit knowledge, has a more personal character. Knowledge management - as

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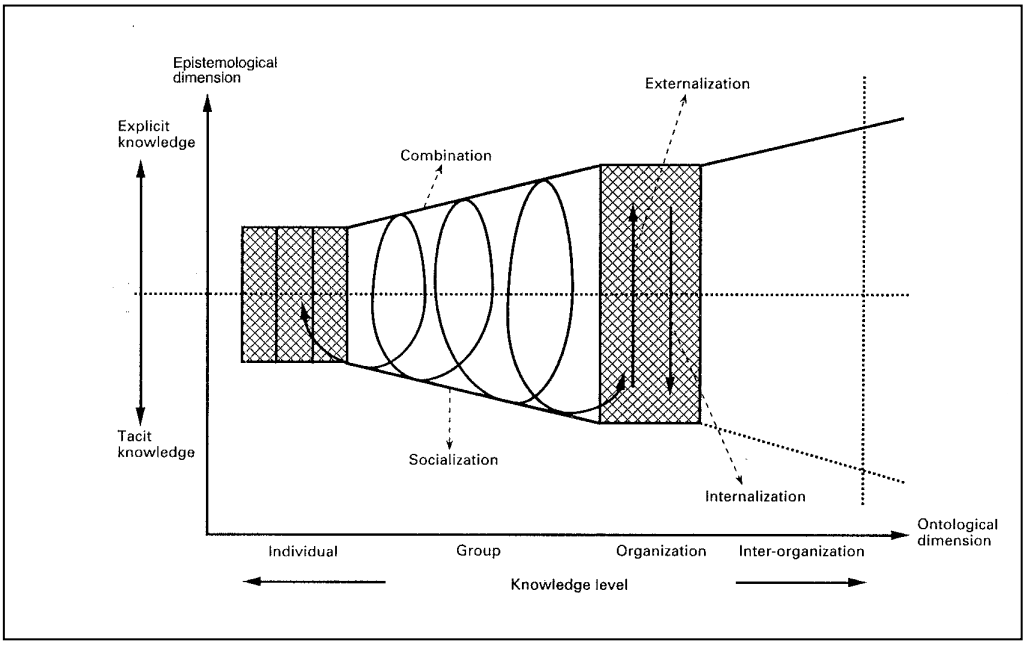
understood by Nonaka (1994) - builds on the conversion of both kinds of knowledge into one another. But there are two things to be kept in mind when focussing on a philosophical terminology:

(i) Neither management nor organization theory share the same goals as a philosophical theory of knowledge. A philosopher's task in the knowledge domain could probably be best described as performing thoughts on *human knowledge*, namely what is real and what we can know about this reality. Philosophical terminology is aimed at general phenomena that apply to knowledge of humankind as a whole. Additionally, time is not a crucial concept in this regard. Organization theory on the other hand is aimed at the understanding of organizations, for example their goals, functioning and behaviour

(ii) Apart from the different goals of analysis there is another point to consider when trying to use Polanyi's philosophical terminology in organization theory: the traditional theory of knowledge paid a premium on reflection, while this does not seem to be a matter of concern to Nonaka (1994). At the heart of Nonaka's ideas seems to be a way of influencing the company's performance in the' conversion of both types of knowledge. Knowledge in this view includes an immediate potential to act (Figure 1.1).

Figure 1.1 Spiral of organizational knowledge creation



Source: Nonaka and Takeuchi (1995: 73)

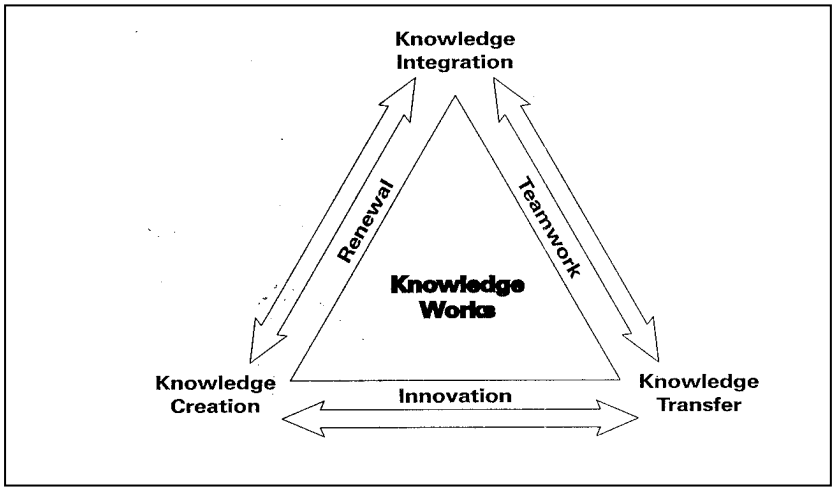
The terminology used for this paper is as follows. Data are building blocks for information, they can be representations of past events that people notice and bring to the attention of other people in an organization (Sanchez 2001). Information is data that is arranged in meaningful patterns. Knowledge as understood here is always specific to a special situation or point of view and gives a potential to act. These acts can be the creation of ideas or concepts, the application of knowledge in corporate decision-making etc. Nevertheless, the core distinction between tacit and explicit knowledge has been very well accepted. *Tacit knowledge*, for example, seems to have found a foundation in recent psychological research on implicit learning (Reber 1993).

1.3 Why knowledge management?

Knowledge management has become one of the most popular topics of management literature in recent years. A whole clump of research and publications proves the increasing value of intangible assets, knowledge property and the significance of the great potential lying in their efficient management. In the course of the research we argued in our theoretical work supporting the practical project that the growing importance of knowledge as a resource can be attributed to three factors, which form preconditions of one another. These are:

- structural reorganisation,
- the globalisation of economic activities and
- the evolution of information and globalisation technologies.

Figure 1.2 The knowledge works form



Source: Fruin (1997: 28)

The structural shift from labour- and capital-intensive activities to knowledge-intensive activities means that companies sell knowledge-based products and services on an ever larger scale. This structural change modifies organisational structures and leads to the reinterpretation of leadership and employee roles. The globalisation of the economy alters the international division of labour; industrialised nations turn into knowledge-based nations. The information and communication technologies make the quick and world-scale transparency of information possible. This, again, will result in rapid market changes and an accelerated innovation speed. In the framework of this project we mainly concentrated on structural changes. The scope of our research was a determined set of knowledge-orientated companies, and knowledge works, as Figure 1.2 has presented it.

In knowledge-orientated companies, the requirements and expectations which employees have to meet, their group work and roles are considerably determined by organisational concepts. From the point of view of knowledge creation, Nonaka and Takeuchi (1995) analysed top-down and bottom-up theories and came to the conclusion that a third method, a certain middle-up-down theory is more suitable for furthering knowledge creation. According to this theory, top managers develop a vision, while the middle management level elaborates clear concepts, which front-line colleagues and trained employees understand and implement. The middle management forms a type of intermediary level in charge of finding the adequate words, metaphors and slogans, which trained staff or customers will understand and enthusiastically embark upon task implementation. Middle managers act as knowledge engineers mediating between reality (which actually exists) and vision (which should be achieved).

However manifold the theories and methods of the individual companies may be, they all comply, consciously or spontaneously, with the principles of knowledge-based management. Nonaka's basic model shows how the implementation of corporate goals can be promoted by deliberate intervention, i.e. through shaping, co-ordinating and developing the knowledge base. Such actions can improve the motivation system of knowledge transfer, e.g. training measures, alliances with other companies, etc. These steps can contribute to success and yield financial and non-financial results of company operation.

1.4 A simple model of the knowledge transfer process

Barney (1995) argued that resources in order to be a source of competitive advantage have to be valuable, rare, not easily imitable and organizationally embedded. Apart from the first two dimensions, the possibility of imitation poses a challenge. In order to prevent knowledge from being imitated, it seems useful to connect it to factors that are not easily communicated such as tacit elements of

knowledge, local influences etc. But for the firm to be of any value knowledge must not only reside inside the originating organizational entity but also has to be transferred to places where it can be usefully applied. The solution to this problem seems to be to broaden our view to incorporate external variables in the discussion of the transfer process.

Bend (2000) offers a frame of reference for knowledge transfer to relate to. On the one hand there are *structural preconditions* for knowledge transfer to be effective such as the availability of relationship networks that allow the exchange of information. They are usually based on trust between partners and/or power relationships between individuals or groups. Knowledge itself also plays an important role: whether it is explicit or implicit knowledge, whether it depends on contexts factors for its understanding, whether it is complex or to be kept secret - this all influences the way a knowledge transfer is effected. The third structural element are the participants to an knowledge exchange - their role, the distance between them, the potential for absorption and the opportunity of putting the knowledge into use. On the other hand there is a process dimension of the knowledge transfer to be analysed: it is the media and transfer tools used but also the direction and level of development that results from the knowledge transfer.

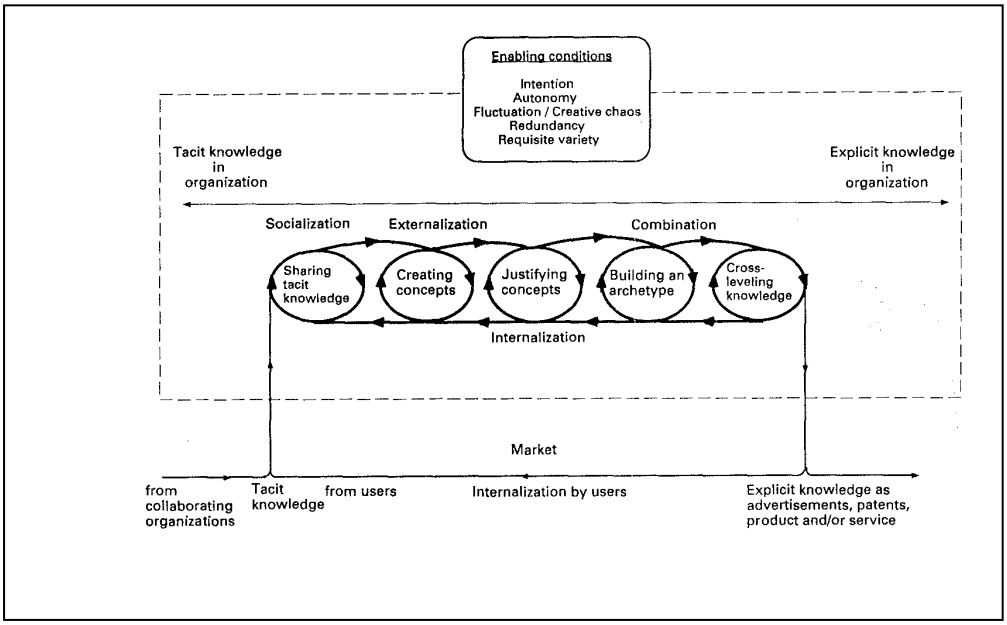
1.5 Relevant factors to a knowledge transfer process

One type of knowledge mentioned above is *tacit knowledge.* Zander and Kogut (1995) operationalised tacit knowledge on an organizational level using complexity, the possibility to codify it in written statements (like manuals), and the observability of the knowledge by competitors or internal staff (e.g. identification of relevant items without own experience in the subject matter). It seems reasonable to assume that the extent to which transferable knowledge is tacit has an influence on the transfer process itself.

Knowledge can reside within *individuals* or within the *relationships* between individuals, groups, or sub-groups. This points to the difference between communication intensiveness and knowledge intensiveness. It is not communication per se that allows knowledge to be created and transferred. Itself the creation is a complex process. Nonaka and Takeuchi draw up a five-phase mode (Figure 1.3).

But the transfer certainly plays a crucial role: without verbal or even non-verbal communication the only way to organize knowledge transfer would be to move around people holding the relevant knowledge. Speaking of explicit knowledge the question of transfer boils down to opportunities for knowledge sharing, possible delays of the transmission and biases from both sides of the communication equation (Huber 1991). There is an abundance of suggestions for choosing appropriate communication channels: direct communication, electronic channels such as email, bulletin boards and so on.

Figure 1.3 Five-phase model of the organizational knowledge creation process



Source: Nonaka and Takeuchi (1995: 84)

Modes of cooperation between individuals can also play an important role. Current literature on professional service firms postulates advantages of less formal cooperation mechanisms such as social norms and values, but it also acknowledges the necessity of hierarchical means of control, incentive systems and professional standards. The impact these means have on the way knowledge is shared is of principal importance to knowledge management in professional service firms. A related factor is the distribution of decision-making power within the organization.

Turning the attention towards the *recipients* of transferred knowledge it is important to make assumptions on their absorptive capacity (Cohen and Levinthal 1990). Basing the argumentation on an expertise model of knowledge management, it is important to have information on the education, experiences of professionals, the social context under which the transfer is taking place and the hierarchical or intra-group status of the recipient. Regarding context, it is assumed that the more similar the background of action the less likely it is the necessity of the transfer of tacit knowledge.

Because knowledge manifests itself in actions one also has to look for potential applications of knowledge. These applications can be routine and/or frequent tasks, such as the audit of financial statements by an audit firm or can be one time only, exceptional tasks (Dixon 2000). The difference between these two types of applications is that more routine tasks can be properly analysed, separated into clear,

identifiable steps and that more experience can be gathered in the performance of the task.

It is necessary to *distinguish between the how and the what* of a knowledge transfer (Boland et al 2001). The "how" of knowledge transfer seems to be a somewhat generic activity, some ideas on how to conceive of the process have been sketched above. Knowledge sharing can be thought of as the flow of pieces of knowledge within a network based on cooperative relationships. This network forms the basis of the social context against that knowledge is transferred. Knowledge can be transferred directly from sender to recipient, where psychological factors play a crucial role. An important influence on the success of transfer means is the *signalling* of the importance of the knowledge or the goal that has to be achieved. This has to be treated as a separate item in conceptions of knowledge transfer mechanisms.

The flow of knowledge within the network needs not be unidirectional, it is also possible that it passes several "nodes" within the network, where it is reinterpreted. Because of interpretation the content and associated value of the knowledge is constantly contested. Knowledge that does not fit to actual situations, problems or feelings is unlikely to pass many sequential "interpretation barriers".

Finally, knowledge has to lead to *actionable results* to be of any value to the organization. Knowledge management cannot lead to the creation of customer value or even to competitive advantages without its application to relevant client problems. While knowledge is usually developed in domains, actual application problems often do not fit these areas of expertise. So the work on specific client problems poses a kind of acid test on the effectiveness of the knowledge sharing efforts. It is important that the parties of a client engagement agree on a common definition of the problem to be solved, state their opinions from their respective perspective and together build a solution to the problem at hand.

1.6 The professional knowledge base as a possible content of knowledge transfer

In this research has been proved that the value created by having professionals do the job will not be obviously visible from the process side of knowledge transfer, it enters the arena from the *content* side. As indicated above at the heart of professionalism is a belief in specialized, applied knowledge (expertise). But there is also a component to this knowledge that cannot be standardized or commodified or at least is thought to be so (Freidson 2001). Knowledge's companion therefore is some form of social control as performed by professional bodies. For professionals this means that they have to find a balance between the relative autonomy granted from the profession's claim to a specialized body of knowledge and strategic imperatives of the professional service firm (Broadbent et al 1997). This also applies

to changes in regulation, the contents of the professional knowledge base or to changes in strategic direction of the firm.

Professional service firms therefore are not free to internally structure their work processes. They have to obey the boundaries of specialize d fields of expertise as set by the profession. Recently, there have been some movements in this area, indicating that some companies are creating multi- disciplinary practices, for example composed of auditors, tax consultants and lawyers. But these movements will also be mirrored by corresponding pronouncements of professionals' licensing bodies. The point is the following: setting up a knowledge management initiative in a professional service firm will almost surely result in a separation of knowledge fields where some experts are taking a leading role in the further development of the area.

For knowledge transfer this means that one would expect relatively little transfer of professional knowledge between the designated areas of expertise. Usually this makes sense, because for example latest developments in audit methodologies are of little value to lawyer operating under the game corporate roof. On the other hand knowledge on individual customers, their known preferences and past service offerings can be of value. This may also apply to the usage of common information technologies such as Lotus Notes. What is of concern here is that different points of view resulting from different professional background should mostly appear at the engagement level.

Within the professional areas of expertise on the other hand, individuals can build on a common vocabulary (as learnt during their education), common institutions that help in the formulation of new expressions, the explanation of new phenomena and provide a forum for the exchange of ideas to its professionals. Often, conferences are organized by parties external to the firm, furthermore journals are published that help in the distribution of new ideas. Another factor is the actual work experiences of professionals on an engagement, where "standard" knowledge management explanations seem to hold best.

1.7 Why study professional service firms?

The term professional service firm is used to describe companies that work in an industry that is characterized by a self-regulation of professionals regarding the contents of their work. The content is usually connected to a claim of expertise, that is a special body of knowledge based on the education and experience of individual members of the profession. Services delivered by members of the profession share some unique properties: they are usually custom-made, knowledge-intensive services, the service delivery process is characterized by judgements of experts and professional standards play at least a role in setting minimal levels of conduct. At the individual level, the explicit content of the body of knowledge is usually well

developed in professional settings. Knowledge is of great concern for professional service firms because it is one important input factor to successful competition in the market place. If one assumes a general trend towards more knowledge-based products and services in Our economy, lessons drawn from the management of professional service firms can be of value to other organizations as well. Furthermore, many social arrangements and even legal regulations are in place around professionals, indicating a need for the protection of knowledge assets.

How does this influence the way professional service firms are organized? One way of thinking about it is to consider Maister's (1985) so-called "3S framework". According to this framework three goal-categories are immanent in all kinds of professional service firms: (i) solutions that satisfy customer needs are demanded by the market- place (output side - client *service),* which requires (ii) motivated and capable individuals working for the company (input side - professional *satisfaction*). Furthermore the work of professional service firms is on (iii) a for-profit basis (financial *success).* The organizational structure of these firms is usually based on individual client-projects. Depending on the contents of these projects and the level of expertise required to perform them three generic types of projects can be distinguished (Maister 1993). There are so called brain projects that require professionals to find a unique, innovative solution to complex client problems. Grey hair projects are based on an experience in related situations the client is facing. The value proposition of procedure projects is not so much based on effectiveness of a service rather it includes a solution to a standardized problem, e.g. an ISO 9.000 - certification with related services.

When looking at professional knowledge, care has to be taken when talking about the management of “the knowledge” of an organization. One has at least to distinguish two levels - on the one hand there is the body of knowledge common to all members of a profession and serves as a kind of "entry ticket" (when passing the required examination) and common base upon which to build. It is not the case that this common body of knowledge is critical for competitive advantages of social entities working in the domain regulated by professional standards. This takes place at the expert level. After a prolonged period of time - usually more then ten years - in practicing a special activity individuals could be termed experts when their performance level fit expectations. Building a reputation for quality service for many professional service firms means relying on experts in their respective fields. This is what makes knowledge transfer for professional service firms tricky: you cannot simply ask experts what they know and write this down.

Regoczei and Hirst describe the problem as follows: "Even if knowledge itself does not come in pieces, language does. What the expert says - words, phrases, expressions, and sentences - are all piece like and discrete, and inevitably there is a mismatch between the possibly continuous, aggregate or conglomerate-like substance on the one hand, and the hard-edged, bony concepts and linguistic expressions on the other" (Regoczei and Hirst 1994: 20).

Getting experts from various field to work effectively together on a client problem requires something more. If we remember the time it takes in active practice to hope to be able to perform on an expert level, it would be a mistake to subscribe to an operational level of analysis only (Ericsson and Charness 1997).

1.8 Professional service organisations: the sample

In the framework of a formerly implemented German-Hungarian DAAD-project entitled 'Novel strategic concepts and the development of rural areas', the process of competence evolvement was demonstrated in the case of numerous German and Hungarian companies (DAAD 1998, 2000). However, we failed to get all employees involved expediently and comprehensively in the company processes, which would be one of the key elements of knowledge management.

In the framework of the new project we attempted to trace those factors which make it possible for management systems to transform the individual knowledge of all employees into collective knowledge and to make good use of it in a venturesome manner – i.e. for the sake of the company's success. Experience shows that the miscarriage of knowledge management in practice is due to the improper means of implementing in-company knowledge transfer (Szűcs 1999). It was also a goal of this project to find appropriate methods since the use of knowledge with suitable tools is a high-priority management task.

The subject of our investigation was the scope of companies where knowledge development is of crucial importance, namely professional service firms such as consultants, planning offices and accountants. Accordingly, the shared project consists of three parts within which a comparison of corporate knowledge development matters has been carried out regarding the individual professions.

The peculiarities of knowledge transfer in the three above mentioned types of professional service organisations have been presented in a separate study (Farkas and Kühnel 2002).

The construction of the data base needed to attain the goal of the research began in both countries with the registration of the parent population. In Germany this was carried out with the help of professional publications and professional telephone directories. In Hungary a nearly complete list of firms to be potentially interviewed was compiled with the aid of the professional associations (Hungarian Association of Management Consultants, National Chamber of Hungarian Accountants, etc.).

The sample, on the whole, is not representative, but the scale of the scrutinised organisations (50 questionnaires sent out per country and per branch) makes reliable analysis and conclusions possible. The questionnaire had originally been prepared in German language. We used a word-by-word translation in Hungary.

The distribution of the analysed sample (the returned and processed questionnaires) is shown in Table 1.1. The survey was carried out in autumn 2001 and spring 2002 in Germany and Hungary, respectively.

Table 1.1 The distribution of sampled firms on the basis of national and branch status

Branch	**Country**		
	Hungary	**Germany**	**Total**
Consultant	37	21	58
Accountant	27	23	50
Agency*	18	31	49
Total	**82**	**75**	**157**

Note: The denomination 'agency' does not properly cover the organisations included in the third branch. Organisations managing or accomplishing projects are pigeonholed here, the main task of which is to mediate knowledge and other resources. The German version of the questionnaire used the expression 'office of engineers'.

The information gained from the questionnaires is enriched by case studies based upon in-depth inteviews (in a size of 20 pages each). The total number of case studies is 6, made up of 3 German and 3 Hungarian, 1 representing every one branch. A methodological guide was elaborated to accompany the case studies. All branch studies were focused on one key field of leadership. Hence the primary aspects of the analysis were

- communication, in the case of consultants,
- feedback and control, in the case of accountants and
- shaping the organisational structure, in the case of agencies.

1.9 Main conclusions

The professional service organisations (PSOs) surveyed and described in the case studies dispose of a great number of knowledge management features in Germany as well as in Hungary, which influence the leadership of these organisations in effect. As effective leadership is situative in any case, i.e. tailored to the prevailing situation, it is useful to began by summarising the specific features of PSOs we experienced – in the first place concentrating on knowledge management

characteristics. The conclusions comprehend the common elements of national features; the otherwise existing cultural differences are not dealt with in this paper[1].

(a) Consultants under scrutiny

- These organisations want to be 'different', they strive to differentiate themselves from other consultants. They elaborate a methodology, software, IT system, report and presentation system of their own. They aim at shaping and communicating an independent corporate culture.
- Beyond the codified principles, their methodology is tailored to the clients, their products cannot be regarded as mass products, nor their services as mass production.
- Their competition strategies are, for the most part, competitive, endeavouring to be the first. It is typical of them to pick up and make the most of information quickly. The structure, technology (knowledge platforms) and resources are co-ordinated accordingly.
- The gathered information is rapidly passed on to the employees.
- Knowledge management is part of corporate policy. The most important forms of knowledge division and transfer are training and mentoring.

(b) Accountants under scrutiny

- The environmental (above all legal) determination of the organisations of this branch is strong, although provisions of law change frequently – particularly in Hungary. The preparation for applying EU regulations is a great challenge.
- Changing rules on the one hand mean a pressure to learn, and on the other hand require strong interest representation (safeguarding) activities in this branch.
- International (globalised) knowledge has been accumulated in the large firms of the branch. This knowledge cannot easily be put to good use in Hungary yet. In Germany there is a greater demand for creativity.
- The externalisation of codified knowledge is hampered by the trade secret obligation, a basic characteristic feature of the branch.
- In this branch, work (thus the necessary knowledge) is often combined with consultancy, hence it is given a twofold character.
- The bearer of knowledge in the projects is the team, and not the individual. Knowledge management is a kind of internal service which does not generate further knowledge.

[1] Further, detailed results of this research can be found in a compilation of essays and studies published in Germany (DAAD 2002). This volume synthesises of the edited versions of the presentations of the scientific symposium held on 24-25 July 2002 in Rostock.

(c) Offices of engineers and agencies under scrutiny

- The organisations of this branch are in transition in both countries: linear-functional structures are taken over by project-team organisations.
- The participating expert usually only knows the particular project and disposes of the knowledge needed for that. Teams and often subcontractors are necessary to implement complex projects. The work of subcontractors has to be co-ordinated as well.
- The applied knowledge embraces obligatory knowledge elements bought by the client from the professional service organisation. Clients do not know statutory provisions and regulations.
- In this branch, project management knowledge represents a core competence.
- The most important element of individual and organisational knowledge in this branch is contact capital.
- In the course of knowledge management, organisations must seek to turn knowledge acquired from the projects into organisational knowledge. This process requires the documentation of the elements of knowledge.
- The demand for knowledge needed for compiling and managing applications for tenders (EU tenders) is characteristic of this branch, in the first place in Hungary. Human resource and organisational conditions must be provided for this purpose, otherwise the companies of the branch can reckon with loss of knowledge.

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