Taxonomies of Organizational Knowledge

Alina Mihaela DIMA, Vitalie STANCOV
Academy of Economic Studies, Bucharest
alinamihaeladima@yahoo.com, vitalie.stancov@gmail.com

The paper systematizes organizational knowledge, starting from the classical dichotomy of tacit and explicit, and outlining the importance of these taxonomies, which may seem reductive, in properly understanding the nature of organizational knowledge and operating with it in business.
Keywords: *organizational knowledge, classifications, knowledge transfer.*

1 Introduction

In any organization, there may be identified two distinct levels of knowledge. The individual level of knowledge, which belongs to each member of the organization, can be released only by the individual. Individual knowledge may be also of tacit, explicit or combination of the two type of knowledge. Due to its nature, explicit individual knowledge can be detached from its owner and processed at the group or organizational level (Bratianu, Jianu et al, 2006, pp.169-172), because it is systemized in a certain form and can be transferred to and perceived by others.
Organizational knowledge means all the knowledge which can be integrated at the organization level from individual knowledge of its members and from incoming knowledge fluxes from the external environment (Bratianu, Jianu et al, 2006, pp.169-172). Organizational knowledge is embedded knowledge and comprises belief systems, collective memories, references and values. It "resides in the relations between individuals, and is therefore more than the sum of individual knowledge bases" (Kriwet, 1997; in Chini, 2004, pp.8-10).
The tension between individual and organizational knowledge is especially critical to the company as a knowledge integrating institution. Knowledge has to be managed as a resource (Chini, 2004, pp.8-10). A company's competitive advantage is not only dependent on its distinctive intangible resources but also on its capability to exploit those resources effectively (Nelson and Winter, 1982, in Riege, 2007).

2. Knowledge transfer processes

A relevant working definition of knowledge transfer is provided by William R. King: knowledge transfer is "the focused, unidirectional communication of knowledge between individuals, groups, or organizations such that the recipient of knowledge has a cognitive understanding, has the ability to apply the knowledge, or applies the knowledge" (Schwartz, 2006). Knowledge transfer is the application of prior knowledge to new learning situations (McKeough, 1995, in Riege, 2007, p.48).
Two general theoretical approaches can be mentioned related to the knowledge transfer processes: the communication model and the knowledge spiral model (Inkpen and Dinur, 1998; in Chini, 2004).
According to the Szulanski's (1996; in Chini, 2004) theory of knowledge transfer as **a communication model**, the process of knowledge transfer can be viewed as a message transmission from a source to a recipient in a given context. In this respect, the basic elements of a transfer should be: source, message, recipient and context.
Inkpen and Dinur (1998; in Chini, 2004, Minbaeva, 2007) extended this model and mention four groups of related factors, depicted in Figure 1.
Also, Szulanski (2003, in Minbaeva, 2007) defines knowledge transfer as a process of dyadic exchanges of knowledge just between the sender and the receiver, where the effectiveness of transfer depends to some extent on the disposition and ability of the source and recipient, on the strength of the tie between them, and on the characteristics of the

object that is being created.
It is important to mention here that a critical feature of modern knowledge management is the time-lag between sender and recipient (Chini, 2004, p.16). Thus, the knowledge transfer process may be interrupted, postponed and restored.

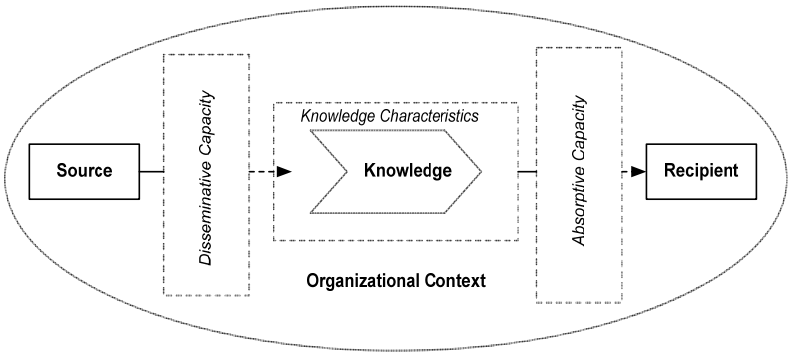

Fig.1. Schematic diagram of knowledge transfer processes
Source: Adapted from Minbaeva (2007, p.569)

It was referred before to the fact that the decision to transfer knowledge is largely individual and is driven by at least two behavioral factors: the ability and the willingness of knowledge senders to share knowledge. According to Husted and Michailova (2002, in Minbaeva, 2007) the decision not to share is also individual, and is often rational and well justified from the perspective of the knowledge.
The other main model of knowledge transfer is the so called **spiral of knowledge**, proposed by Nonaka and Takeuchi (1995), who attribute the success of Japanese companies to their effectiveness in creating knowledge. This model is built on the dimension of explicit and tacit types of knowledge. The core assumption of this model is that tacit knowledge has to be mobilized and converted. This means that the model does not only explain knowledge creation, but also describes processes of transferring knowledge, specifically the so-called conversion process. Nonaka and Takeuchi (1995) identify four specific conversion processes:
- Socialization (tacit to tacit) occurs when individuals exchange tacit knowledge without codifying it during the transfer phase, e.g. shared mental models, technical skills.
- Externalization (tacit to explicit) happens when tacit knowledge is made explicit by codifying it in the form of metaphors, analogies, hypotheses, models etc. In this way individual knowledge can be made available on a corporate-wide level. Externalization is thus the most important process for knowledge creation.

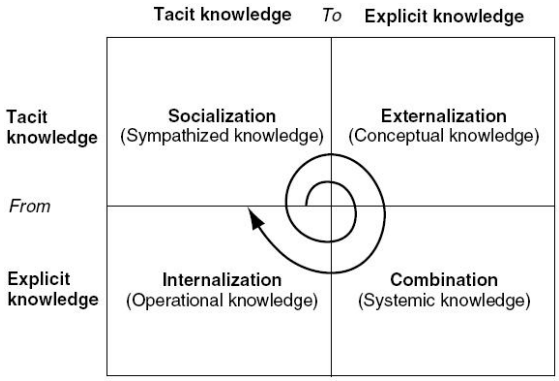

Fig.2. The knowledge spiral, source: Nonaka and Takeuchi (1995, p.62)

- Through Combination (explicit to explicit) concepts are systematized within a knowledge system. Existing elements of knowledge are combined in order to create new explicit knowledge. Several media, e.g. documents, meetings, phone calls, support combination.
- Internalization (explicit to tacit) means that incoming knowledge is integrated into an individual's knowledge base.

The relation between these conversion processes is presented in Figure 2.
This knowledge spiral is double-looped and may indicate the type of learning which the

conversion processes imply. Argyris and Schön (1978) distinguish between single-loop and double-loop learning. In single-loop learning the entities (individuals or organizations) modify their actions just according to the difference between expected and obtained outcomes. In double-loop learning, they question the values, assumptions and policies that led to the actions in the first place. Double loop learning implies a profound retroactive analysis of the outcomes. It is not just an adaptation in the process to the unforeseen changes, like in the case with single loop learning. The double-looped knowledge spiral is used in this representation, because the process of transforming tacit knowledge into explicit one supposes a deep analysis and high understanding of the roots of tacit knowledge, covert in routines, skills, knowing-how of the individuals or organizations. At the same time, there is a continuum of the transformation process and a direction of the spiral arrow, as tacit knowledge once converted into explicit one is internalized further into an individual's knowledge base.

3. Conclusions

The knowledge transfer processes in organizations are a continuous interplay of individual and organizational knowledge. Given that these types of knowledge are interrelated, and thus difficult to dissociate, the importance of reliable taxonomies becomes obvious.

Although some taxonomies are impracticable, because they advance too many classes of knowledge, or go into details which are not useful from the point of view of the sequence of activities actually taking place at the organizational level, some other, which are simple, without being simplistic, prove to be trustworthy instruments in conceptualizing and explaining knowledge, and transforming it from something which sticks and flows independently of our management, into a "substance" which can be managed with good effects on the performance of the modern organization.

References

Argote, L., Ingram, P. (2000) Knowledge Transfer: A Basis for Competitive Advantage in Firms, *Organizational Behavior and Human Decision Processes*, 82(1):150-169

Argyris, C., Schon, D. (1978) *Organizational Learning: A theory of action perspective*, Reading: Addison-Wesley

Bratianu, C., Jianu, I, Vasilache, S. (2006) *Business Management*, Bucharest: ASE

Chini T. C. (2004) *Effective Knowledge Transfer in Multinational Corporations,* New York: Palgrave Macmillan

Davenport, T. H., Prusak, L. (1998) *Working Knowledge*, Cambridge, MA: Harvard Business School Press

Galbraith, C. S. (1990) Transferring core manufacturing technologies in high technology firms, *California Management Review*, 32(4):56–70

Kriwet, C. K. (1997) *Inter- and Intra-organizational Knowledge Transfer*, Bamberg: Universität St. Gallen

Minbaeva, D. B. (2007) Knowledge Transfer in Multinational Corporations, *Management International Review*, 47(4):567-593

Nelson, R.R., Winter, S.G. (1982) *An Evolutionary Theory of Economic Change*, Boston: Harvard Business School Press

Nonaka, I., Takeuchi, H. (1995) *The Knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation*, New York: Oxford University Press

Riege, A., (2007) Actions to overcome knowledge transfer barriers in MNCs, *Journal of Knowledge Management*, 11(1):48-67

Schwartz, D. G. (2006) *Encyclopedia of Knowledge Management*, London: Idea Group Reference

Szulanski, G. (1996) Exploring internal stickiness: impediments to the transfer of best practice within the firm, *Strategic Management Journal*, 17:27–43

Szulanski, G. (2003) *Sticky Knowledge: Barriers to Knowing in the Firm*, London: SAGE Publications