KNOWLEDGE TRANSFER AND INITIATION PROCESS: ABOUT NEW EMPLOYEE BECOMING OLD RELIABLE

Erkki Innola[a]
Antti Tuomisto[b]

[a,b]Laboris, Information Technology Department,
University of Turku, Finland
[a] erkki.innola@it.utu.fi
[b] antti.tuomisto@it.utu.fi

Session I-4

Abstract

We believe that when a new employee enters an organization this engages a need for long-lasting initiation processes which requires sophisticated organizational interactions and activities. In general, initiation process (IP) is about transferring knowledge. However, knowledge management is the individual/organization relationship, and about how knowledge transfer, sharing and creation are pursued and supported. Information technology can help to shift the focus of IP from introductory briefing to the process of knowledge transfer between an individual and an organization. The result is a conceptualization of the roles and interactions of an initiation process in which individual level attributes and cyclic-qualitative time concept support the discovery of knowledge as it emerges in practice.

Keywords: Initiation process, knowledge transfer, cyclic time, work, organization, information systems.

Knowledge Transfer and Initiation Process: About New Employee becoming Old Reliable

Erkki Innola[a],
Antti Tuomisto[a]

[a] Laboris, Information Technology Department
University of Turku, Finland
Erkki.Innola@it.utu.fi
Antti.Tuomisto@it.utu.fi

Abstract

We believe that when a new employee enters an organization this engages a need for long-lasting initiation processes which requires sophisticated organizational interactions and activities. In general, initiation process (IP) is about transferring knowledge. However, knowledge management is the individual/organization relationship, and about how knowledge transfer, sharing and creation are pursued and supported. Information technology can help to shift the focus of IP from introductory briefing to the process of knowledge transfer between an individual and an organization. The result is a conceptualization of the roles and interactions of an initiation process in which individual level attributes and cyclic-qualitative time concept support the discovery of knowledge as it emerges in practice.

Keywords: Initiation process; knowledge transfer; cyclic time; work; organization; information systems;

Suggested track: J Knowledge and Information technology

1 Introduction

A new employee is a huge resource loaded with enthusiasm and motivation, but also with tensions, new 'radical' thoughts and insights. Our experience shows that the initiation process (IP) is often regarded as a short phase at the end of the recruitment process. Instead, we suggest that knowledge transfer (KT) is possible to connect to cyclic time concepts in a way that both employee and organization can benefit from. It is not easy, yet important to collect experiences and cultivate intuitions faced in daily routines at work place in a way that does not increase work load or lead to overemphasized control. Organization has to ask are the employees doing the right things in the relevant organizational environment. Another question is how to build up effective supportive systems for these IP activities.

We believe that by examining extensively (from the vivid start to far away end of the individual/organization relationship) the initiation process of a new employee we can show features that support both knowledge transfer and individual's self-management.

Knowledge transfer becomes a mode (or moment) of work where a tutor and an untutored meet, and these interactions are recognizable by the supportive KT/IP system in terms of knowledge management.

Individual's role in IP evolves during time. For example, post-modern work view implies that work tasks complicate, work rate increases and more changes of work life emerge (Clegg and Hardy 1999). The inevitable conclusion is that more issues are subject to self-management, and this leads to A more active (or different) role of IP. The experiences and intuitions of an individual become the essence of the extensive IP, and these should affect work motivation positively, rather than increasing negative stress. Because of intenseness of individual level, the initiation process seems to follow a more cyclic rather than linear time concept (Hassard, 1999). This strengthens the role of individual in knowledge transfer.

In chapter 2 we present the roles of an individual and an organization in initiation process. Then, in chapter 3 the interactions of these roles are examined. A short descriptive case is given in chapter 4 and conclusions and future research are discussed in chapter 5.

2 Knowledge management and organizational practice

Knowledge and knowledge management are tightly connected into practice. "Successful organizational synthesis of knowledge requires discovering knowledge as it emerges in practice" (Brown and Duguid 1998 p. 100). The result of knowledge management is measurable results in organizational functioning, like profit, improved efficiency, product innovations, human capital and product- or process-oriented results. In the field of knowledge management research, the main issues are often theoretical framework definition like what is knowledge, taxonomy of different types of knowledge (Nonaka and Takeuchi 1995) or knowledge processes (Leonard-Barton 1995; Alavi and Leidner 1998).

In KM studies, case descriptions are usually used to give rigor descriptions of knowledge management efforts and results. The connection between work in practice (done by individuals or teams) and real organizational results remains unsolved. In our work we connect individual and organizational aspects into knowledge management, sharing and transfer framework. We are also defining the process of knowledge sharing and transfer as a visible component of an initiation process.

An initiation process is often seen as the last phase of recruitment process. Another view in KM literature regarding initiation deals with training and learning issues. In our context initiation is a strategic organizational knowledge process for sharing, transferring and creating organizational knowledge, in which the new organizational resource (an employee) is introduced into an organization. Initiation process has a start but we doubt that it would stop by the end of training. The individual becomes a part of an organization and a team in practice, gains organizational knowledge and produces (measurable) results as a part of his job, and this takes much more time than a few months.

2.1 Initiation process

An initiation process is an interactive process between an individual and an organization. The connection shapes organizational practice, organizational knowledge, ways to act in certain situations and organizational culture. These are interpreted subjectively in the minds of individuals. This subjective interpretation shapes the acts and behavior of an individual and his work.

Sharing or transferring of knowledge is an interaction between a new organizational resource and other individuals who have already internalized organizational variables. People who are responsible for conducting the initiation process are superiors, subordinates or colleagues. Knowledge and especially tacit dimension involved must be transferred in the form of interpersonal communication connected into organizational practice and processes (Smith 2001). This is interpersonal interaction, although the objectives and results are seen in the organizational level.

For our purposes, initiation process offers a simple and clear perspective for knowledge transfer, sharing and creation in organizations. With the studies of organizational initiation, it is possible for us to examine the relationship between an individual and an organization within the initiation process but also in a more general level as a part of knowledge transfer and sharing.

2.1.1 The participants of an initiation process

The parties of an initiation process are the organization (represented by the interpretations of other individuals) and a new employee.

In the field of traditional organizational research, the role of an individual is ambiguous (Nord and Fox 1999; Reed 1999). Traditional research has emphasized the role of an individual as a primary target of organization studies (Nord and Fox 1999).

The role of an individual has decreased, as the role of the context has been expanding (Nord and Fox 1999). In knowledge management, research of the role of the individual has always been marginal. Usually concept of an organization and its processes and objectives as an entity reflects positivistic thinking. This excludes the role of an individual and the rather important differences between the roles of individuals. We find this interpretation rather limited, because the role of an individual as the primary storage of tacit knowledge is well defined and agreed upon. Knowledge is located in the minds of individuals (Davenport and Prusak 1998).

Generally, in knowledge management research the individual is a more or less positivistic-approached black box or a taken-for-granted average person. The personal differences of individuals are put more or less aside, probably because the inclusion of these properties complicates the study of individuals and organizations.

In organizational practice, it is essential to understand the subjective and multidimensional role of the individual. Eventually, all the components of organizational practice are internalized and interpreted in different, personal ways. On the other hand, the individual does not form the organizational practice by himself. Organization and its multi-dimensionality must be seen as a part of the whole picture. There is a connection between private, individual and collective organizational knowledge (Brown and Duguid 1998). The connection is not hard to define in detail, but it is possible to identify certain important attributes of this connection.

2.1.2 Interaction of individual and organizational attributes

The main attributes of the individual are personal abilities, personality, experience and motivation. Personal abilities and personality oriented variables are relatively stable. Experience and motivation are more dynamic in nature. The stable variables explain quite a lot of the individual differences connected to the organizational practice and results (Nord and Fox 1999). “Organizations, which appear similar in terms of their task, structure and environment, exhibit disturbingly different characteristics.” (Walsham 1993 p. 31) Individual differences are related to personality by trait psychology (Nord and Fox 1999) and mental capabilities (Schruijer and Vansina 2002). The dynamic components interact with organizational variables and form the interpretation of organizational variables. Organizational practice, culture and objectives are understood in individual context by internalization processes. Dynamic variables of an individual can also behave similarly in an organizational context.

The existence of an organization is based on the need to gain certain organizational objectives and to evolve towards improved state-of-affairs. In general, organizational

attributes can be divided into groups of past, present and future attributes. The birth of an organization, stories of success and failure, business idea, survival and facilitators of growth are the main past attributes. Present attributes are connected tightly into organizational practice, the main attributes are commonly accepted visions or mental models of organizational culture, different courses of actions in organizational context and values. The main attributes of future are organizational objectives, strategies and ways to achieve these strategic goals in practice. The relationship between organizational and individual attributes is mostly limited into organization's present attributes. On the other hand, the results and objectives of this interaction are mostly related into the future attributes of an organization.

Initiation process connects the dynamic variables of an individual and the organization's present and future actions into each other. Initiation process also makes visible the individual's and organization's different concepts of time. In an individual level processes and learning takes place in cycles. Organizational practice is dominated by the linear-quantitative time concept (Hassard 1999). The initiation process is an interaction between individuals and also different subjective interpretations of organizational practices and objectives. The tacit dimension of an organizational practice is shared or transferred by other individuals with conversations, narratives and working together (learning-by-doing, master-apprentice relationship). This is how the organizational knowledge and especially its tacit dimension are transferred from an organization to an individual; with the help of other individuals and their interpretations of organizational values. We base this claim on cyclic-qualitative time concept and emphasis on personal differences in individual level.

The transfer and sharing of organizational knowledge is a two-way process. Knowledge transfer between an individual and an organization includes at least two different interpretations of organizational attributes. The interaction between an individual and an organization is complicated. For example the motivation of an individual changes or decreases, there are difficulties to self-evaluate the state of the initiation process, the appearance of personal and social conflicts, etc.

We must treat individual and organizational attributes and related information systems as an inseparable whole according to the inseparability postulate and the act-oriented approach (Eriksson and Nurminen 1991; Nurminen and Forsman 1994). This includes also initiation process and knowledge transfer from the long-term perspective. We include in the successful initiation process at individual level in organizational context the concepts of development, learning, change and motivation.

3 Cyclic-qualitative initiation process

Information technology can help to shift the focus of the initiation process from an introductory briefing to long-term knowledge transfer between an individual and organizational representatives. We supplement linear-quantitative perception of resource management with cyclic-qualitative perception of individual employee's perceptions of organization and work. The result is a conceptualized process that offers tools for the organization's representatives and new employees to perform and manage the initiation of a new employee. In addition, we address long-term issues of support for knowledge transfer and sharing. The initiation process is aimed to work with the emergence of knowledge in practice.

3.1 Cyclic-qualitative time

The commodification of time (i.e. flexi-time) originates from organizational needs of linear-quantitative management of work time (Hassard 1999). However, our practice-oriented and dialectical setting of individual-organization reminds of the need to emphasize the individual.

Cyclic-qualitative and linear-quantitative time concepts provide useful perspectives on the initiation process. According to Hassard (1999) cyclic-qualitative studies of time can provide more nuances and richness to clarify the complexities of work studies. He also uses the time frame of a career as an example. We are also interested in careers of individuals, but not only the careers themselves, but rather means based on cyclic-qualitative perspective which can be incorporated into the organizational praxis of knowledge transfer.

Initiation process is about knowledge transfer in the sense of dynamics of an individual (skills and motivation). Yet, it is also short-term and long-term organizational development in terms of current individual actions with known organizational transformation of knowledge into measurable outcomes and evolving and emergent organizational future needs. Despite all (counter)actions we have to be active on making present activities to hold also in the future.

This definition embraces our long-term perspective of the initiation process. The bursts of knowledge that are very likely in a case of a new employee seem to accommodate the same roles and interactions in later phases of work life. We interpreted this situation as a possibility of shift of the roles of an individual and an organization in the initiation process. Using the initiation process concept and cyclic-qualitative time concept, we enforce the individual-organizational dialects. This should avoid the

attempt of linear-quantitative management of knowledge emerging in practice, which seems to be insufficient approach (Hassard 1999). In addition, oversimplification of individuals in the interactions of initiation process is taken into account, and a more active role of individuals who initiate needs for changes is suggested. Managing this information is a natural part of initiation process and this requires appropriate supportive ISs.

The broader view of initiation contains world view of alternative futures (see e.g. Buchanan and Huczynski 1985) that is imminent to all individuals. We take the individual as the main object and the key initiative for knowledge transfer for better management of "alternative futures" which that an organization faces. If an employee's work load, work content, and nature of work are changing towards more demanding tasks, then ideas of applying (self-)management oriented concepts might be tempting. For example, Ackoff (1974) introduces interactive planning that could be used in initiation process to emphasize the important knowledge transfer role of individual employees. According to Ackoff, interactive planning is appropriate "if one is not willing to settle for the past, the present, or the future that appears likely now" (Ackoff, 1974, p. 28). This is in line with the cyclic-quantitative thinking, although the planning perspective is not emphasized in our view of the initiation process. Instead, we examine the interactions of an initiation process.

3.1.1 Interactions in initiation process

The main goal of the discussed initiation process is to maintain the long-period motivation of an individual. Because individual's motivation-related issues have cyclicity in their nature, we find it reasonable to also include cyclic features in the initiation process. This, again, is about the individual-organization dialectics and searches for means to deal with smaller or larger knowledge bursts emerging in practice.

Information systems may provide appropriate solutions through which the roles of an individual and organization in IP can be conceptualized. This must include a state in which we interpret the actors of IP from individual perspective as they try to fulfill the mission of present organizational motives. There are bursts of knowledge that create tension to several interactions between the individual attributes and the organization. Some of these are traditionally dealt with linear-quantitative management of work time, outcome etc. However, much of this management attempt lies within false conception of dynamic features of individuals. The linear-quantitative management effort actually confines to static individual attributes: only interaction is between the organization and the new employee, and it contains a job interview, an employee selection, and guiding

the process so that the new employee takes the required initiation process. This leaves an important area for the cyclical initiation process to take care of. The initiation process contains three types of interactions: the formation of the organization's representative, the dialectical setting of initiation, and the discovery of emergent knowledge in practice.

The first interaction type maintains organizational knowledge as a basis for action. The organization's representative forms an interpretation of the current practice based on work procedures, rules, organizational culture, strategy etc., but also based on her values and views of organization and work in general. The skills and motivation of representative change. The second interaction type contains an initiation of the new employee, and this affects both the representative and the new employee, as they strive to achieve common knowledge of the tasks and work environment. The main object is to answer the present demands of performance and production, but there are also links to the future aspect in terms of investment in human capital. The skills and motivation are actively (re)presented in this interaction. The third interaction type represents the difficult task of discovering knowledge as it emerges. It contradicts the practice interpreted by an individual employee and the organizational counterpart of present course of action. In a way, the adaptation of best practices legitimates the new employee to engage in "role switching", to share and transfer knowledge as it emerges in practice.

For example, as the organization's representative initiates a new employee, the representative's expertise on the issue aims to motivate the present course of action, yet it contains personal decisions based on current skills and motivation. Next, the new employee works with the representative, and the new employee faces the new organizational situations from a fresh perspective. The possible "biases" between current practice and the new insights are usually subject to traditional work management, and the deviations are to be corrected or normalized. Yet, they tell about the different interpretations of individuals, and thus should be part of the IP and knowledge transfer. Finally, the new employee more or less integrates into the organization. Still, skill and motivation issues must be addressed: for the future needs of the organization, the expertise possessed by individuals, which is concretized in their actions, and institutionalized by the evaluation of the results of these actions (evaluated against present performance criteria), are subject to knowledge transfer. This is one way to discover knowledge as it emerges in practice.

3.2 The benefits of cyclic-qualitative initiation process

The results are the three interaction types and the organization and individual dialectics with the two time concepts that can help to sustain an active relation between individual knowledge and the interpretations of organizations short-term and long-term objectives, goals, and means to achieve these goals. We believe that these can help to improve the connection between the individual motivation, skills and organizational needs. Yet, there are risks that this requires administrative or supportive work, which make our enhanced initiation process too resource demanding. This can help to get the results of knowledge transfer more practical and more concrete. Interactions and their results can be connected to measurable results in organizational functioning and improved profit and efficiency, or profit, product innovations or indirect human capital, product and process oriented results.

4 Case: construction of high quality sea cruisers

The presented applied to a shipyard case (Tuomisto, Lahti, Savela, 2001) in which an installation group of 14 welders and technicians was studied. In this work group, we can identify workers with shorter and longer employment and experience in ship building. Usually, the experienced workers initiate new employees. Some official education and (re)training has also been given to the new employees. In addition, the “old reliable” group of workers has done some development projects, even on their own.

The average age of group members was 46, and work experience of the employees was between 3 and 40 years. Employees themselves estimated the average initiation time to adapt to their own job being between 1 and 5 years. This meant that the new members of the group were still partly in their initiation process. The ratio between “young” and “experienced” employees in the group was approximately one to two, which is quite common in metal industry. The classification of “young” and “experienced” is based on their work history in the current work place and job position. The “younger” had 3 to 8 years of experience as the more experienced had 13 to 38 years of experience. Although this is a very subjective classification, and the new employee role is broad in many senses, this is still in line with our objectives. In this case the less experienced employees had a very similar situation even after several years of work as we can find in a traditional new employees initiation (training). Thus, rather than being a loosely interpreted example, this actually resembles the challenging content of initiation and knowledge transfer in organizations.

In addition to the group's main task, they identified several other tasks that supplement their work. These other tasks included e.g. repairs, creation of prototypes, demonstrations, planning, evaluation, feedback, goal setting, customer service, reports and expressing opinions. The previous task list gives a more vivid description of the "well-defined engineering-type of assembling job". This is in line with our richer view on work, but similar "surprising" extensions of knowledge and work can be found in e.g. Ellingsen and Monteiro (2003, p. 203) as they refer to they study of "clinical work in large hospitals … that unduely has been left out of traditional listings of knowledge work." The broad scope of work tasks relates also to job motivation. The group members expressed the urge for additional tasks: up to 50% of the members felt that they are able to manage also more demanding tasks. Therefore, some initiation in the organization might be in order, but does the organization acknowledge this potential and how the knowledge is cultivated? We suggest that our long-term initiation process can help to conceptualize the situation in a way that the smaller or larger bursts of knowledge emerging in practice can be addressed.

The "new employees" in the case study highlighted some individual-organization related initiation questions, but because the organization was not alert to this kind of interaction, the issues were more or less ignored. This could be one point where our IP and knowledge transfer concepts are useful. It could be useful to use this IP concept and roles within the initiation process to show e.g. possibilities of work development (i.e. ability to do the work in a way that uses the potential of the actors and relates to their motivation issues effectively). In this sense, the roles of a "new employee" and the initiator can be reversed.

Finally, based on the short descriptive case we can state that not all useful information and knowledge did unfold, and the information emerging from practice that did unfold, was not used efficiently or effectively. In other words, knowledge transfer did not succeed, and skills and motivation relating to current work practice were inappropriately managed. From the case study we can identify the fundamental element in IP and knowledge transfer: the motivated, skilled employee in what we call a "pilot team". This "pilot team" is not a full time test team, but rather a natural part of managing one's work. However, left alone this concept cannot survive, and therefore it requires strong organizational position and acknowledgment. In addition, several supportive functions are required (e.g. information technology investments, and education and training).

The main task of the group was to be part of producing high quality cruiser in given time schedule. Job motivation and skill issues were almost constantly present at work situations, and development of work and work methods existed. However, these were unorganized individual or small group efforts without any organized actions. The organization solved same or similar kinds of problems repeatedly. If the organization had supported the long-term initiation as a basis for knowledge management of emerging knowledge in practice, then it would have boosted, or enhanced, the possibility to improve the work overall; especially to effect the use of the employees' skills and motivation of workers; discovering the knowledge that emerges in practice. More support to our IP and KT approach comes from the fact that this in turn would help the organization to focus and verify long-term plans and objectives.

5 Conclusions and future research

We suggest that initiation process with cyclic time concept could help to ease the knowledge transfer. Initiation process is a useful activity if it can deal with individual motivation throughout the employee's career. We argue for the cyclic time concept in initiation process. Initiation process is individual-oriented and forms a natural part of knowledge creation and transfer. Successful initiation process increases productivity. It also maintains the alleged high motivation of new employees. The interactions between the new employee and organization's representatives can be supported. The construction of an information system supporting initiation process is based on act-orientation and inseparability of the work and the employee. The supporting system is a natural part of the employee's information system. The initiation process is an organizational activity, in which also the roles of being initiated and giving initiation can change during time.

In a way, this is the same as training and work development from a long-term perspective, but the skills and motivation are not just objects of action, but also the prerequisites of it. The roles of practical experience, a tutor, the new employee and (self)evaluation need to be emphasized from an individual perspective in order to get individual-organization dialectic to work.

Our future research contains of the individual-organization dialectics in practice. The tacit dimension of initiation is probably seen in different light in product and knowledge oriented organizations. In addition, general attributes and phases of an initiation process are to be analyzed in empirical settings. We believe that a coherent conceptualization of different initiation processes helps us to understand knowledge

sharing and knowledge transfer issues in general. This in turn, can help us find some general procedures to ensure the success of the initiation processes in different organizational settings. With a deeper understanding of IP and KT, we see several possibilities to enhance the human resource management and its supportive information systems.

6 References

Ackoff, R.L. (1974): Redesigning the Future. A Systems Approach to Societal Problems. John Wiley & Sons, Inc., New York.

Alavi, M. and D. E. Leidner (1998): Knowledge management and knowledge management systems : conceptual foundations and Research Issues. MIS Quarterly.

Brown, J. S. and P. Duguid (1998). "Organizing knowledge." California Management Review 40(3): 90-111.

Buchanan, D.A. and Huczynski, A.A. (1985): Organizational Behavior: An introductory text. Prentice Hall International Ltd., London.

Clegg, S. and Hardy, C. (1999): (eds.) Studying Organizations. Theory and Method. Sage, London.

Davenport, T. and L. Prusak (1998): Working Knowledge: How organizations manage what they know. Boston, MA, Harvard Business School Press.

Ellingsen, G. and Monteiro, E. (2003): Mechanisms for producing a working knowledge: enacting, orchestrating and organizing. Information and Organization, 13 (2003) 203-229.

Eriksson, I. and Nurminen, M. (1991): Doing by learning: Embedded Application Systems. Journal of Organizational Computing. 1(4), 323-339.

Hassard, J. (1999): Images of time in Work and Organization. In S. Clegg and C. Hardy (eds.) Studying Organizations. Theory and Method. Sage, London, 327-344.

Leonard-Barton, D. (1995): Wellsprings of Knowledge - Building and Sustaining the Sources of Innovation, Harvard Business School Press.

Nonaka, I. and H. Takeuchi (1995): The Knowledge Creating Company, Oxford University Press.

Nord, W. R. and S. Fox (1999): The Individual in Organizational Studies: the Great Dissapearing Act? In S. Clegg and C. Hardy (eds.) Studying Organizations. Theory and Method. Sage, London

Nurminen, M.I. and Forsman, U. (1994): Reversed Quality Life Cycle Model. G.E. Bradley & H.W. Hendrick (eds.) Human Factors in Organizational Design and Management - IV. North-Holland, Amsterdam, 393-398.

Reed, M. (1999). Organizational theorizing: a Historically Contested Terrain. In S. Clegg and C. Hardy (eds.) Studying Organizations. Theory and Method. Sage, London

Shruijer, S. G. L. and L. S. Vansina (2002). "Leader, leadership and leadeing: from individual characteristics to relating in context." Journal of Organizational Behavior 23: 869-874.

Smith, E. A. (2001). "The role of tacit and explicit knowledge in the workplace." Journal of Knowledge Management 5(4): 311-321.

Tuomisto, A., Lahti, A., Savela, M. (2001): Team work and IT. TEKES report 1246/401/00. (in Finnish)