
**The use of information technology in contemporary HRM
– A practice-based study of e-HRM at Sandvik Corp.**

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Abstract and disposition

This paper argues for a practice-based approach to the study of e-HRM, presenting a methodological and theoretical approach to a case study of a global human resource transformation project at Sandvik Corp. Highlighting the gap between theory and practice in human resource management studies, I propose to bridge this gap using a practice-based approach, referring to the ‘practice turn’ in social science. The approach is based on an ethnographical study method, focused on three methodological lenses that guide attention to knowledge based processes grounded in everyday work practices. The paper ends up presenting study objects and some conclusions.

Keyword: HRM, HR IS, e-HRM, HR transformation, practice, philosophy, methodological lenses, ethnography, case study, Sandvik Corp.

An integrative approach to e-HRM research

Recent attempts have been made to find a definition of e-HRM, as a conceptual umbrella to the complete approach for “doing HRM”. This definition has traditionally touched upon the implementation and structuring process of technology driven HR transformations and the consequence of these organizing activities in creating HR network structures throughout the organization (Strohmeier 2007). Bondarouk and Ruël (2009) continue this discussion arguing we need to find a consensus in a definition covering the integration of HRM and IT, focusing also on targeted employee and managers, often being the value creating consumers of web-based technologies:

“an umbrella term covering all possible integration mechanisms and contents between HRM and Information Technologies aiming at creating value within and across organizations for targeted employees and management.” (Bondarouk and Ruël 2009) p.507

This definition suggests the integration of four aspects (Bondarouk and Ruël 2009):

1) *Content of e-HRM*: focus on the type of HR practices and IT used, and the math between them

2) *Implementation of e-HRM*: focus on the process of adoption and appropriation of e-HRM by organizational members.

3) *Targeted employee and managers*: focus on specific stakeholder groups. As the modern HR organization goes way beyond both the HR department, and even the whole organization, a new approach needs to focus on line-management and employees that are actively involved in using e-HRM applications.

4) *e-HRM consequence*: a multilevel perspective viewing e-HRM value creation as ‘subjectively realized by a target user who is the focus of value creation’ (Lepak, Smith et al. 2007) p.182

Answering this call; I argue for a case study of e-HRM at Sandvik Corp.; *focusing on the implementation of HR IS and structuring of a specific HR practice (competence development and performance management); using a practice-based approach to analyze the role of key stakeholders and technology (Peoplesoft) in determining the value of HR services.*

A practice-based case study of e-HRM

Sandvik Corp. is a knowledge-based Swedish engineering group with advanced products and a world-leading position within the selected areas. Since 2003 the company have run a large change program called CONNECT for its management of human resources. The change program was created to introduce new ways of working with HR questions on a global basis, securing efficient and common ways of working and changing focus from administrative tasks to more strategic HR work. The change program consists of the implementation of HR IS software (‘Peoplesoft’) and introducing new way of working with HR; reorganizing processes to support personalization strategies, introducing new role responsibilities for HR professionals, and a service organization. The program consists of four corner stones being the implementation of a HR IS (‘Peoplesoft’) to enable a global HR information handling, introducing global HR processes, a new HR role on both global and national level, called Human Resource Advisor (HRA) and a Service Centre (SC) solution, responsible for delivering effective HR administration services.

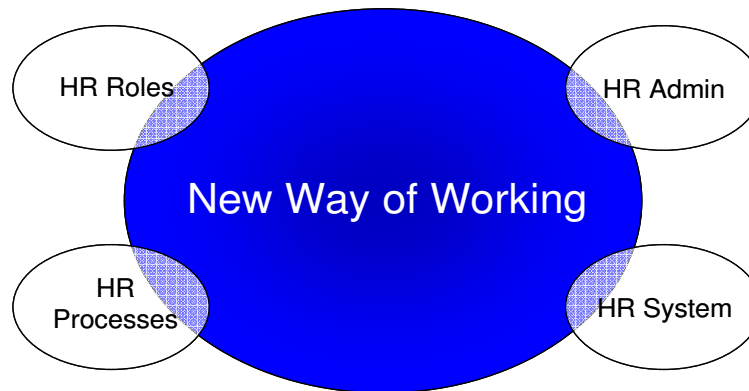


Figure 1.

Copyright Sandvik Corp.

Focusing on every day HR work the study aims at finding a practical relevance, without abandoning a academic purpose; theorizing the structuration (Giddens 1984) of these HR practices at Sandvik Corp.

The 'practice turn'

Framing the study this from an epistemological perspective, highlighting the emergent nature of human organizing, I refer to the 'practice turn' in social theory (Lave and Wenger 1991; Orlikowski 1992; Weick and Roberts 1993; Orr 1996; Cook and Brown 1999; Orlikowski 2000; Brown and Duguid 2001; Schatzki, Cetina et al. 2001; Orlikowski 2002; Gherardi 2006; Schreyögg and Geiger 2007).

Roots of the perspective are to be found in sociological theories of practice (Bourdieu 1977) and philosophical pragmatism (Dewey 1938; Rorty 1979). Recent approaches (Brown and Duguid 1991; Lave and Wenger 1991) has offered a pragmatic orientation towards the interpretation of organizational performance through the observation of everyday practices in the workplace. It offers a pragmatic framing of the ongoing construction of organizational activity and the embeddedness of technology, routines and roles in work practices. Thus this standpoint also provides an individualistic epistemology. Theorize individual agency, recognizing its constraints in the social and physical context, we cannot define knowledge in terms of mind (Spender and Scherer 2007). Rather we need to better understand situated activity, including the embodied capacities, the dispositions, know-how and tacit understanding that resides within the practices themselves (Schatzki, Cetina et al. 2001). There is a need to bring a processual view of the on-going and recursive practices centre-stage (Spender 2005), focusing on living or this fundamentally individual character of knowledge,

the in-dwelling (Polanyi 1962) or 'knowing', our competence as human agents to negotiate our experience in these practices.

Case study method

The use of case study method (Yin 1989) was a precondition, opening up for an ethnographical and deep qualitative approach. The single case approach is a question of simplification, because of time and the complexity of the case.

In more general terms, the scientific method will be represented by a well-documented and well-structured research process with explanation of observation techniques, as well as my own ability, consciousness and attendance to the situation as a researcher (Merriam 1988). The idea builds upon a process analysis (Pettigrew 1990), as the study will capture real time developments during one year. The purpose is to create insights and discoveries and develop the understanding, thus it is more important to develop credibility than justified truths. Providing a rich description of the phenomena of HR transformation at Sandvik Corp., the case is supposed to create a reference frame for discussion and debate and work as a catalyst of new theoretical knowledge (Eisenhardt 1989; Yin 1989; Eisenhardt and Graebner 2007).

Practice as methodology

Arguing for research of what it is people in organizations actually do, a practice-based approach needs to have an appropriate methodology for such a purpose. Using phenomenology as the overarching intellectual perspective, ethnography as the strategy for investigation, to gain empirical access into these knowledge-based processes, both Yanow (2006) and Patriotta (2003) suggest a (re-) focusing of practice-based studies, both on the knowing of individuals and the way that spatial and material elements communicate meaning (Patriotta 2003 (b); Yanow 2006). Referring to Orr's (1996) study of photo repair technicians:

"[Orr is] Attending to the activities prescribed explicitly in the terms of employment is the purchase provided by an analytic focus on work *practices* — its engagement with the particular patterns of activity characteristic of work in a particular setting in relationship with the particular features of that setting, its artifacts, habits, and language, and others engaged in similar activities." (Yanow 2006) p. 1745

"A more hermeneutic-phenomenological approach, however, would locate workers' responses in their 'lifeworld' and in the extent to which they have created, and continue to

find, meaning in and through that ‘lifeworld’, including its expression in organizational structures and other arrangements.” (Yanow 2006) p. 1753

Patriotta dig into this ‘life world’ of organizations in order to capture the taken for granted stream of everyday routines, interactions and events that constitute both individual and social practice. He point to the scarce attention paid to the ongoing transformation, translation and reconfiguration occurring along the knowledge chain, and the before mentioned ‘alienation of theory from practice, central to the situated approach. Referring to the discussion of organizational knowledge ‘in the making’, he suggest that all knowledge is continuously and socially constructed he adopts a view of learning and knowing as predominantly social activities which takes place through participation (Patriotta 2003 (a); Patriotta 2003 (b)).

As a way to rescue the tacit, taken for granted assumptions underlying our dealings with the world, analysis of human experience is the key when searching for the deeper structures of everyday life. The essence of the method lies in the detailed analysis of human experience. To disentangle organizational knowledge from the tacit background against which it is utilized on a day-to-day basis, Patriotta develops a set of methodological lenses. The three lenses: time, breakdown, and narratives provide operational devices to help conduct description and observation in a systemic fashion.

Taken as a whole, the three lenses represent modes of deinstitutionalizing of knowledge. They look at knowledge creating dynamics in reverse, so to speak, by focusing on discontinuities in time, action and experience. Each lens provides a distinctive angle, or mode of access, to the tacit nature of organizational knowledge systems. This framework also provides a form of methodological triangulation, a commonly used strategy in qualitative research, improving the richness of data while reducing risk of interpretative biases; extending this principle by incorporating a higher level of complexity encompassing issues of meta-level perspective and ontological significance, redefining time as a spatial dimension (Patriotta 2003 (b)).

Time

“...the tacit nature of human and organizational knowing is related to problems of pre-interpretations. Reality is necessarily apprehended through socially constructed lenses that have sedimented over time, leading to a sort of ontological blindness whereby social phenomena become gradually entangled in the structure of everydayness and evade

notice. Indeed, the notion of pre-interpretation is paradoxical in nature. Human knowing occurs against a practical background that is transparent to the user and therefore not accessible for inquiry. However, such a background is itself a human construction; it is the effect of humans' everyday coping with the world. It incorporates a history of experiences, consolidates habits, and structural repertoires, which over the years have provided successful responses to the emergence of problematic situations. In other words, essential backgrounds presiding over the practice of everyday life are both the source and the outcome of human knowing." (Patriotta 2003 (b)) p.60

Through interpreting the evolution of organizational structures and behaviours, time can be studied and allows the researcher to trace back the origins of a complex phenomenon (Patriotta 2003 (b)). Referring to the Annales School, Patriotta proposes a synthesis between a analytical approach that is privileging explanation and the identification of law-like causalities (Ricoeur 1984), and a narrative approach that denies any causality in favour of how one writes history and tells the story. The idea is to deny the singularity of events and the role of the individual in favour of holistic notions such as social facts. Knowledge systems then are unravelled through the identification of discrete phases, seizures, and breakpoints which identify evolutionary paths.

'Sedimentary time' allows the researcher to develop an appreciation of the process of inscription and stratification by which knowledge becomes progressively institutionalized (Patriotta 2003 (b)). 'Narrative time' (Ricoeur 1984) focuses on the process of collective remembering, accounting for the unfolding of action according to distinctive plots. Time as a commodity directs our attention towards the ways in which the equivocality of action is harnessed in stable temporal structures (e.g. roles, work methods, deadlines). Finally 'social time' calls into question the 'facticity' (Knorr-Cetina 1981) of knowledge. It provides the analyst with a time machine for deconstructing the facts that have been taken for granted in a given community, following the characters involved in the situated process of knowledge construction, while they are busy at work, to trace back the networks of events, decisions, physical artefacts and institutions surrounding the 'making of things' (Patriotta 2003 (b)).

Breakdowns and routines

When knowledge is deeply internalized and institutionalized we tend to use it in an almost automatic and irreflexive way. Though, when there is a disruption of an established order, the

breakdowns provide a way of voicing a background that is taken for granted. In order to restore normality, organizational actors need to explicitly interact with the background against which knowledge is used and knowledge needs to be applied in a deliberate way. The ongoing flow of action and sense-making is then articulated in the form of narratives, moves and decisions, and as a consequence, knowledge references to the context of use are disclosed and emphasized. In this respect breakdowns bring tacit knowledge to the fore by exhibiting it as ‘present-at-hand’. The analysis of breakdowns produce, then, a useful method for reflecting upon organizational context hosting a particular knowledge system and opens up the possibility of deconstructing the meaning embodied in organizational artefacts, routines and other knowledge-based activities. In this respect, breakdowns provide a window through which it is possible to access the organizational reality, out of a situation that requires deliberate attention (Patriotta 2003 (b)).

As breakdowns point to the temporary collapse of pragmatic relationships with things, routines rather seems to relate to things functioning smoothly. Still, Patriotta further questions if breakdowns at all can be distinguished from organizational routines. Referring to Nelson and Winter (1982), contending that it is significant that the problem-solving responses routinely evoked by difficulties with the existing routines may yield result that lead to major change (Nelson and Winter 1982). This may also be reflected by Feldman and Pentland (2003), view of routines as both performative and ostensive, having a fundamentally emergent character due to the continuing structuration of social activity. Actors involved in the solution of a problem are forced to articulate knowledge in a series of ‘organizing moves’ (Pentland 1992), decisions, narratives and so on, which enact certain organizational features of organization (the division of labour, the application of problem solving procedures, the deliberate use of work tools)¹. Still, the ‘dramatic’ character of organizational action reinforces the argument against the risk of treating critical incidents as isolated episodes of occurring at specific points in time.

“Since, in order to become meaningful, disruptions need to be contextualized through the construction of narratives, the researcher should be able to avoid that risk by

¹ From socio-technical perspective the methodological focus on breakdowns provide a means for testing the resilience of a given organizational setting, thus test the solidity of materialized routines, by a technical object, and the way we tend to build routines around this the socio-technical network. Important is the processes whereby order is disrupted and eventually recomposed in organizations Patriotta, G. (2003 (b)). Organizational knowledge in the making. Oxford, Oxford University Press..

systematically linking sense-making dynamics occurring around breakdowns to the broader organizational context.” (Patriotta 2003 (b)) p.69

Narratives

By definition tacit, background knowledge is experience related. Piecing together of evidence and clues reconstructing past and present experiences, through the narratives of the actors involved, is a third strategy of defining the embodiment of notable experiences into some form of organizational discourse (Patriotta 2003 (b)).

This way the narrative process becomes connected to a situational view of organizational knowledge and learning (Brown and Duguid 1991; Lave and Wenger 1991). Narration is seen as a central feature of the modus operandi of informal practices, reflecting the complex social web within which work takes place, and maintaining the stability of work setting by fostering the circulation of organizational knowledge within the community of workers (Orr 1996; Patriotta 2003 (b)). Narratives may be seen as a form of problem-solving in our everyday coping with the world, and may be recognized also through story-telling as a basic organizing principle of human cognition, i.e. providing cognitive devices to guide action (Boje 1991; Boland and Tenkasi 1995; Weick 1995 (a); Patriotta 2003 (b)). Narratives provide access to the controversy-based dynamics through which organizational actors deal with the equivocality of everyday action. They unfold the features of knowledge-making processes in terms of an internal dialectic between text and action.

“In this regard, narratives turn action into text and text into action. Through the institutionalization of meaning, action is temporarily fixed; it is turned into textual artefacts that can be dissected by using methodology of text-interpretation. In turn, by connecting event and meaning, the texts become a script to be acted upon, a prompt for ad hoc performances. Ultimately, text provide a guide for conduct and thereby link action to cognition and sense making.” (Patriotta 2003 (b)) p.71

Narratives emphasize the processual nature of knowing and organizing. Through a process of ordering and sequencing, time comes to play an important role in conferring consistency, thereby promoting sense-making. In fact the strength of narratives as interpretive devices stems precisely from their ability to link the present to the past and the future, anticipating to retrospection and repetition, being a fundamental source of sense-making. Because of their

connection to experience, they display common-sense wisdom in organizational discourse, and they are the carriers of such deep-seated, sticky, commonsensical stock of knowledge, pointing to shared worldviews. The deconstruction of narratives should therefore allow the analyst to look at how individuals in organizations articulate knowledge by weaving webs of signification (Geertz 1973). Secondly, (Patriotta 2003 (b)).

As depicted by Patriotta, the task of the researcher is simply to describe in detail how organizational actors make sense of equivocal happenings in work settings while attempting to identify emerging patterns of regularities in action. Changing or overturning the taken for granted rules, or replacing them with completely new set, requires “interpretive competence” on part of the scientist. It lies in perspective taking: being able to reflect upon and renarrativize the familiar to open up new insights and understandings. This way the observer, being the researcher, is himself involved in the construction of narrative accounts in order to distinguish certain patterns of behaviour (Patriotta 2003 (b)). It is a way of narrating organizations through the collection of stories, both documenting cultural artefacts and capturing the narrative mode of meaning construction, through storytelling (Boje 1991; Tsoukas and Hatch 2001).

Resulting study objects and research questions

Using ethnographical methodology gives us a robust picture of problems and opportunities met by practitioners in the every day work. A retrospective account of the project, through interviews and document studies, will direct attention towards the ways in which action has been harnessed in stable temporal structures. Studying also the present change management, searching for discrete phases, seizures, and breakpoints will also direct the attention towards day-to-day activities, doing observations of meetings and typical HR work situations where HRA, LM and employees interact and use technology and tools.

First, I conduct a study of the *systemic character and structural properties of the change program*, being e.g. formal organization, process descriptions, power relations and organizational culture, from a historical perspective. Secondly, I aim at the emergent *social construction of HR practices*, recognizing activities affecting organizational routines such as negotiations during workshops and other meetings. Third, I go on with a focus on human interpretation and *practice-based knowing in everyday HR work situation* observing HRAs and LM interacting face-to-face and while using technology to solve every day problems.

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