SECTION 3: EXPLORATORY LEARNING, EXTERNAL INTERFACE AND E-HRM

Foreword and rationale: We focus on how innovative thinking might be generated within an organization, a question that has been identified as a particular challenge for MSBs (CBI, 2011 p. 26); whilst simultaneously balancing the day-to-day business demands. This ability to operate efficiently in the now, by exploiting existing resources, while at the same time looking forward in an explorative manner is known as ambidexterity (Duncan, 1976; Gibson and Birkinshaw, 2004; Tushman and O'Reilly, 1996). E-HRM relates to web-based systems that enable the deployment of HR processes and information to line managers and employees (Foster, 2010; Ruël *et al.*, 2004). These systems, it is argued, are a form of organizational capital which can act as catalysts for exploratory learning and it is through exploratory learning, we argue, that knowledge is generated.

Considering the implications for strategic HRM, we will build on insights shared in a recent White Paper (Sparrow, 2010). Cross-level dynamics will be debated: for example, how exploratory learning might be set in motion by managers (Kang *et al.*, 2007), facilitated by organizational capital but maintained and shared via human and social capital in the form of *exploratory learners* acting as *boundary spanners* between the internal and external interfaces. This chapter explores how exploratory learners can enable HRM ambidexterity using e-HRM as an architecture of intellectual capital.

EXPLORATORY LEARNERS, HR AMBIDEXTERITY AND E-HRM PROJECTS

Carole Tansley and Susan Kirk

INTRODUCTION

In this chapter we suggest that in order for the human resource (HR) function to support organizational innovation, HR practitioners must first understand the challenges of innovating in their own functional area. We argue that to do this with any chance of success, *exploratory learners* need to undertake continuous development of the HR knowledge assets of the organization working with both internal and external stakeholders. This is important because contemporary organizational developments, such as the growth of knowledge-based and networked organizations, mean that managing HR knowledge for now and the future is vital to an organization's health and growth (Tyson, 1999). One major learning challenge for HR practitioners in this endeavour is to carry out the potentially contradictory tasks of not only acquiring and exploiting existing HR knowledge assets (*exploitation*), but also to enable the generation, transfer, and integration of new knowledge assets from both inside and outside the organization (*exploration*) to provide exceptional HR service to all stakeholders inside and external to the organization (Tansley *et al.*, 2014). This balancing of knowledge exploitation and exploration has been termed *ambidexterity* ((Duncan, 1976; Gibson and Birkinshaw, 2004; Raisch and Birkinshaw, 2008; Tushman and O'Reilly, 1996) and this is the first concept we draw upon as an analytical frame in this chapter to examine HR ambidexterity as an innovatory practice.

Ambidexterity

The generation of knowledge assets has been described as having two forms: exploration and exploitation (March, 1991). Exploration 'involves a relatively broad and generalized search to expand the organization's knowledge base into novel areas and/or to extend existing capabilities into new knowledge domains', whereas exploitation 'relies on a narrower, in-depth search to expand an organization's knowledge base and on combinative mechanisms to reconfigure existing knowledge into new types of capability within its existing domains' (Snell and Morris, 2014, p217). Both exploitation and exploration relate to innovatory practices.

We suggest that the notion of ambidexterity is particularly useful at HR functional level as it involves these potentially contradictory tasks of, on the one hand, acquiring and exploiting existing HR knowledge and, on the other hand, generating, transferring and integrating new HR knowledge through a process of exploration for innovatory HR service to all stakeholders in the organization. In doing this, HR specialists will not only come to understand the essential essences of efficiently enacting their own practice, but will also gain an appreciation of the challenges of implementing innovation within the function for the benefit of the organization.

The e-HRM context of the study

Because the enactment of ambidexterity as an innovatory practice requires deep levels of engagement in managing knowledge assets and its pace and outcomes are affected by exploratory learning across time (Kang *et al.*, 2012), it is a complicated endeavour for those responsible for designing and implementing HR strategy. This is why effective HR data and information management processes are essential tools and in the contemporary organization this inevitably means the design, development, implementation and application of an appropriate electronic information system. Electronic HRM (e-HRM) is defined as ‘the planning, implementation and application of information systems for both networking and supporting practitioners in their shared performance of HR activities’ (Strohmeier, 2007, p.20). These systems tend to be web-based and support the whole talent supply chain, from recruitment and selection to development and rewards payments. They provide the means for organizations to achieve both efficiency and effectiveness in their HR operations (Parry, 2011) by enabling HR departments to store and analyze data to increase the flow of workforce information, as well as enabling the devolution of many routine administrative and compliance functions traditionally performed by corporate HR departments (Bondarouk *et al.*, 2009; Tansley *et al.*, 2001). They also enable the deployment of HR processes and information to line managers and employees (Ruël *et al.*, 2004).

The functionality of e-HRM systems has tended towards HR knowledge exploitation (managing day-to-day tasks), although such systems can also enable the creation of opportunities for HR exploration (the development of new and novel applications through innovative HR) (Tansley *et al.*, 2014). In order to enact a balance of exploitation and exploration activities (Tushman and O’Reilly, 1996), we argue that there is a necessity to focus on *intellectual capital* as a key resource for the management of such projects.

Intellectual capital

Intellectual capital has been defined as the set of intangible resources and capabilities, or knowledge assets, that are possessed or controlled by the firm, and which are linked to firm competitiveness and performance (Nahapiet & Ghoshal, 1998; Teece, 2000; Subramaniam and Youndt, 2005; Martín-de Castro *et al.*, 2006; Martín-de Castro, 2014). Intellectual capital is a useful second concept for this chapter because it enables us to empirically examine how organizational actors might juggle three classes of knowledge assets: *organizational capital*, *human capital* and *social capital* (Snell and Morris, 2014) and how HR ambidexterity may be attempted through managing all three over the life of a project.

We can provide useful definitions of intellectual capital’s three classes of knowledge assets. By the term *organizational capital* we mean ‘the codified knowledge embedded in the organization’s systems, processes, routines, structures and technologies (Edvinsson and Malone, 1997; Levitt and March, 1988; Martín-de-Castro *et al.*, 2006)’ (Snell and Morris, 2014, p217). *Human capital* is the sum of expertise and skills of employees within an organization (Joia, 2000) and *social capital* is ‘the aggregate of resources embedded within, available through, and derived from the network of relationships’ (Snell and Morris, 2014, p219 and also see Nahapiet and Ghoshal, 1998). With intellectual capital, ‘value is derived,

in part, from the organization's ability to create and acquire knowledge locally and to leverage it across the organization and what an organization learns in one location can be potentially replicated, modified, and integrated in other locations' (Snell and Morris, 2014: 214). In this chapter we take intellectual capital as an innovation *affordance* (Gibson, 1986) that is, what organizational, human and social capital can provide for managing HR knowledge in order to enact ambidexterity. A key skill of those managing this affordance is to adopt the role of an *exploratory learner*.

Exploratory learners

Learning occurs in the processes of knowledge generation, transfer and application (Snell and Morris, 2014). Such learning can be termed 'exploratory learning', as it involves 'the generation of new ideas by actively searching for alternative viewpoints and perspectives', which happens 'in part as employees engage with parties external to the organization and in part as knowledge is exchanged within the organization' (Shipton in Rathbone, 2012, p12). Those involved in organizational projects such as e-HRM implementations will therefore be exploratory learners throughout the project lifecycle as the project team attempts to enact dynamic capability through HR ambidexterity. Dynamic capability has been defined as 'the organization's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments' (Teece, *et al.*, 1997). Thus exploratory learners engaging in these processes of dynamic capability development constitute the third conceptual element utilized in this chapter. We see the relationships between these concepts as shown below in Figure 1:

Figure 1: The Relationship between HRM ambidexterity, e-HRM and Exploratory Learners

Our framework shows how achieving a balance of HR knowledge exploitation and exploration in ambidexterity is afforded by intellectual capital and that exploratory learners facilitate that affordance.

In this chapter, in order to examine how HR ambidexterity is established, interconnected and amplified, we examine a case study of HR specialists and management of a UK local authority (TLA) engaged in major changes in HR strategy alongside the implementation of an e-HRM system. This case study was chosen as we felt that TLA senior management and staff were attempting to develop HR ambidexterity by drawing on their intellectual capital as exploratory learners. The research question informing this study is; 'What are the processes through which exploratory learners facilitate HR ambidexterity through e-HRM systems? In addressing this question, the chapter is structured as follows. Firstly, we describe our research design. Secondly, we present the case study in a way that enables ambidexterity to be understood as a balance of exploitation/exploration. Thirdly, we explore the role of exploratory learners in facilitating the acquisition and dissemination of intellectual capital in ambidextrous e-HRM systems. Finally, we discuss lessons from the research for HR specialists in particular and management in general. By taking a knowledge-based view on our three core concepts we contribute to the debates on ambidexterity in technology developments; intellectual capital in human resourcing and exploratory learning in e-HRM project work.

RESEARCH DESIGN

Our case study is a UK, rural, local authority employing c.8,000 staff, making it the largest employer in its county. A unitary authority since 1996, the local authority (TLA) is responsible for all local government services including education, social care, roads, bridges, leisure services, tourism and planning. It covers one of the most sparsely populated local authority areas in England and Wales, having only one person in every four hectares, and is experiencing an increasingly ageing and culturally diverse population. In addition to its challenging geography and demographics, TLA experienced its first ever revenue funding reduction from the Government requiring a cut of over £2.3 million. This created an urgent need for efficiently exploiting current resources, whilst maintaining effective levels of service and sparing some time for considering future strategies for improvement. This led to the creation of an improvement plan (the 'Change Plan'), comprising five key improvement objectives to shape service delivery over the next three years to 2014. These were to run alongside 'Operational Delivery and Continuous Improvement' initiatives which were detailed in individual service division strategies and are intended to ensure that the Council's day-to-day activities continue to improve. Representatives from each service area were required to identify how their work contributes to the achievement of the council's corporate improvement objectives and to the overall outcomes for the service area.

We interviewed fourteen members of staff in the local authority, from the CEO to systems analysts. The staff interviewed, their roles and their level in TLA are summarized in Table 1, below:

Level	Role	Position
1	Chief Executive Officer	CEO
2	Head of Function	Head of Local & Environmental Services
3	Senior Manager	Employment Services (ES) Manager
4	Middle Managers and Team Leaders	Transactions & Systems (T&S) Manager
		Recruitment Team Leader
		Principle Officer (PO) Professional Development
		Systems Team Leader
		Organizational Development (OD) Manager
		Assistant Leisure Centre Manager
5	Administrative and Operational staff	Systems Team (3 Project Assistants)
		Systems Team (Report Writer)
		HR Systems Administrator

Table 1: Positions, roles and levels of interviewees in TLA

The interviewees were asked to give an account of their aims, objectives and experiences on the e-HRM project and how they saw ambidexterity being manifest in this project. To orient the interviews, we stated our ‘working definition’ of ambidexterity as ‘the attempt to achieve a balance of exploitation and exploration in organizational practices’. Most of those interviewed could be called ‘exploratory learners’. Exploratory learning across the life of a project (i.e. ‘the generation of new ideas by actively searching for alternative viewpoints and perspectives’) is necessary because the implementation of an e-HRM system is not an everyday occurrence, so there is much learning to be achieved by stakeholders in perhaps unfamiliar knowledge domains such as technology implementation, project management and anticipating changes occurring to legacy systems in the organization to make way for the newer version.

Data collection and analysis

We analyzed documentary materials relating to the work of TLA, the HR strategies and the e-HRM project included policy documents, project documentation, charts, diagrams and presentations as well as material from the software vendor, such as workshop presentation material. The sponsor of this study, the Transactions and Systems Manager (T&S Manager) was interviewed at the initial launch of the study in November 2011 when the research project was being formalized, and, as well as taking part in the two day interviews, she was engaged in information-gathering conversations at a number of meetings on the site of the software supplier, (TSC) and at other locations. Fourteen semi-structured interviews were conducted over a period of two consecutive days in May 2012. The interviews were conducted across multiple hierarchical levels within TLA. Furthermore, an interview with the Chief Executive Officer meant that the interviews covered a complete strand of the organization’s strategic plan and provided a mix of views from different vantage points.

Interviews lasted between thirty minutes and one hour. The interview questions were intended to draw out any activities and practices demonstrating ambidexterity within the area of HRM in relation to its implementation and utilization of e-HRM technologies.

A second data gathering activity was the observation of a one day Human Capital Management (HCM) workshop which was held at the MHR in July 2012 for their technology people led by TLA's T&S Manager (our sponsor) which was focused on the challenges of designing the functionality of the e-HRM system being used by TLA.

All interviews were transcribed and analyzed to identify key themes or patterns emerging which could relate to existing theories and concepts around the literature on ambidexterity intellectual capital and exploratory learning. Analysis was done initially by the creation of mind-maps from the interview transcripts, which enabled some key themes to be drawn out, such as exploration, exploitation, structure, context, environment, systems, and technology innovation. Emerging themes were then used in NVIVO, a software qualitative data analysis package. In this chapter quotes are provided from the transcripts to illustrate observations made and where names of places and people are used by participants, or where a specific gender is referred to, these are replaced with a more generic term to maintain anonymity.

THE LOCAL AUTHORITY (TLA) STORY

This is the Local Authority's (TLA's) story of the management of the intellectual capital of an e-HRM system implementation with the aim of enacting HR ambidexterity. TLA's corporate Change Plan for corporate improvement is aimed at all functional areas, but our focus was only the HR functional area.

The Corporate Change Plan

The Employment Services Division seek to improve quality and reduce costs of delivering HR services by:

- transforming the ways in which the workforce operates, is remunerated and developed
- utilizing modern technology to improve productivity
- improving the way in which goods and services are procured
- improving communications with workforce and community
- seeking collaboration opportunities with other public bodies

Such a quality and cost improvement strategy requires the leveraging of intellectual capital comprising of intangible resources and capabilities. Key to this are the knowledge assets of organizational capital, human capital and social capital. In the next section we explore how organizational capital is manifest as an e-HRM system.

E-HRM as organizational capital

Organizational capital has been said to comprise 'the codified knowledge embedded in the organization's systems, processes, routines, structures and technologies (Edvinsson and

Malone, 1997; Levitt and March, 1988; Martín-de-Castro et al., 2006)’ (Snell and Morris, 2014, p217). E-HRM systems are part of this architecture, as they have traditionally enabled the acquisition and exploitation of existing knowledge assets relating to employees (Tansley et al, 2014).

Although empirical reports have indicated the use of e-HRM systems have increased exponentially, this is still mainly for administrative purposes and e-HRM projects remain primarily ‘technology-driven events with a focus upon the growing sophistication of IT’ (Bondarouk et al, 2009, p579). As an effective exploitation tool, an e-HRM system ‘speeds up transaction processing, reduces information errors, and improves the tracking and control of HR actions. Thus e-HRM improves service delivery’ (Bondarouk et al, 2009, p579) and learning how to do this can produce surprising results. For example, the following excerpt shows how e-HRM system implementation can lead to the questioning of the status quo and the removal of complex, bureaucratic management structures:

‘Some of our grounds maintenance, refuse, highways maintenance etc., they were all separate services with their own management tiers, and from using the HR System and other processes, we’ve identified in Highways that for every 12 operatives we had 9 supervisory roles behind it.’

CEO on the People Manager system

E-HRM’s power as an exploitation tool is often used as the main sales rhetoric for vendors to persuade organizations to purchase such systems (Bondarouk et al, 2009, p578). TLA’s e-HRM vendors gave little attention to their system’s exploratory capability, so their e-HRM system is primarily a knowledge repository for HR information. Nevertheless, with increased technological sophistication e-HRM systems are being used to leverage existing information to generate new HR knowledge, thus generating innovative knowledge in the hands of exploratory learners.

Moving beyond e-HRM exploitation to exploration

Databases and other forms of intellectual property generally have been proven to enable knowledge generation and innovation through decision support and learning curve effects (cf. Adner and Kapoor, 2009; Haas and Hansen, 2007). For example, performance management systems and research and development capabilities have increasingly depended on data mining and analytics to generate new insights and drawing on codified technology structures has been shown to positively influence learning, particularly in financial service organizations. In light of this, we argue that in moving beyond e-HRM exploitation to exploration, the expertise and skills of exploratory learners, as *human capital*, need to be appreciated in order that HR ambidexterity can be enacted.

HR expertise/skills as human capital

Human capital is defined as the sum of expertise and skills of employees within an organization (Joia, 2000) and it is important because how employees are managed within an organization has an impact on knowledge generation and, in turn, knowledge dissemination

via social capital structures. Human capital, (in our case study, local authority officers, particularly managers), is the key causal driver of knowledge generation (Zucker *et al.*, 1998). Furthermore, Hatch and Dyer (2004) found that investments in the development of organization-specific human capital had a significant impact on organizational learning and performance.

In terms of e-HRM exploitation of human capital, one area that that TLA was engaged in was gathering and collating data about professional development. As one manager explained;

‘Part of my team are collecting and aligning the qualifications, then we’ll give that piece of work to the T&S Manager’s team who convert it to whatever. So we are working internally in two different teams on that. Then once we’ve got that in the system, anyone new to the organization who isn’t in the menu will come to us in Learning and Development and we’ll look at where it fits into the framework. We’ll key it into the system to keep the data as pure as we can’

Principal Officer, Professional Development

In addition to using e-HRM to manage the day-to-day business, there was evidence of the functionality of the system being a catalyst prompting exploratory learners to generate and share new and novel ideas.

Moving beyond e-HRM exploitation to exploration

Human capital has been recognized as an important driver of exploration via innovation (Alpkan *et al.*, 2010). Bledow *et al.* (2009) defined innovation as ‘the development and intentional introduction of new and useful ideas by individuals, teams, and organizations’. Although in order to fully realize the benefits of the innovative knowledge generated by exploratory learners, it must be disseminated to relevant stakeholders within the organization. This is the role social capital networks play in ambidextrous HR systems.

Networks of exploratory learners as social capital

Social capital has been defined as ‘the aggregate of resources embedded within, available through, and derived from the network of relationships’ (Snell and Morris, 2014, p219). The exploitation skills associated with social capital have a dual purpose in e-HRM systems implementation. On the one hand, they are necessary to manage the day-to-day tasks as the following excerpt illustrates:

‘I think that was the time when you sort of really honed your negotiation and communication skills because you were dealing with people literally who was picking their pay packet up and their pay was incorrect, and trying to deal with them and it’s got to get back to the managers and at the same time the next day you might be sat the board at a completely different level’

T&S Manager

However, they are also crucial in enabling exploration in e-HRM systems geared towards HR ambidexterity:

‘In terms of L&D, we haven’t got an external web based thing. We have our own intranet, since we are predominantly internal customer facing. But my department are going for some external stuff. Since, for local businesses, we can deliver training much cheaper...it’s just a push from our team really. They can come on our courses. I think the Authority’s emphasis is on community focus and I was thinking how does that apply to L&D since we are internal focused. So we are looking at small businesses in terms of what can we offer them, therefore we need to market and advertise and in my mind I’m thinking ‘what’s the modern technology that they can understand’ and things like that. In terms of training tools and things, I’ve got a couple of colleagues who have things on-line. Mind-mapping tools and things. In terms of training in the Authority, we need to be using this as an interactive tool for staff.’

Organizational Development (OD) Manager

Highlighted here is how social capital is being enacted by networks of exploratory learners, both inside and external to, the organization. What we also see is how, in the context of this e-HRM implementation project, exploratory learners, such as this OD manager, act as boundary spanners to bring all of these actors together and drawing upon TLAs organizational capital and human capital to do so.

How exploratory learners use social capital in spanning internal boundaries

Tushman argues that ‘special boundary roles evolve in the organization’s communication network to fulfil the essential function of linking the organization’s internal network to external sources of information’ (1977, p587). This was clearly seen to be in the case in TLA. Individuals who facilitate exploratory learning across boundaries tend to have exceptional communication capabilities enabling them to draw value from extensive internal and external social networks and have been labelled as communication ‘stars’ (Allen and Cohen, 1969). In TLA, it was found that many of the e-HRM project stakeholders had these characteristics, having gained the requisite knowledge and experience to make them well placed to generate and share knowledge in the future. TLA’s CEO was a great proponent of this:

‘...rather than just thinking up and down the silos, [I] encourage thinking across...free thinking and coming up with ideas and sharing them’

CEO

Thus there was wide engagement in boundary spanning to a certain degree; although arguably, just as some individuals are better at accruing and utilizing social capital than others, some people are more adept at spanning boundaries. Whatever the levels of skill and tacit knowledge of the actors concerned, all need organizational support to facilitate such exploratory ambidextrous behaviours.

For exploratory learners to span internal boundaries, it is necessary to have appropriate HRM architecture, and TLA achieved this to a certain extent by de-layering and empowering operational staff.

‘I’m managing the Learning and Development Team and the Occupational Health and Safety Team and the Analyst Team on the Job Evaluation project. So certainly with the Job Evaluation project we’ve been doing a lot of work with [the vendor] because we’ve actually got to look at how we’re going to be implementing the new pay model, so they’ve been helping us to look at how the system is going to hold that information. It’s a bit difficult on the project to put deadlines into place because at this particular point in time...we haven’t finalised the consultation part of it with the unions, so we don’t know at the moment if we’re going to agree a collective agreement with them...’

OD Manager

Here we imagine the diversity of knowledge generation, transfer and application occurring across internal functional boundaries and exploratory learning being enacted by the OD manager. Her comment also demonstrates how project work involves spanning, to develop social capital, across many different groups of people, including trade unions. We see this in another area of HR:

‘The T&S Manager is my main link. They and I will brandish ideas around and then think, well, how are we gonna do it, about lots of things. You know even now we’ve developed a lot of this stuff, there’s still stuff that is being done manually that I know at some point...’.....End users will say ‘you didn’t ask us, this doesn’t work for us....’ so then we have to go back in and tweak it a little bit. You always have to think of the end user...’

Recruitment Team Leader.

In this comment we see how exploratory learning involves generating ideas across time scales (now and for the future) and across media (manual and computer systems). It also requires that facilitators of this process learn how to take micro politics into account when gauging and addressing the opinions and resistance from users.

We see an example of this when exploratory learners told us about their preference for the groups they are most comfortable spanning across:

‘The Employee Services Manager loves all the bureaucracy, talking to the Members, going to all these meetings, whereas I’m like “I don’t want to be sat here doing this, I want to be creative over here”...So, the way we balance it is, they tend to do all of that, which something tells me is a mistake for me ‘cos my face isn’t being seen enough, but, and I’m quite happy to do all the links with [the vendor] and the teams, which the ES Manager finds just “Don’t talk to me about that, I don’t even want to hear the terminology”.....When we wanted to put rostering into the leisure centres you had to think like “Now, which leisure centre’s going to be the most open to this?”...We needed to have a leisure centre to prove the concept’.

T&S Manager

Acting on preferences for which social capital networks to draw upon can be highly career limiting later on when positive social capital has not been generated with the right people who could make a difference.

Finally, sharing problems is one way for exploratory learners to use their social capital whilst engaging in boundary spanning activities:

‘I must admit, when they [the e-HRM systems team] came here there was headaches to start with, but I think they took it really well and helped us through that because we had concerns of how it was going to work and, very useful I must admit...and it’s quite simple, any of the problems we’ve had have been very simple to correct as well. So again it’s all linked and [my] teams here, they can see it and simply “ah right yeah’, it’s not just my problem it’s someone else’s problem”’.

Assistant Leisure Centre Manager

Notions of boundary spanning to extend exploratory learning and reduce ‘silo thinking’ is not confined to internal stakeholders.

How exploratory learners use social capital in spanning external boundaries

Research within TLA indicates that spanning external boundaries is held to be equally as important as internal boundary spanning. These linkages encompass relationships and external partnerships with both public and private sector organizations and are enshrined within the business goals, as explained by the T & S manager:

‘now within the *Change Plan* we have got objectives to do and partnership working, so it is there, recognition, so whereas that wouldn’t have been on the radar back when we done that diagram’.

The public sector stakeholders range from higher education institutions to the National Health Service and also to forging links with other local authorities, as well as more widely:

‘Regionally we do a lot of work with another local authority...and they have agreed to take the HR System and we are going to work with them to help them implement it. And the view is, again, if they have the same processes and modules as us, we can then look across the two organizations to see how we can jointly deliver the services. Social Services is an example, and Highways where we already working together’.

T & S Manager

The partnerships fostered enabled innovation knowledge generation. For example, TLA management benefited from a leadership training programme brought in by their local university. Another example was where TLA engaged in knowledge transfer about e-HRM strategy and practice to a neighbouring local authority. Forging and maintaining these relationships is ensured through the social capital activities of TLA’s exploratory learners,

who also operate as boundary spanners communicating and negotiating between the internal and external interfaces. Top level engagement is essential for the sustainability of such practices:

‘...both CEOs have said that they will collaborate... We have to work towards it, because if we don’t and *the other TLA* go elsewhere you’ll never get the opportunity back’.

T & S Manager

A growing area for such partnerships is with a range of private sector organizations who link in via third parties, for example;

‘we get a lot of private companies really, now. I mean a lot of people now, through [the vendors] customer user group as well, they know not only about what this TLA is doing, but they’ll ring cos my name’s just there, all my contact details are on the website’.

OD Manager

These relationships may extend to other potential partners, as this excerpt shows, and such partnerships can be enduring with some spanning many years. TLAs exploratory learners were found to have utilized the outputs from these liaisons to explore new possibilities and innovative ways of working. For instance, one manager explained how she will build on work undertaken by external consultants looking at behaviours for the TLA and;

‘I will pick up to look at strength-based and a whole load of stuff so, we are getting ready for June. We may be moving in slightly, possibly a different way’.

Innovative thinking is thus stimulated through such external relationships enabling exploratory learners to balance both the exploitation and exploration aspects of ambidextrous e-HRM. Such has been the success in social capital terms, that TLA plan to extend their private stakeholder network by forging links with smaller employers and seeking to put junior employees onto apprenticeships with these organizations.

DISCUSSION

In this chapter so far we have explored an organizational example of the ongoing relationship between intellectual capital as a set of knowledge assets and the drive towards HR ambidexterity as a way of balancing HR exploitation and exploration through an e-HRM implementation in a medium-sized local authority. In this section we will explore this relationship and identify lessons for practice, particularly in relation to exploratory learners and exploratory learning.

Cook and Brown (1999), in their discussion about *dynamic affordance* describe the *generative dance* between knowledge and practice that permits learners to reflect on their practice based on the knowledge they acquire and to refine their knowledge based on the practice that they perform. Shipton found from her studies that ‘two groups of HRM

mechanisms are likely to enhance innovation in products and technical systems; those designed to promote exploratory learning (e.g. project work and placements) and those intended to exploit existing knowledge (i.e. training, induction, appraisal, contingent pay and teamwork)' (2012, p19). Exploratory learning involves a 'trade-off' between exploration and exploitation and may produce 'conflicts between short-run and long-run concerns and between gains to individual knowledge and gains to collective knowledge' (March, 1991, p75). As we have argued, the three classes of knowledge assets embedded in intellectual capital; organizational capital, human capital and social capital are affordances of exploratory learning and thus help to resolve tensions inherent in achieving a balance in ambidextrous e-HRM environments. We now consider each of these elements in turn.

Organizational capital and exploratory learning

E-HRM systems, as a form of organizational capital in this case, offer exploratory learners the opportunity to more easily manage day-to-day tasks by handling routine data recording and maintenance. The functionality of such systems can also act as a catalyst for innovative thinking and creative solution identification by exploratory learners; thus helping to resolve some of the tensions inherent in achieving a balance between exploitation and exploration, that is HR ambidexterity.

Organizational capital is linked to organizational learning because 'an organization learns if any of its units acquires knowledge that it recognizes as potentially useful to the organization.' (Huber, 1991, p89 in Hargadon and Fanelli, 2002, p42). This is important because 'processes, systems, structures, and routines inform practice by guiding action in a way that might both enable and constrain learning behavior (Bowman and Swart, 2007)' (Snell and Morris, 2014, p222). In order to realize the benefits of e-HRM organizational capital however, it is vital that an organization places an emphasis on the support and development of their human capital.

Human capital and exploratory learning

Human capital comprises of the expertise and skills of the employees within an organization (Joia, 2000) and it is these attributes which are vital in ensuring knowledge generation (Zucker *et al*, 1998). The quality of human capital is of key importance in the achievement of a balance of exploitation and exploration in HR ambidexterity. However, skilled and knowledgeable people alone are not sufficient to ensure exploratory learning.

As Bowman and Swart suggest; 'current approaches that position human capital as central to value generation in knowledge-based industries obscure the importance of the relational nature of knowledge production' (2007, p. 488). Grigoriou and Rothaermel suggest that we should conceptualize 'new knowledge development as a process of search and recombination' and they further state; 'we suggest that a focus on individual productivity alone presents an under-socialized view of human capital. Rather, we emphasize the importance of embedded relationships by individuals to effectively perform knowledge-generating activities' (2014, 586). We assert that human and social capital should operate interdependently to drive knowledge generation.

Social capital and exploratory learning

Social capital is a key constituent of intellectual capital that is ‘based on relationships and networks between people, groups and organizations’ (Martín-de Castro, 2014, p239). Social networks contribute to knowledge creation because they alert individuals to the existence, location, and significance of new knowledge and the configuration of these networks determines the pace and direction of knowledge creation (Hansen, 2002). Tsai (2001) found that organizational units could produce more innovations and enjoy better performance if they occupied central network positions that provide access to new knowledge developed by other units.

In the language of ambidexterity, ‘the codified knowledge embedded in the organization’s systems, processes, routines, structures and technologies (Edvinsson and Malone, 1997; Levitt and March, 1988; Martín-de-Castro et al., 2006)’ can be viewed as ‘the product of an ongoing and recursive interaction between empirical and latent knowledge, between knowledge as action and knowledge as possibility’ (Hargadon and Fanelli, 2002, p290).

What brings together the enactment of all of these elements and their alignment is exploratory learning which is not only focused on knowledge generation, transfer and application processes throughout an e-HRM project, but also on the development of ‘combinative capability’ (Kogut and Zander, 1992, p.391). That is, to learn not only how to “generate new combinations of existing knowledge” and connect previously unexplored knowledge domains’, but also to “generate new combinations of existing knowledge” and connect previously unexplored knowledge domains.

Exploratory learning is not just an individual activity in a project team environment, so group exploratory learning is important because ‘If the strategically most important resource of the organization is knowledge, and if knowledge resides in specialized form among individual organizational members, then the essence of organizational capability is the integration of individuals’ specialized knowledge’ (Grant, 1996, p. 376). Such learning can take place across both internal and external boundaries and involve many stakeholders with the process being facilitated by exploratory learners who act as boundary spanners (see Hustad and Bechina, 2011).

CONCLUSIONS

In this chapter, the interrelationship between the knowledge assets of intellectual capital (in the form of organizational capital, human capital and social capital) were examined in order to gain insights into how organizations can, through exploratory learning and boundary spanning, achieve organizational ambidexterity. We show how e-HRM systems can be viewed as a facet of organizational capital to facilitate both exploitation and exploration. We also illustrate how exploratory learners (human capital) through boundary spanning via social capital networks, can enable organizations to generate knowledge through both internal and external stakeholder relationships. Exploratory learners are, in effect, individuals who enact

ambidexterity by using their knowledge and skills to manage day-to-day tasks whilst simultaneously forging social capital networks both inside and outside the organization to benefit from a two-way exchange of knowledge.

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