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A Social Capital Perspective on the Role of Human Resource Practices in Intra-organisational Knowledge Sharing

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ABSTRACT

While a growing body of HRM research has underscored the primacy of people management issues within the broader KM agenda, little progress has been made in understanding the interrelationships between HR practices and intra-organisational knowledge sharing. The aim of this paper is to contribute theoretically to the debate on the emergent role of HR practices in intra-organisational knowledge sharing within knowledge-intensive firms. Viewing knowledge as a socially constructed phenomenon and the knowledge-intensive firm as a distributed knowledge system, the paper draws upon social capital theory and places to the forefront of the discussion the catalytic – although overlooked – role of organisational social structure (in the form of either social capital or social liability) in mediating the relationship between HRM and intra-organisational knowledge sharing. The paper suggests that employees' ability, motivation, and opportunity to share their human capital can be viewed as both the cause and the outcome of the cognitive, relational, and structural dimensions of social capital embedded in an organisation's – formal as well as informal – social architecture. The paper seeks to shed light into whether and how HR practices influence the creation and sustenance of social capital, and by extension, knowledge workers' decision to share what they know. Hence, understanding the dynamics of organisational social capital is considered as prerequisite for understanding the intervening role of HR practices in the knowledge sharing process. The paper places the HR dialogue on human capital in the social context of how knowledge can be managed and shared.

Key Words: Human Resource Management; Social Capital; Knowledge Sharing

INTRODUCTION

While knowledge has traditionally been regarded by economists and organisation theorists as a key engine of production (Marshall, 1890) and the basis for individual and organisational competence (Hayek, 1945; Penrose, 1959), the idea of knowledge management (KM) has enjoyed widespread popularity in the academic and business press only in recent years. However, despite its rapid development, most of the KM discourse has tended to be information technology (IT) driven, and has thus failed to shed light into the 'soft', but at least equally important, issue of managing knowledge workers (Robertson & O'Malley Hammersley, 2000; Scarbrough & Swan, 1999), who can be viewed as 'the ultimate knowledge creators and bearers' (Oltra, 2003: 2). Despite the realisation that people management issues play a critical role in knowledge leveraging processes, HRM theory has paid little attention to the HR implications of managing knowledge assets towards achieving knowledge sharing optimisation (Hislop, 2003; Scarbrough & Swan, 1999; Storey & Quintas, 2001).

The emergence of the knowledge-intensive firm (KIF) (Alvesson, 2000; Blackler, 1995) as a key player in the knowledge economy signals a significant change from rigid organisational structures to more complex and fluid forms whose boundaries can be no longer defined in terms of land and/or capital ownership criteria, but rather in terms of transferability of useful organisational knowledge. Knowledge sharing becomes crucial for the survival and success of KIFs and this requires a rethinking of the employment relationship (Hibbard & Carrillo, 1996; Robertson & O'Malley Hammersley, 2000). There is, therefore, a need to re-examine the appropriateness of conventional human resources management (HRM) practices in terms of their compatibility with KIFs' strategic priorities along with the changing needs, interests, and values of knowledge workers (Keegan, 1998; Ruggles, 1998).

This paper contributes to the debate on HR's role in managing organisational knowledge by providing a social capital perspective on the HR implications of intra-organisational knowledge sharing. Specifically, drawing upon HRM theory, social capital theory, and KM theory, it develops a conceptual model of the interrelationships between HR practices and social capital dynamics, and their combined effect on employees' ability, motivation, and opportunity to share knowledge. Thus, it seeks to be a fruitful counterpoint to the existing body of research by placing the HR dialogue on human capital in the social context of how knowledge is managed and shared.

The paper is structured as follows: In the first section, the notion of knowledge sharing is defined, and the problems associated with it are highlighted. In addition, the idea of social capital is discussed, focusing on its implications for employees' attitudes towards knowledge sharing. In the second section, the role of HR practices in the knowledge sharing process is examined, followed by an analysis of the proposed conceptual model. The concluding section summarises the paper's key points, and also makes recommendations for further research.

KNOWLEDGE SHARING AND SOCIAL CAPITAL: THEORETICAL FRAMEWORK AND ANALYSIS

Knowledge Sharing

Since Kogut & Zander (1992) argued that a firm's ability to transfer knowledge is its *raison d'être*, research on knowledge sharing has become one of the most promising areas of research in KM. Knowledge sharing can be defined as 'a reciprocal process of understanding, integrating and sense-making, which is embedded in the activities of the organisation' (Willem & Scarbrough, 2002: 4). Based on Storey (2001), MacNeil (2003: 299) states that knowledge sharing occurs 'when people who share a common purpose and experience similar problems come together to exchange ideas and information'.

A KIF's competitive business model is based on deploying its knowledge assets. It thus needs to recognize not only the variety of forms of knowledge and understand their properties, but most importantly to develop the means by which knowledge can be disseminated (Hunter et al., 2002). Szulanski (2000: 10) suggests that 'mere possession of potentially valuable knowledge somewhere within an organization does not necessarily mean that other parts of the organization benefit from this knowledge'. Knowledge sharing is considered as a crucial KM process within organisational settings characterised by high division of labour, as it facilitates the integration and regeneration of otherwise fragmented, specialised, and asymmetrically distributed knowledge, thus making feasible the production of complex and innovative products and services (Boer et al., 2002). Knowledge sharing is perceived as fostering individual and organisational learning, and also promoting employee cooperation (Boer & Berends, 2003; Moorman & Miner, 1997).

Although the benefits of the knowledge transfer process have been documented in both inter-organisational (Dyer & Nobeoka, 2000) and intra-organisational levels (Baum & Ingram, 1998; Epple et al., 1996), its optimisation has proven a difficult challenge (Argote et al., 2003; Szulanski, 1996). Many organisations are faced with knowledge sharing problems (Gupta & Govindarajan, 2000; Michailova & Husted, 2003; Ruggles, 1998; von Hippel, 1994) that cannot be overcome by investing solely in information and communication technologies (ICTs) (Swan et al., 2000). In general, knowledge sharing problems can be classified into four main categories: obstacles related to the tacit dimension of knowledge (Polanyi, 1966) resulting in the so-called knowledge 'stickiness' (Szulanski, 1996; von Hippel, 1994); impediments connected to the economics of knowledge sharing (Cabrera & Cabrera, 2002; von Krogh, 2003); political frictions among organisational members caused mainly by knowledge status and power imbalances (Gardiner, 2003; Storey & Barnett, 2000); and psychosocial barriers originating from employees' behaviour (Cabrera, 2003; Husted & Michailova, 2002). It is evident that knowledge sharing is a far more

complicated social process, than just a technical, IT regulated activity. It is mediated by a wide range of complex, highly contextual, and therefore difficult to control factors embodied in an organisation's social architecture (Mueller, 1996).

A Social Capital Approach to Knowledge Sharing

While the idea of social capital has a long history in social, economic, and political sciences, recently it has also attracted the attention of organisation and management theorists (Adler & Kwon, 2002; Baker, 2000; Cohen & Prusak, 2001; Leana & van Buren III, 1999; Lesser, 2000; Nahapiet & Ghoshal, 1998). This interest can be attributed to the rise of the network economy and the emergence of KIFs (Lesser, 2000). As Cohen & Prusak (2001: 16) suggest, '[t]he size and intricacy of organizations, the proliferation of critical information, and the increasing complexity of [work] tasks make connection and cooperation – social capital – increasingly important'.

Viewing organisational knowledge as a socially constructed phenomenon (Berger & Luckmann, 1967), and the KIF as a distributed knowledge system (Tsoukas, 1996), reinforces the perception of intra-firm knowledge sharing as a collective action process located in complex and collaborative social interactions. Accordingly, the role of social capital is considered as vital. Social capital can be described as an attribute or asset of work organisations (Leana & van Buren III, 1999), and it is defined as 'the sum of the actual and potential resources embedded within, available in, and derived from the network of relationships possessed by an individual or social unit' (Nahapiet & Ghoshal, 1998: 243).

Social capital is suggested to be a valuable organisational resource as it facilitates the interactions among organisational members that are necessary for successful collective action (Leana & van Buren III, 1999). Furthermore, according to Nahapiet & Ghoshal (1998), social relationships – and the social capital therein – can have an important influence on the development of intellectual capital. The linkages between social capital and organizational knowledge are best illustrated in Nahapiet & Ghoshal's (1998) theoretical model. According to this, social capital consists of three mutually reinforced dimensions: structural, relational, and cognitive social capital.

Structural social capital, viewing social relationships through the lenses of social network theory (e.g. Wasserman & Faust, 1994), refers to the pattern, configuration, and purpose of social interactions. Therefore, central to the structural dimension of social capital, is the existence of network ties among actors, the configuration of network ties (i.e., density, connectivity, hierarchy), and the notion of appropriability – that is networks capacity in serving as information resources for different than initially developed purposes (Coleman, 1988). Social network theorists (Burt, 1992; Granovetter, 1973; Hansen, 1999) show that the structural properties of social relationships constitute major resources of benefits derived from: (1) gaining access to valuable information and knowledge flows; (2) timing – that is 'the ability of personal

contacts to provide information sooner than it becomes available to people without such contacts' (Nahapiet & Ghoshal, 1998: 252); and (3) referrals which provide 'information on available opportunities to people or actors in the network, hence influencing the opportunity to combine and exchange knowledge' (ibid: 252-253).

The relational dimension focuses on the content, rather than the structure, of social relationships. It refers to the kind of relationships individuals or groups of individuals have developed with each other through a history of social interactions. Trust and trustworthiness are among the most important facets of relational social capital. Trust is defined as 'the willingness to be vulnerable to the actions of another party' (Mayer et al., 1995: 712), where trustworthiness is 'the quality of the trusted party that makes the trustor willing to be vulnerable' (Levin & Cross, 2003: 3). The existence of high trust in a relationship produces certain outcomes such as cooperation, and sensitive information exchange (Mayer & Davis, 1999). Research on organisational trust provides evidence that trusting working relationships are characterised by greater knowledge sharing as individuals are more willing not only to give useful knowledge but also to listen and absorb others' ideas and knowledge (Andrews & Delahaye, 2000; Mayer et al., 1995). Since trust implies a willingness to engage in a risktaking activity (Mayer & Davies, 1999), it has been also argued that it can lead individuals to a propensity for experimentation with accessing and synthesising diverse pieces of information and knowledge. This can result in the development of new intellectual capital (Nahapiet & Ghoshal, 1998).

Finally, the cognitive dimension refers to resources that provide shared representations, interpretations, and systems of meaning among parties. According to Nahapiet & Ghoshal (1998), the important facets of the cognitive cluster are shared language and codes, and shared narratives. When interactions embody shared understandings, common language and codes, employees can enhance their intercommunication abilities, thereby providing more opportunities to share knowledge effectively (Morris et al., 2002). The importance of shared language has been underlined by Tsoukas & Vladimirou (2001). These authors mention that individuals' ability to draw distinctions within a collectively generated domain of action is contingent upon the cultural tools they utilise with language being the most important one. The existence of shared language (in terms of both verbal communication and other forms of symbolic communication) is vital not only for efficient knowledge transfer, but also for knowledge integration mainly through the establishment of common cognitive schemata and frameworks, such as metaphors, analogies, and stories, which act as vehicles for integrating individual understandings and experiences. Furthermore, the occurrence of a shared vision can facilitate knowledge sharing and integration among individuals or groups by providing a purposeful meaning to their actions. 'A shared vision embodies the collective goals and aspirations of the members of an organisation ... [O]rganization members who

share a vision will be more likely to become partners sharing or exchanging their resources' (Tsai & Ghoshal, 1998: 467).

The interlinks among the three dimensions of social capital, and their combined effect on resource exchange and value creation have been empirically examined in Tsai & Ghoshal's (1998) study of a large multi-unit electronics organisation in the US. Specifically, this study shows that both structural and cognitive social capital had a significant positive impact on the relational social capital which, in turn, was found to be associated with resource exchange and combination resulting in increased product innovation.

The results of the above study suggest that social capital can act as a mechanism for facilitating knowledge sharing by: (1) constructing shared language, and a shared vision through which employees are able to share their knowledge, (2) cultivating trust and trustworthiness that can motivate employees not to hoard their knowledge, and (3) providing employees with the opportunity to detect, communicate and exchange knowledge through the creation of new and/or reconfiguration of existing network ties (both within and outside the firm).

Based on the familiar tripartite A-M-O (ability-motivation-opportunity) framework (Boxall & Purcell, 2003; Campbell et al., 1993), a first theoretical proposition can be formulated as follows:

Proposition 1: The cognitive, relational, and structural dimensions of social capital are likely to have a combined effect on employees' ability, motivation and opportunity to share their knowledge, respectively.

It is suggested though that the relationship between social capital and employees' A-M-O to share knowledge is reciprocal. Consequently, employees' high propensity to share their knowledge can lead to higher levels of social capital. Thus, social capital can be viewed as both a cause and outcome of employees' A-M-O to share their human capital.

THE ROLE OF HUMAN RESOURCE PRACTICES IN KNOWLEDGE SHARING

A New Role for HRM

As all types of work organisations involve knowledge in the forms of employees' know-what and know-how (Quinn, 1992), the distinction between knowledge intensive and non-knowledge intensive organisations is not apparent. It is suggested though that the key differentiator of KIFs is the primacy of intellectual capital over physical and/or financial inputs (Swart & Kinnie, 2003). Quinn (1992: 241) has expressed a similar view, suggesting that contemporary firm's core competencies lie

more in its intellectual base than its hard assets. '[V]irtually all public and private enterprises – including most successful corporations – are becoming dominantly repositories and coordinators of intellect'. Hence, it can be argued that KIF's competitive advantage potential resides in the development of its intellectual capital. The latter 'represents a valuable resource and a capability for action based on knowledge and knowing' (Nahapiet & Ghosal, 1998: 245) and can be defined as a combination of human and social capital (McElroy, 2002).

The realisation that 'the combination of high-quality human capital and high-quality social capital is key to competitive advantage in the knowledge economy' (Lengnick-Hall & Lengnick-Hall, 2003: 62) can represent a significant departure from a conventional, individualistic theorising of HRM, to more interactionist perspectives (Schneider, 1983) that acknowledge the importance of social relationships and social capital therein.

Based on the above, it is suggested that KIFs can gain intellectual capital advantage by combining their human capital advantage (i.e., employees' capacity to acquire and apply effectively new knowledge, capabilities and skills) and social capital advantages (i.e., the quality of social relationships – enabling employees to communicate useful knowledge).

Hence, this paper, proposes the much neglected – at least by the traditional positivist HRM tradition – inclusion of social capital as a fundamental factor into the HR equation. Specifically, it suggests that HR practices should aim at contributing to the simultaneous development of human and social capital advantages, which in combination constitute a KIF's intellectual capital advantage (see Figure 1).

[Insert Figure 1 about here]

According to Lengnick-Hall & Lengnick Hall (2002), this can be best accomplished if HR professionals adopt four new interdependent and mutually reinforced roles: (1) human capital steward (assisting individuals' to develop their knowledge, skills, and capabilities); (2) knowledge facilitator (coaching, resource gathering, spotting personal mastery, and providing constructive feedback to employees); (3) relationship builder (helping individuals to build a strong web of relationships); and (4) rapid deployment specialist (drawing on human and social capital to contribute to firm's intellectual capital advancement).

However, as the vast majority of HRM theory has persistently focused on the human capital dimension, our understanding of HR practices' role in the management of social capital remains significantly limited (Brass & Labianca, 1999). This paper addresses a challenge to HRM theory and practice concerning the design and implementation of the right mix of HR practices that can facilitate social capital advantage. It has been mentioned, though, that while social and human capital need to be managed jointly (Pennings et al., 1998), investing in social capital differs in

fundamental ways from investing in human capital (Coleman, 1988). The following section focuses on the HR implications of managing social capital towards achieving intra-organisational knowledge sharing.

HR Practices, Social capital and Knowledge Sharing: Towards a Conceptual Model

A recent stream of research has begun to throw new light on the HR issues of managing knowledge. This, while varying in scope, level of analysis, and methods used, can be classified into three main clusters. The first takes a paternalistic approach and views HR's role as just intervening and exogenous to the actual process of knowledge sharing (Michailova & Husted, 2003; Soliman & Spooner, 2000). The second, while being consistent with agency theory, adopts a more integrated approach by placing emphasis on more strategic features of HRM and their impact on KM outcomes (Oltra, 2003; Yahya & Goh, 2002).

Finally, there is a small amount of research exploring social capital's implications for HR practice (Baker, 2000; Brass & Labianca, 1999; Lengnick-Hall & Lengnick Hall, 2002). For example, Baker (2000) identifies a set of ten HR 'best practices' that can build organizational social capital (see Table 1).

[Insert Table 1 about here]

Knowledge sharing phenomena can be better understood by examining whether and how employment practices impact on employees' ability, motivation, and opportunity to engage in knowledge sharing activities which in turn depend upon the cognitive, relational, and structural social capital.

Not surprisingly, HRM research offers its biggest contribution to the motivation element of knowledge sharing. Critical to this appears to be the extent to which knowledge sharing is embedded in reward and appraisal systems (Hansen et al., 1999). It is argued that the relative effectiveness of a reward system depends on the type of employees engaged in knowledge exchange as well as the type of knowledge. Osterloh & Frey (2000) suggest that firms can manage motivation better than the market (which relies only on relative prices) by choosing an optimal combination of both intrinsic and extrinsic rewards suitable for different types of employee groups, and thus compatible with the different types of knowledge (tacit or explicit) transferred across and within those groups. In addition, it is suggested that high levels of employee commitment can be associated with knowledge sharing proclivity (Hislop, 2003). Moreover, Leana & van Buren III (1999) suggest that a long term orientation to employment relationships, including the provision of job security and the promotion of collaborative work, can build relational contracts between employees and employer and also among employees. Empirical evidence supports this view, showing that a healthy or desired psychological contract can have a significant

positive effect on employees' knowledge sharing behaviours (Patch et al., 2000). Finally, Robertson & O'Malley Hammersley (2000) underline the important role of job satisfaction and fulfilment of employees' expectations in encouraging the sharing of their knowledge.

In regard to the structural social capital's implications for HRM, Brass & Labianca (1999) identify five areas including: recruitment and selection (based on utilising the personal networks of employees for attracting and hiring job candidates); socialisation (early connections in the organisational network can lead to enhanced social capital); training (similar training experiences can contribute on building connections across diverse and heterogeneous groups in anticipation of the future formation of cross-functional teams); performance management (performance can be improved when the network structure matches the information processing requirements); and career development (mentoring plays an important role as strong connections to a mentor can lead to increased access to the organisational network resulting in career advancement).

Finally, HR practices can contribute to the formation of cognitive social capital necessary for knowledge sharing by: introducing 'cultural fit' criteria in the recruitment and selection processes that can ensure that prospective employees are capable of demonstrating a knowledge sharing potential willingness, cross-functional teamworking skills, and collaborative spirit (Robertson & O'Malley Hammersley, 2000; Swart & Kinnie, 2003). Other HR initiatives include the development of self-development programmes, and self-management teamworking, and also the creation of a cultural environment characterised by informality, egalitarianism, and active employee involvement in decision making (Robertson & O'Malley Hammersley, 2000).

Hence, a second theoretical proposition can be formulated as follows:

Proposition 2: Social capital is likely to mediate the impact of HR practices on employees' ability, motivation, and opportunity to share their knowledge.

Furthermore, it is suggested that HR practices' role in the knowledge sharing process appears to be twofold. Specifically, HR practices can influence employees' A-M-O to share their knowledge: (1) by impacting on the cognitive, relational, and structural social capital, and (2) by creating a set of anticipated outcomes (e.g., employee commitment, job satisfaction), which in turn, can have a direct effect on employees' knowledge sharing attitudes.

The potential causal links among HR practices, social capital, and intra-organisational knowledge sharing can be integrated into the following conceptual model (see Figure 2).

[Insert Figure 2 about here]

According to this conceptual model, intra-organisational knowledge sharing is viewed through the lens of employees' A-M-O to engage in knowledge sharing activities. The A-M-O framework can be seen as a robust analytical tool as it places individuals' abilities, motivation and opportunities to succeed in a specific context (Boxall & Purcell, 2003). Campbell et al. (1993) define ability as a combination of declarative knowledge (including facts, principles, goals, and self-knowledge) and procedural knowledge and skill (including cognitive skills). Similarly, in this model, ability (to share knowledge) is both an antecedent to and a result of cognitive social capital. Motivation is determined by the individual's choice to perform, the level of effort, and the persistence of that effort (ibid). This model identifies trust and trustworthiness as major determinants of the individual's choice to get involved in knowledge sharing activities.

It is argued, though, that even highly capable and motivated employees cannot perform successfully if they lack the opportunity to access useful channels and utilise their resources (Boxall & Purcell, 2003). 'However, the role of opportunity is not clearly acknowledged' (ibid: 137). In this model, employees' opportunity to share their knowledge is suggested to be heavily influenced by the structural characteristics of the formal as well as informal networks of social interactions taking place within (and outside) the firm.

Hence, the conceptual model adds to the understanding of the knowledge sharing process, as it provides an integrated theoretical framework, according to which, employees' abilities, motivation and opportunities to share their knowledge are dialectically interlinked with the cognitive, relational, and structural social capital embedded in, and derived from the organisation's social context. This is a novel approach, as the vast majority of studies have failed to incorporate all the three dimensions of social capital into their analyses of knowledge sharing in organisations.

In addition, this model contributes to an alternative theorising of HR's role in the management of organisational knowledge. Specifically, it embraces a social capital perspective, stressing the need for examining empirically the largely overlooked impact of HR practices on the structure, content, and value of social relationships within the KIF. This suggests a process-based approach to HRM (Swart & Kinnie, 2003), acknowledging the role of the organisation's social architecture (Mueller, 1996) as fundamental, in order to understand and assess the actual contribution of HR practices to intra-organisational knowledge sharing.

CONCLUSION

This paper represents an effort to nudge the HR dialogue towards the social aspects of intra-organisational knowledge sharing by providing a preliminary conceptual model for further refinement and empirical examination. In this model, social capital is

viewed as an important multi-faceted factor that is likely to mediate the impact of HR practices on the level and quality of knowledge sharing taking place within knowledge intensive business environments.

It would be simplistic, though, to omit from the analysis the problems with the concept of social capital, by implying that it is a panacea for overcoming knowledge sharing inefficiencies. Both theoretical (Adler & Kwon, 2002; Brass & Labianca, 1999; Leana & van Buren III, 1999), and empirical analyses (Edelman et al., 2004) have pointed out the 'dark side' of social capital. Specifically, there are costs associated with maintaining ongoing relationships and norms, and related to the maintenance of slack resources (for socialization of new organisational members) (Leana & van Buren III, 1999). There are also pitfalls of unrealised innovation and resistance to change caused by established relationships and strong norms keeping employees embedded in regularities, not willing to internalise new information and knowledge (Edelman et al., 2004). It is suggested that 'the social context in which social capital is created and utilized has a significant impact on its form and usage' (ibid: S67).

This addresses further challenges to HRM concerning the design and implementation of HR practices that can facilitate social capital advantage. The main difficulty derives from the evolving nature of social capital. Specifically, in the long-term, social capital tends toward strong ties, resilient trust, and overlapping component knowledge (Morris et al., 2002). Brass & Labianca (1999) recommend that research on social capital can benefit from including the consideration of the negative side of social capital, namely social liability, which destroys trust and norms, and also prevents information and knowledge sharing. Understanding the dynamics of organisational social capital is therefore considered as an essential prerequisite for understanding and explaining the role of HR practices in its sustenance and its impact on knowledge sharing.

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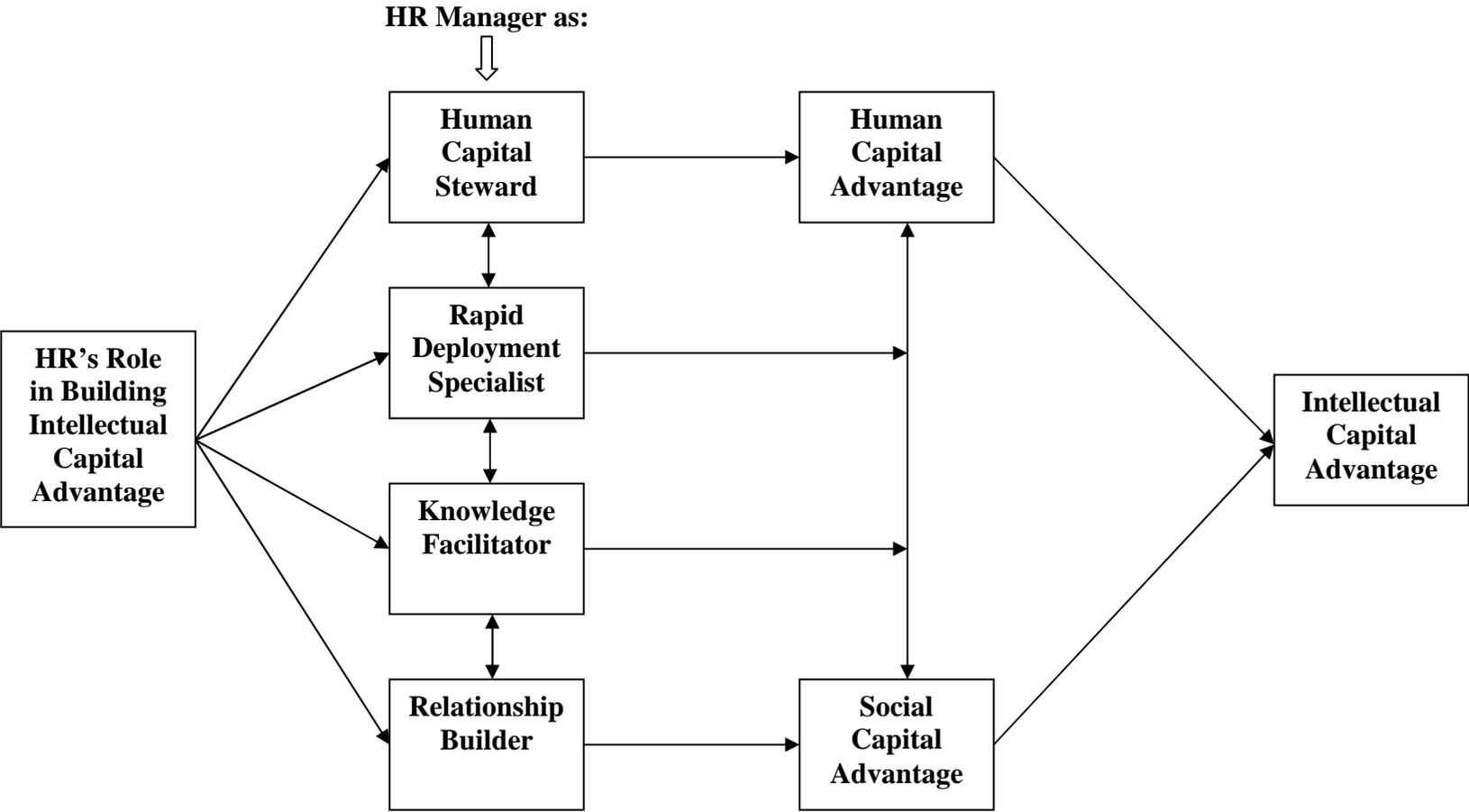
TABLES AND FIGURES

Table 1: HR ‘best practices’ that build organisational social capital

HR Practices
<ul style="list-style-type: none"> • <u>Faculty Design and Location</u>: open offices, absence of physical barriers, co-location, water-cooler strategies • <u>Hiring</u>: Hire networks and not just on the basis of what people know • <u>Education and Training</u>: Introducing cross-functional training • <u>Multidisciplinary teams</u>: Promoting cross-functional teamworking • <u>Rotation Programs</u>: Acting as natural vehicles for building networks that transfer knowledge across organisational boundaries and develop a global mindset. • <u>Incentive Systems</u>: Combining individual and collective rewards; rewarding for knowledge sharing • <u>Communities of Practice (CoP)</u>: Fostering, nurturing, and investing in the development of CoP. A CoP gives employees a home • <u>Management Networks</u>: Involving people who are drawn from across company’s functions, business units and geography, and from different levels in hierarchy. • <u>External Networks</u>: Developing networks of alliances with competitors, customers and suppliers.

Source: Baker (2000: 182-192)

Figure 1: HR's role in building intellectual capital advantage



Source: Lengnick-Hall & Lengnick Hall (2002)

Figure 2: A social capital perspective of the role of HR practices in intra-organisational knowledge sharing

