Sustainability Issues in Human Resource Management:

Linkages, theoretical approaches, and outlines for an emerging field

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Abstract: Sustainability has been subject of thought and reflection in the field of management for a long time. Only recently, however, does the link between sustainability and HR issues seem to have received attention. The main goal of this paper is to introduce this literature and their different approaches, to identify the benefit of this perspective for traditional HRM research, and to suggest first approaches towards an extended theoretical framework for SHRM. Finally, the paper proposes open research questions and outlines of a perhaps emerging field of research.

Introduction

Over the past two decades, technological developments, globalization, and competitive demands have caused dramatic changes within and across organizations, and have transformed general conditions for human resource management (HRM) strategy and decision-making. Human resources (HR), HRM practices and strategies have been identified as essential for organizational success (e.g. Wright, Gardner, Moynihan & Allen, 2005). The rise in importance of HR and HRM has fuelled a quickly expanding stream of research (e.g. Martín-Alcázar, Romero-Fernández & Sánchez-Gardey, 2005). Strategy and resource orientation in HRM literature have increased (e.g. Wright, Dunford & Snell, 2001), and some human resources have been identified as 'critical' for organizations (Taylor, Beechler & Napier, 1996). Examples are expatriates or highly qualified global managers, as their knowledge and competencies are regarded as essential for the realization of corporate strategies (Brewster & Suutari, 2005; Lazarova & Caligiuri, 2004). In a global economy, one of the major problems for today's HR executives is the scarcity of highly qualified and motivated HR (e.g. Thom & Zaugg, 2004). HR researchers have suggested new ways for

practitioners to draw from a larger and thus more diverse HR pool (e.g. women as global managers), to extend and intensify the use of available HR (e.g. high performance work systems), and to develop new HR (e.g. new types of cross-cultural training).

In their decision-making however, HR practitioners find themselves in permanent tension between short-termed profit making (e.g. retrenchment or downsizing because of labour-cost pressure) on the one hand and long-term organizational viability on the other (Wright & Snell, 2005). On the one hand, it has been proposed that i.e. HR training and development can lead to sustainable competitive advantage (e.g. Aragón-Sánchez, Barba-Aragón & Sanz-Valle, 2003), and that on the other hand, cost-cutting strategies such as downsizing or neglecting HR training can reduce an organization's strategic ability, endanger its organizational viability, and can lead to negative effects for organizations themselves (e.g. Evans, 1999; Mariappanadar, 2003; Wright & Snell, 2005). However, many HRM practitioners find themselves in paradoxical, ambiguous situations between competing demands. In these situations, no simple 'either/or decisions' can be formulated (see also Evans, 1999).

From a sustainability perspective, scholars have picked up different facets of the dilemma of short-termed profit making and long-term organizational viability, such as the problem of scarcity of highly qualified HR, or of unintended outcomes for HR, HRM, and the society. In this literature, it is assumed that in practice, critical HR are consumed and exploited rather than developed and reproduced (e.g. Kira, 2002, 2003; Thom & Zaugg, 2004). For instance, authors mention highly qualified employees facing increased work-related stress, work-family-conflicts, health problems, burnout, or lack of employability (e.g. Docherty, Forslin & Shani, 2002; Moldaschl & Fischer, 2004; Thom & Zaugg, 2004). Consequences for corporations can range from negative outcomes for its future strategic ability to loss of innovativeness because of ineffective strategies today (e.g. Docherty et al., 2002a). In the literature linking sustainability and HRM issues, three main questions are asked: (a) How can HR executives manage future supply with qualified and motivated human resources (e.g. Müller-Christ & Remer, 1999; Thom & Zaugg, 2004)?; (b) How can unwanted, negative effects and 'externalities' of HR deployment or retrenchment be prevented (e.g. Docherty et al., 2002a, Mariappanadar, 2003)? (c) Who is responsible for the measures that have to be taken (e.g. Thom & Zaugg, 2004)?

Although sustainability is an important issue in the field of management research and in practice with this concept emerging in more and more organisations, it has received comparatively little attention from HR researchers (Boudreau & Ramstad, 2005; Thom & Zaugg, 2004). The literature linking sustainability and HRM is widely dispersed across disciplines, diverse in its interpretation of sustainability, and barely interrelated with mainstream HRM literature. A large amount of the sustainability literature presented in this paper has not yet reached reviewed academic journals. Result of the author's own literature research is that from 1995 to 2005, none of the 21.580 articles published in 29 high-ranked academic journals were devoted to the link between sustainability and HRM issues although the terms sustainability and sustainable are often in use. The majority of the papers, however, apply sustainability relating to 'sustainable competitive advantage' and HRM or Corporate Social Responsibility. However, publications can be traced outside of these journals. Only very recently, papers have emerged that apply sustainability as a concept for HR issues (e.g. Boudreau & Ramstad, 2005; Mariappanadar, 2003). The different approaches to sustainability in HRM have not been analysed and compared systematically. This research

gap is the point of departure for this conceptual paper, and contributions to literature are threefold.

First, the main goal of this paper is to highlight existing links between sustainability issues and HRM on both micro and macro levels of analysis, and to make the case for studying HRM topics from a sustainability perspective. Accordingly, the contribution of the first section is to review the recommendations of these approaches as to manage future supply of qualified and motivated HR, to prevent negative side and feedback effects of HR practices and strategies, and to identify the locus of responsibility for these actions. Then, conclusions are drawn for the development of a theoretical framework linking sustainability and HR issues. It is suggested that a sustainability perspective could contribute to a new understanding of strategic success in HRM and help analyse detrimental long-term outcomes of HR strategies and practices. The second contribution of the paper is to extend the theoretical foundation of an existing Strategic HRM (SHRM) conceptual model (Wright & McMahan, 1992) from a sustainability perspective. The main focus of this section is the connection between today's balance of human resource exploitation and development and tomorrow's human resource base. For this reason, it argues that theoretical concepts such as ambiguities, time horizon, and reflexivity, should play a more important role in SHRM frameworks and theory building. Finally, implications for theoretical and empirical research and possible outlines for a field which is regarded as emerging are proposed.

Linkages of sustainability and HR issues in the literature

In this section of the paper, the evolution of different understandings of sustainability is outlined and reviewed. Current applications of sustainability in HR-related literature on both micro and macro levels are examined, and a comparison and critical analysis of the approaches identified is undertaken. Conclusions for the development of a theoretical framework linking sustainability to HRM research are drawn.

Brief evolution of the notion of sustainability and its diffusion into HRM research

Today, the notion of 'sustainability' is one of the most widely used words across different disciplines with a broad variety of definitions, but it remains difficult to analyse from where exactly it originated (Leal Filho, 2000). Traditionally, the terms sustainability and sustainable development are used as synonyms for the notions 'long-term', 'durable', 'sound', and 'systematic' (Leal Filho, 2000). According to Dyllick and Hockerts (2002), the understanding of the term 'sustainability' has been influenced mainly by three different stakeholder groups; ecologists, business strategy scholars, and the United Nation's World Commission on Environment and Development (WCED, 1987), called the 'Brundtland Commission'. Some authors believe sustainability first appeared as a concept in the forestry sector (see also Leal Filho, 2000), before it was adapted by the ecological movement concerned with the over-exploitation of natural and environmental resources, in the 1970s (e.g. Daly, 1973; Meadows, Meadows & Randers, 1972). While ecologists focus on sustainability's ecological dimension – the protection of the natural environment – the traditional goal of business strategy scholars is economic sustainability of organizations (Dyllick & Hockerts, 2002). Business strategists apply the term in conjunction with 'sustainable competitive advantages' (e.g. Porter, 1980; Barney, 1991). Firm resources are sources of sustained competitive advantage if they are valuable, rare, imperfectly imitable,

and difficult to substitute (Barney, 1991). Human capital has been identified as a very important resource category for building a sustained competitive advantage (Barney, 1991; Schuler & Jackson, 2005), and human resource literature has picked up this theoretical development (e.g. Wright, McMahan & McWilliams, 1994).

Barney (1991) points out that his definition of sustained competitive advantage is not oriented towards a long-lasting calendar time, but at stability of the competitive advantage over time: "Empirically, sustained competitive advantages may, on average, last a long period of calendar time. However, it is not this period of calendar time that defines the existence of a sustained competitive advantage, but the inability of current and potential competitors to duplicate that strategy that makes a competitive advantage sustained" (Barney, 1991: 103). D'Aveni (1995) supported this assumption with his work on 'hypercompetition' indicating that there are no sustainable competitive advantages due to very dynamic and disruptive competitive environments. Accordingly, the term sustainable or sustainability is not necessarily understood as a synonym for 'long-term' or 'durable' in the Strategic Management literature. This is important when valuing one of the differences to the views on sustainability discussed later in the paper. The strategic objectives to deal with resources are two-dimensional; one important task is the exploitation or deployment of the resources for a firm's competitive advantage, but Grant (1991: 131) explicitly points out that another important task is to identify resource gaps and to develop a firm's resource base: "This includes replacement investment to maintain the firm's stock of resources and to augment resources in order to buttress and extend positions of competitive advantage as well as broaden the firm's strategic opportunity set".

The Brundtland Commission focused on sustainable development of societies and added a social dimension to the ecological and economic ones, defining sustainable development as a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987: 43). Although originally intended as emphasizing the link between the economic difficulties of developing countries and sustainable development, this definition became one of the most often cited definitions which influenced the practical emergence of further constructs and definitions of sustainability in management theory and practice (Anand & Sen, 2000; Gladwin, Kennelly & Krause, 1995). First, ecological issues dominated the discussion on sustainable development in management research, but within the last few years, social issues have become increasingly important (Dyllick & Hockerts, 2002). Last but not least, the diffusion of notions such as 'Corporate Social Responsibility' (CSR)[1] or 'Corporate Sustainability',[2] in practice and research, have contributed to an increase of interest in sustainability linked to HR issues. HR topics in this literature are e.g. ethical issues, gender issues, education, or life-long learning. As an extensive review of CSR literature is beyond the scope of this paper, this section focuses primarily on the less well known literature linking sustainability and HR issues.

These concepts of 'Sustainable Work Systems', 'Sustainable HRM', and 'Sustainable Management of HR' bear traces of one or more previously described understandings of sustainability. In the next section, the links between sustainability and HR issues are tracked and compared. The elaboration concentrates on the different understandings of sustainability,

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[1] For reviews on CSR see McWilliams, Siegel & Wright (2006), Salzmann, Ionescu-Somers & Steger (2005); van Marrewijk (2003), and Whetten, Rands & Godfrey (2002).
[2] Practitioners are organized in the World Business Council for Sustainable Development (WBCSD), www.wbcsd.org.

on the suggestions given to ensure future supply with HR, to reduce negative effects of HR practices or strategies, and on the locus of responsibility for these actions.

Sustainable Work Systems

Influenced by the political debate on sustainability and sustainable development, researchers from different disciplines in the U.S. and Europe with an interest in Sustainable Work Systems[3] (SWS) promote an understanding of sustainability largely based on the Brundtland Commission's definition (e.g. Docherty, Forslin, Shani & Kira, 2002c; Moldaschl, 2005). However, as sustainability is a very complex concept, authors do not try to offer just one truth or "one unified message, but rather, different impressions on sustainability" (Docherty et al., 2002c: 12). For example, Docherty and colleagues (2002c: 12) propose a stakeholder perspective: "Sustainability - as we understand it - encompasses three levels: the individual, the organizational and the societal. Sustainability at one level cannot be built on the exploitation of the others. These levels are intimately related to the organization's key stakeholders: personnel, customers, owners and society. [...] A prerequisite for sustainability at the system level (individual, organizational or societal) is to achieve a balance between stakeholders' needs and goals at different levels simultaneously". An increasingly short-termed profit orientation with strategies like downsizing, outsourcing, or contingent work is hold incompatible with social and long-term economic objectives (Docherty et al., 2002a). A further critical view is pursued by Moldaschl (2005: 5) who understands his sustainability perspective as consciously subjective, and value-laden: "The term sustainability does not stand for ecology, […] but for a general resource perspective. The prerequisites, side effects, and boundaries of economic actions in our capitalistic society are herewith discussed."

To sum up, the understanding of sustainability from proponents of SWS is largely in line with the understanding of social responsibility in the CSR literature. It refers to those stakeholder expectations justified through ethical reasoning or through expectations of what is social equity (see also Whetten et al. 2002). This understanding follows the assumption that companies should be held responsible for negative effects of their actions on their stakeholders and on society.[4] The responsibility for side effects, HR exploitation, and development are located in organizations (e.g. Docherty et al. 2002a; Moldaschl 2005). In SWS, examples for these negative side effects are work-related stress symptoms, work-dependent psychosomatic reactions, burnout, self-exploitation tendencies, increased pressure of time and work pace, increased pressure to perform, eroding trust in employment relations, and blurring boundaries between work and private life (Brödner, 2002; Docherty, Forslin, Shani & Kira, 2002c; Kira, 2002). The scholars of SWS are convinced that these phenomena appear more often than ever among highly skilled, self-determined, highly participating, and autonomously acting employees because these employees face contradictory and ambiguous demands, experience increased work-related stress, and because not all of them are able to cope with these tensions (e.g. Brödner, 2002).

Increased globalization, competition, team work, the development of information and communication technology, increased uncertainty of employment, self-organized work, and

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[3] Work systems are the "roles, responsibilities and relationships for getting work done" (Beer, 2002: xiv in Docherty et al., 2002a).

[4] This assumption has been followed by a long history of controversial and sometimes heated debates. In question is the scope of a company's responsibility for society and about who decides what social responsibility is: organizations or societies? (see Whetten et al., 2002).

autonomy are identified as some of the causes for more intensive and flexible work systems contributing to negative outcomes for employees and to HR exploitation (Brödner & Knuth, 2002; Docherty et al., 2002a, 2002c). The concept of 'intensive work systems' (IWS) consumes human resources physically, cognitively, socially, and emotionally due to high work intensity. Contrary to this concept, SWS are proposed that prevent negative outcomes of intensive HR deployment, and allow regeneration and development of HR: "Human resources to be fostered include skills, knowledge, co-operation and trust, motivation, employability, constructive industrial relations, and also broader institutional/societal prerequisites, such as training systems" (Docherty, Forslin, Shani & Kira, 2002c: 11). Beyond this core idea, SWS are thought to lead to a balance of working life quality and organizational performance, to 'sustainable change processes', and to employment (Docherty, Forslin, Shani & Kira, 2002c). To achieve these objectives, potential solutions are explored from several theoretical perspectives and from first empirical studies (e.g. Docherty, Forslin & Shani, 2002a; Kira, 2003).

For example, analytical concepts of psychology and stress research such as 'sense of coherence' and 'salutogenes' (Antonovsky, 1987), stress, coping, flow, resource regeneration, or competence have been proposed to understand intensive work systems and to conceptualize regenerative and salutary work (Brödner & Forslin, 2002; Brödner & Knuth, 2002; Kira, 2002; Latniak, Gerlmaier, Voss-Dahm & Brödner, 2005). Additionally, a 'resource-centred socio-economic' perspective focusing on the embeddedness of the firm has been proposed to extend the management perspective (Moldaschl, 2004). According to Moldaschl and Fischer (2004: 132) socio-economics is no consistent theory but a 'movement', 'heuristic framework', or 'paradigm'. The purpose of the resource-centred socio-economic approach is to offer a relational definition of resources, to differentiate between resource types, to raise awareness for unintended side effects, and for longer time horizons (Moldaschl, 2002, Moldaschl & Brödner, 2002; Moldaschl & Fischer, 2004; Moldaschl, 2005).

With reference to the question of what can be done to manage future supply of qualified and motivated resources, the answers offered in the literature on SWS suggest putting more emphasis on the regeneration and development of human and social resources (Docherty et al., 2002a). Employees should be allowed to grow, to learn, and to use their intelligence and creativity for their work and participate in decision-making processes (Docherty et al., 2002a). At the individual level this growth and development could be achieved by work experiences that make people 'stronger', and at the organisational level the sustainability perspective is supposed to lead to competitiveness and value generation for an organization's stakeholders (Docherty et al., 2002c: 12). The goal of this stream of literature is to improve understanding of the mechanisms and processes leading to HR exploitation or development. Therefore, recent publications continuing this stream focus on 'sustainable learning', learning and reflection, and on treating intangible resources (e.g. social capital) in organizations (Boud, Cressey & Docherty, 2006; Moldaschl, 2005; Shani & Docherty, 2003). However, the authors do not suggest how the difficult balance of exploiting and developing HR can be achieved from an HRM perspective. This is what the next approach tries to add by proposing an integrative HRM concept for reconciling economic competitiveness and social responsibility.

Sustainable Human Resource Management

Representatives of the University of Bern, Switzerland, propose the first systematic, theoretically and empirically substantiated concept for a 'Sustainable Human Resource Management' for Swiss companies.[5] Sustainable HRM is defined as "those long-term oriented conceptual approaches and activities aimed at a socially responsible and economically appropriate recruitment and selection, development, deployment, and release of employees." (Thom & Zaugg, 2004: 217).[6] Sustainable HRM is interpreted as a cross-functional task. The authors propose Sustainable HRM particularly for organizational change situations as these often make too great demands on the people involved. For example, Sustainable HRM could help sustaining employee dignity in the case of staff reduction and warranting their employment on the job market (Thom & Schüpbach-Brönnimann, 2003; Thom & Zaugg, 2001).

For empirical exploration, a mail questionnaire was sent to all members of eight European HRM associations in Switzerland, Germany, Italy, France, Spain, Austria, Great Britain, and the Netherlands (Thom & Zaugg, 2004). Among others, the respondents were asked to associate freely on the term 'sustainability in HRM'. The practitioners associated about 300 different terms which were clustered into 20 categories. Most often the terms were related to HR development, employee skills, leadership and support, strategic planning, reward systems, and value orientation. The researchers conclude that there seems to be an interest for sustainability issues in HRM practice although the understanding of sustainability is very heterogeneous. From their cross-cultural comparison they deduce that economic goal orientation of HRM is regarded as most important in every country except for Switzerland (Thom & Zaugg, 2004). For further examination of the issue, important theoretical foundations of this approach to sustainable HRM are derived from the sustainability literature (e.g. WCED, 1987), from the literature on sustainable work systems (e.g. Kira, 2002) and from SHRM literature such as the Harvard approach (Beer et al., 1984), Human Investment Philosophy (Miles & Snow, 1995), People-Centred Management (Pfeffer, 1998), entrepreneurial HRM (Wunderer & Dick, 2000), stakeholder theory (Freeman, 1999), and self-organization theory (Göbel, 1998; Probst, 1987). More details on the use of these theories and the sustainable HRM concept can be expected from Zaugg (in press).

Concerning the questions of particular interest for this paper, the locus of responsibility, the treatment of negative side-effects and the future supply with skilled and motivated HR the Swiss approach of Sustainable HRM gives the following answers. The researchers assume that companies, employees, and society are mutually in charge for sustainable activities. Responsibility is extended to employees' responsibility for themselves and for their careers. Human resources are interpreted as 'subjects', as equal partners, and as self-responsible actors. Moreover, it is assumed, that employees' individual objectives include improved employability, increased desire to participate in decision-making processes, quality of life, and balancing roles within and outside of work (work-life-balance) (Thom & Zaugg, 2004). Implicitly the authors seem to assume that negative effects of HR practices and strategies can be prevented if employees act in a self-responsible way, participates in decisions, and if HRM operates as a 'guardian of HR' with the objective to support and "to deploy HR in a way that the employee's long-term development and performance is not affected but improved. An

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[5] Current publications on this stream of research encompass e.g. Thom, 2002; Thom & Schüpbach-Brönnimann, 2003; Thom & Zaugg, 2002, 2004; Zaugg, 2002; Zaugg, Blum & Thom, 2001. Details on the concept are supposed to be published in April 2006; see Zaugg (in press).
[6] German quotations in the text have been translated by the author of this paper.

employee's ability to perform should remain useful for employees themselves, their families, other companies as well as for society." (Zaugg, 2002: 14).

As an answer to the issue of long-term supply with highly qualified and motivated HR, three main tasks are regarded as particularly important for a Sustainable HRM; HR development, design of reward systems as well as consideration of sustainability in the company's goals, –strategies, and organizational culture (Thom, 2002). Further important tasks are HR recruitment, HR marketing, HR care (e.g. job security, health promotion), HR deployment (e.g. flexible working time models, work-life-balance, sabbaticals), HR release, trust-sensitive and participative leadership (Thom & Schüpbach-Brönnimann, 2003; Thom & Zaugg, 2002).

To sum up, the Swiss approach conceptualizes Sustainable HRM following the Swiss tradition of a harmonious co-existence of employees, corporations, and society as in previous approaches e.g. from Krulis-Randa (1990) or Staffelbach (1990). Sustainability is perceived as a mutual benefit for all stakeholders and as a contribution to long-term economic sustainability. This seems to be the main difference of this approach to traditional HRM conceptualizations. Economic success alone is not regarded as sufficient for long-term organizational survival. The authors of the next concept agree with the latter assumption but seek to find an economically rational explanation for sustainability in organizations and in HRM.

Sustainable Management of Human Resources

Scholars from the University of Bayreuth, Germany, have laid the foundation for the development of a rational understanding of sustainability of organizations (Remer, 1993; Müller-Christ & Remer, 1999; Müller-Christ, 2001). The proponent's intention is not to remind actors of their responsibilities or moral obligations for employees or society. Instead, the central assumption is that it is economically rational to act in a sustainable way if resources are scarce and that a sustainability perspective could lead to a more realistic theory of the firm (Müller-Christ, 2001). Accordingly, the understanding of the notion Sustainable Management is different from the majority of approaches in the sustainability literature. For this literature, sustainability or 'Corporate Sustainability' aims at balancing economic prosperity, social equity, and environmental integrity (e.g. Bansal, 2005). While Müller-Christ's (2001) Sustainable Management approach also pursues a balance, the reasoning for sustainability is not based on responsibility but on economic rationality. Hence, the conceptual objectives of this approach encompass exploring a causal explanation for mutual exchange relationships between organizations and their environments, and developing a general theoretical approach for treating scarce resources (Müller-Christ, 2001).

The causal explanation and the recommendations for actions of this approach, both rely on the understanding of organizations. From Luhmann's (1984) system's perspective and with respect to the resource-dependence theory (Pfeffer & Salancik, 2003[1978]), organisations are defined as resource-dependent socio-economic systems, consuming and supplying resources (Müller-Christ, 2001). The Sustainable Management approach is based on three main assumptions. First, based on Luhmann's (e.g. 1984, 1986) early works it is assumed that organizations survive because they open their boundaries and because they manage the balance of mutually 'opening' and 'maintaining' their boundaries. Based co-evolution theory (e.g. Bateson, 1981) the second assumption is that organizations survive because they

cooperate with each other to reproduce the HR base and because they create mutual exchange relationships. Finally, based on 'economic ecology' (e.g. Remer, 1993) the third main statement is that organizations survive because they manage sustaining and reproducing their resource base in their environments (Müller-Christ, 2001). Organizational environments are not regarded as constraints but as 'sources for resources' ('Ressourcenquellen') which companies need for their long-term existence (Müller-Christ & Remer, 1999). To exploit these resources on a long-term basis, the sources for resources have to be sustained.

According to this understanding, a company acts in a sustainable and economically rational way if its resource reproduction divided by resource consumption equals one (Müller-Christ & Remer, 1999). The authors derive this definition of sustainability from old European forestry laws which state that wood consumption and reproduction should be balanced to sustain a forest. The idea is a general rule in accounting for balancing a company's financial capital (Müller-Christ & Remer, 1999).[7] In the concept, HR are treated with the same logic as any other organizational resources (e.g. natural, financial, or social resources). The only differences between resources seem to be captured in the expression 'specific conditions of development, reproduction, and regeneration' ('Eigengesetzlichkeiten') derived from systems thinking (Müller-Christ, 2001). 'Specific conditions of development, reproduction and regeneration' of HR are defined as those requirements which have to be fulfilled to build HR (development), to ensure the functioning of the sources for HR (reproduction), and to ensure that employees maintain their capability to work over time (regeneration). For example, it takes a person a certain time to go to school, to university, or to work to build skills, knowledge, and competencies. The underlying conditions are specific conditions of development or reproduction. Another example is the explanation of the failure of schools, universities, or labour markets to provide the people with the skills or motivation needed in organizations. In HRM literature, this is usually interpreted as market failure (e.g. Linnehan & De Carolis, 2005). From the system's perspective of the Sustainable Management approach this is interpreted as a failure of the functioning of the 'sources for HR'. The difference is that in the systems approach the failure is not perceived as 'given' but as effects caused among others by previous HR practices and strategies which now operate as a feedback loop on the organization.

Concerning the supply with highly skilled and motivated HR, the Sustainable Management perspective explores "what companies themselves have to do in their environments to have durable access to skilled human resources (Sustainable HRM)" (Müller-Christ & Remer, 1999: 76). The suggestion is that on the one hand, organizations should reduce negative side effects of practices and strategies on the 'sources for resources' (e.g. on labour markets, education systems, or on families). On the other hand, organizations should ensure the survival of those sources for resources which provide human resources with the skills and motivation required (Müller-Christ, 2001). In other words, according to this approach it is economically rational for companies to invest in the survival of their sources for resources if the functioning of these is endangered. Hence, this approach also seeks to explain why

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[7] This analogy between sustainability and accountancy principles had been observed elsewhere as Anand and Sen (2000) point out: "This principle also has much in common with the ideal concept of income that accountants seek to determine: the greatest amount that can be consumed in the current period without reducing prospects for consumption in the future" (Repetto, 1985: 10).

companies invest in Corporate Universities or in work-to-school programmes[8] although it is uncertain that they will profit from their investment; this is interpreted as the attempt to sustain the sources for HR (Müller-Christ, 2001).

However, 'exploiting' and 'reproducing' human resources simultaneously and to find a balance between exploitation and reproduction poses a dilemma for practitioners. According to Müller-Christ (2001), two different logics stand behind this dilemma; efficiency and sustainability. The author suggests that resource exploitations follow the economic logic of efficiency and that reproduction follows the logic of sustainability. The relationship between efficiency and sustainability is conceptualised as an ambiguous and a dual one; thus, it is impossible to maximize efficiency and sustainability simultaneously (Müller-Christ, 2001). The main assumption of this view for HRM is that it is important for organizations to learn more about the 'intrinsic values' of HR and about the 'specific conditions of development, reproduction, and regeneration' of the sources for HR to ensure future supply with skilled and motivated employees.

Discussion of the consequences of the sustainability perspective for further research

The foregoing review indicates that sustainability is a very multifaceted phenomenon with a heterogeneous understanding of *what* sustainability is, *why* it should be paid attention to, and of *how* this concept could be explained. In the literature reviewed, the explanation for a sustainability perspective range from social responsibility to economic rationality, depending on the research goals, theoretical foundation, research paradigm, and on the main source of the sustainability definition. While the proponents of SWS pursue the understanding of sustainability as a social responsibility, the approach of Sustainable HRM tries to balance economic rationality and social responsibility simultaneously, and the Sustainable Management of HR explore sustainability as an economic rationality, only (see table 1). The question whether social responsibility or economic rationality can explain a sustainability perspective is an interesting one to explore in further research. For this paper, I assume in line with Oliver (1997) that practical decision making can be explained from a normative (e.g. institutional determinants) as well as from an economically rational perspective (e.g. resource-based determinants). However, this could only explain *why* organizations engage in corporate sustainable development (see also Bansal, 2005), it does not yet propose that they *should*. To make a statement on this for HRM, more research is needed on what Sustainable HRM is and on how it affects HR or the HR base in comparison to traditional HRM.

All approaches described have in common that they plead for a longer-term view on their objects/subjects of research. The proponents of SWS consider long-term consequences of intensive work systems on HR (e.g. Docherty et al., 2002a). Those of Sustainable HRM aim at a long-term competitive advantage and assume that this can be achieved by implementing a Sustainable HRM (Thom & Zaugg, 2004). The Sustainable Management of HR advises to balance deployment of HR and reproduction of the HR base on a long-term basis through investment in the sources for HR (e.g. Müller-Christ, 2001). Accordingly, the first conclusion is that in the sustainability literature the understanding of sustainability and 'sustainable success' *is* oriented at a long-term calendar time contrary to Barney's (1991) definition of sustainable competitive advantage discussed previously. Time, time-horizon, and how long in

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[8] Linnehan and De Carolis (2005) recently explained school-to-work programs from resource-based and transaction cost perspectives. A practitioner's forum in Germany: www.portal-schule-wirtschaft.de.

calendar time 'long-term' is perceived, are issues varying in the eye of the beholder and they need therefore to be further discussed. It also needs to be explored how the important balance between short and long-term objectives and the balance between economic success and sustainability can be achieved. Here again, the tension and ambiguities for practitioners deriving from this dilemma could be explored (see also Evans, 1999).

Approach / Finding	Sustainable Work Systems (SWS)	Sustainable HRM	Sustainable Management of HR
Level of analysis	Micro	Micro and macro	Macro
Source of understanding of sustainability	Based on Brundtland Commissions' definition Heterogeneous Long-term oriented	Based on Brundtland Commissions' definition and on strategy research Long-term oriented	Based on ecology and strategy research Resource consumption divided by resource reproduction = 1 Long-term oriented
Type of explanation for sustainability	Social responsibility	social responsibility, self-responsibility, and economic rationality	Economic rationality
Who is responsible for sustainability?	Mainly organizations	Society, organizations, *and* individuals	---
Main theoretical foundation	e.g. stakeholder theory; resource-based socio-economics; stress theory, health psychology	e.g. stakeholder theory; self-organization theory; SHRM	open systems theory, co-evolution theory, and ecology
Main objective of the approach	Employee's health and development Raise awareness for negative side-effects of HR exploitation and self exploitation (work-related health problems)	Long-term supply with skilled and motivated HR Sustained competitive advantage AND employee's well-being, employability	Long-term supply with skilled and motivated HR Raise awareness for dysfunction of sources for HR (e.g. scarcity of skilled, motivated HR) under influence of HR activities
Main implications	Control for negative effects on today's HR Support employees coping with ambiguities and work intensity HRM role as 'protector'?	Control for negative effects on today's HR Strengthen employee's self-responsibility and participation in decision-making HRM role as 'guardian'	Balance duality of efficiency and sustainability Rethink understanding of HR base and invest in it Reduce negative feedback effects on 'sources for resources' Respect 'specific conditions of development, reproduction and regeneration' e.g. HR development and reproduction need time
Limitations	Limited empirical exploration; central focus on normative explanation	Limited empirical exploration; Lack of long-term exploration; Best practice approach	No empirical exploration; central focus on rational decision making only

Table 1: Comparison of concepts linking sustainability and HR issues (Source: compiled by the author).

Furthermore, the literature on sustainability and HR issues presented above sheds new light on the issue of unintended or negative outcomes (side effects) of HR practices and strategies on both micro and macro levels (see table 1). While the literature on SWS focuses on the effects of intensive work systems on individuals, their health, and well-being (e.g. Kira, 2003), the approach of Sustainable Management focuses on negative feedback effects from HR activities on the reproduction or maintenance of an organization's HR base (e.g. Müller-Christ, 2001). The micro level research indicates that some of the recent HR practices may have more side effects than what is regarded as socially responsible. From a macro level of analysis, the Sustainable Management approach considers that HR practices and strategies can have detrimental effects for an organization's future resource base and thus for themselves (Müller-Christ, 2001). While some strategy research deals with unintended consequences of strategies (Mintzberg, Ahlstrand & Lampel, 1998; Heracleous, 2003; Watson, 2003), the issue of unintended and especially unwanted (long-term) consequences of HRM practices and strategies for future HR and an organization's strategic capabilities seem to have been overlooked in SHRM literature until very recently (e.g. Wright & Snell, 2005). The main conclusions here are that a sustainability perspective could raise awareness for negative side effects of HR activities on employees, organizations, and on the (future) HR base as a task for SHRM. Multiple levels of analysis seem appropriate for research to produce a more comprehensive picture. As the side effects probably develop over a longer time and as possible links, for example, between the scarcity of skilled and motivated HR and HR practices and strategies are not easy to detect (e.g. problem of cause-effect explanation), it is assumed in this paper, that a higher level of reflexivity is needed in research and practice to analyse these negative feedback loops.

Besides 'time', 'side effects', and 'reflexivity', the literature reviewed highlights another aspect which seems to be important for further exploration: ambiguities for employees and ambiguities for HR practitioners because of the dilemma of HR 'exploitation' and HR 'reproduction'. On a micro level, the literature on SWS offers an insight into the psychological consequences of employee's struggling with ambiguous situations at work and suffering from increased work-related stress (e.g. Brödner & Forslin, 2002). It has been put forward that more regenerative and meaningful work is needed (Kira, 2003). Today, situations in which "skills in decision-making under ambiguity" (Mintzberg, 1973: 191) are required go beyond the employee group of top-managers addressed in Mintzberg's (1973) research. The Swiss Sustainable HRM approach can be interpreted as putting forward the importance of balancing social responsibility and economic rationality (see also Thom & Zaugg, 2004). On a macro level, the literature on Sustainable Management of HR indicates that handling contradictory notions of success becomes increasingly important (Müller-Christ, 2001). The debates on CSR (see also Whetten et al., 2002) as well as the sustainability perspective presented in this paper could newly fuel the discussion on ambiguities, paradoxes, dualities, and dilemmas in HRM on micro and macro levels of analysis as well as between these levels.

As it is one of the objectives of this paper is to propose sustainability as a perspective for HRM, one of the key issues for further exploration is to develop a broader definition for Sustainable HRM and to clarify the difference between Sustainable and Strategic HRM (SHRM).

First approaches towards a framework for HRM from a sustainability perspective

The objective of this section is to start bridging the gap between the sustainability perspective and existing Strategic HRM (SHRM) frameworks. To achieve this goal, the key concepts are defined, a first attempt for a theoretical framework for Sustainable HRM is suggested, and for further analysis the focus is narrowed to the problems of ambiguities, time, and reflexivity.

Definition of key concepts of a sustainability perspective for HRM

It has been concluded in the previous section that it is necessary to define Sustainable HRM to open the term for a potential field and to describe the difference between Sustainable HRM and SHRM. My central assumption is that sustainability is a possible perspective to shed new light on existing HRM research. Accordingly, a more comprehensive understanding is proposed in this section by drawing on sustainability and HRM literature. Therefore, the analysis begins with an often cited definition of SHRM in the field. Wright and McMahan (1992: 298) define Strategic HRM as "the pattern of planned human resource deployments and activities intended to enable the firm to achieve its goals". According to Wright (1998), this definition focuses on people (human resources) as the primary source of competitive advantage, on practices etc. to gain this competitive advantage (activities), and on a purpose (goal achievement). In the U.S. literature, this purpose is maximisation of organizational performance (Wright, 1998). The understanding of strategy (pattern, plan) in this definition includes the concept of horizontal and vertical "fit" (Wright, 1998) which is widely accepted in HRM research. In the literature on sustainability and HR issues, however, doubts have been raised concerning two of these components, maximisation of organizational performance and the fit-assumption. For example, Moldaschl and Fischer (2004) refer to the 'disequilibrium' assumption from a social constructionist perspective. While detailed discussion on whether the idea of fit is appropriate or not goes beyond the scope of this paper, I concentrate on the notion of success in HRM and on the treatment of HR.

The literature on sustainability and HR issues throws up questions if a maximisation of organizational performance is desirable and applicable. First, there are also negative side effects for employees, organizations themselves, and for societies (e.g. Docherty et al., 2002a). Recent publications from 'traditional' HRM researchers also pick up this challenge and offer a broader view of strategic success by explicitly or implicitly applying the Brundtland Commission's definition of sustainability. For example, Schuler and Jackson (2005: 24) state that "success requires meeting the present demands of multiple stakeholders while also anticipating their future needs." Accordingly, the researchers include 'social responsibility' towards stakeholders into their framework for SHRM. A similar quotation stems from Boudreau and Ramstad (2005: 129) who understand sustainability as a new paradigm for HRM and define it as "achieving success today without compromising the needs of the future". For them, sustainability sheds new light on the understanding of organizational success going beyond the traditional focus of financial results, and the authors see practical application for the paradigm in HRM fields such as talent pools or sustainable employment relationships. Similarly, a paper from Mariappandar (2003: 910) focuses on the issue of 'Sustainable Human Resource Strategy' which "can be defined as the management of human resources to meet the optimal needs of the company and community of the present without compromising the ability to meet the needs of the future." In his paper, the author explores the side effects ('externalities') of retrenchment and downsizing on organizations, individuals,

and communities in Australia. With reference to Sun and colleagues (2001), he proposes that the "economic reality of the companies and economic welfare of human society are the two sides of a coin and proper balance of the two is important" (Mariappanadar, 2003: 907). As a result, more scholars seem to see the value of sustainability in conceptualizing a more complex understanding of strategic success.

Referring to the above literature I propose that *Sustainable HRM is the pattern of planned or emerging human resource deployments and activities intended to enable a balance of organizational goal achievement and reproduction of the human resource base over a long-lasting calendar time and to control for negative impact on the human resource base*. The main objectives of Sustainable HRM are to (1) to balance the ambiguities and the duality of efficiency and sustainability over a long-lasting calendar time, (2) to sustain, develop, and reproduce an organization's human and social resource base e.g. with the help of mutual exchange relationships, (3) to evaluate and assess negative effects of HR activities on the HR base and on the sources for HR. That is, sustainability is perceived as a cross-functional concept and as an extending perspective for integrating both micro and macro level research. In the next section, a first suggestion for a conceptual model is made to illustrate the difference to existing HRM research.

Theoretical framework for a sustainability perspective

Three important theoretical perspectives have been adopted in the literature on sustainability and HR issues: the stakeholder theory (Freeman, 1984, 1999), resource-based theories (e.g. Pfeffer & Salancik, 1978; Barney, 1991), and systems theory (Luhmann, 1984). However, as indicated before e.g. to explain sustainable behaviour theories such as institutional theories might be helpful. To explore potential theories for a sustainability perspective I build on Wright and McMahan's (1992) conceptual model of theoretical frameworks for SHRM (see figure 1).

[insert figure 1 about here]

The main differences to the previous model are the extension of the understanding of the HRM capital pool, the recognition of side effects, and the feedback loops from firm level outcomes to HR behaviours and HRM 'sources for HR'. Firstly, from a more economically rational sustainability perspective not only (today's) HRM capital pool is relevant but also the capacity of 'sources for HR' to 'reproduce' further HR (see also Müller-Christ, 2001). This goes beyond the cybernetic model of HR systems described in Wright and McMahan's (1992) paper but is in line with Grant's (1991) understanding of a two-dimensional strategic objective.

In addition, the model was extended by adding potential 'side effects' from HRM practices on HR behaviours (e.g. effects such as work-related health problems) and long-term side effects other than firm-level outcomes. Those long-term effects could then again influence the 'sources for HR' and their capability to 'reproduce' HR. On the other hand, long-term side effects could influence institutional or political forces with the result that HRM practices have to be adapted e.g. to stakeholder needs. Here is where the social responsibility and normative choice oriented explanation of sustainability attaches. Difficult to capture for strategic decision-making are the future 'needs' of stakeholders (see Schuler & Jackson, 2005) as today's knowledge on future needs are limited. Anand and Sen (2000: 2035) point

out: "Since we do not know what the tastes and preferences of future generations will be, and what they will do, we can talk of sustainability only in terms of conserving a capacity to produce well-being." Here again, ambiguities for decision-making arise in practice.

Ambiguities and dualities

The relevance of ambiguities, paradoxes, dualities, and dilemmas has been an increasing concern for management and organization scholars in the U.S. and in Europe since the 1980s and 1990s, when claims were advanced that one of the main reasons for organisational failure is the inadequacy to cope with paradoxes (e.g. Cameron & Quinn, 1988). One of the key outcomes of this field of research is the observation that many developments in management practice have evolved in waves or cycles between the two poles or 'horns' of a dilemma[9] over time (e.g. Hampden-Turner, 1990) and that these changes become increasingly fast. Therefore, Evans and Doz (1989: 219) suggested that "the proverbial organisational pendulum once swinging leisurely over a generation from one desirable quality to its opposite now gyrates fro arc to arc. Organizations are besieged by the paradoxes that these dualities create". Thus, organisations are 'swinging', 'balancing', or 'oscillating' between contrary poles (Evans, Doz & Laurent, 1989).

The translation of the term ambiguity (lat. ambiguitas) signifies 'more than one meaning'. While ambiguities (e.g. Evans, 1999) and paradoxes (e.g. Cameron & Quinn, 1988) can be interpreted as the 'product' or outcomes of tensions which decision-makers have to face, dualities (e.g. Evans & Doz, 1989) or dilemmas (e.g. Hamden-Turner, 1990) are proposed to be the underlying causes for these tensions: "ambiguity is the reactive face of HRM subject to the opposition of duality" (Evans, 1999: 333). The main belief from this stream of research is that "opposites are not viewed as 'either/or' choices, the appropriateness of which depends on a particular context (as in contingency theory), but dualities that must be reconciled or dynamically balanced" (Evans, 1999: 328). It is not possible to reconcile opposing forces for ever but the tensions they create have to be accepted and coped with (Evans, 1999). Accordingly, the first step towards dealing with a duality between two poles is to identify, define, and accept it (Hampden-Turner, 1990). Subsequently, both poles of a duality, both emerging pathways have to be pursued simultaneously (e.g. Müller-Stewens & Fontin, 1997), which Evans and Doz (1989) have called 'layering'. Evans (1999: 330) proposes that between two poles of a duality lies a 'zone of constructive tension' i.e. a zone where a balance between extremes is possible.

Especially Paul Evans has advocated the use of duality theory for HRM (e.g. Evans & Doz, 1989; Evans, 1999). Evans (1999: 326) argues that "the mainstream field of HRM has largely ignored these dualistic forces which are becoming increasingly acknowledged in the wider field of management and applied organization theory. It has been reactively subject to them, rather than introducing them into the theory and substance of the field". For example, HR professionals find themselves in ambiguous situations when they have to decide between short-term profit making and long-term development of HR (see also Evans, 1999). Another example is that work pace increases due to information and communication technologies (ICT): "the new flexible and ICT intensive workplace is profoundly ambiguous for the employees" (Docherty et al., 2002c: 5). The authors add that under these conditions "the socially constructed meaning and the role of time seem to be transforming" (Docherty et al.,

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[9] For an overview of dilemma research and theories see Hampden-Turner & Trompenaars (2000).

2002c: 5). The emergence of sustainability in HRM research and the ambiguities reported could re-fuel the discussion on the dualities on topics such as intended and unintended effects of HR practices and strategies, or short and long-term oriented objectives and HR activities.

Time and reflexivity

George and Jones (2000: 658) claimed "that the role of time must be explicitly incorporated into a theory (and not just treated as a boundary condition) if a theory is to provide an ontologically accurate description of a phenomenon". They also propose time for a more in depth problem statement. Recently, Wright and Haggerty (2005) have put forward that time is a neglected variable in the SHRM research on the relationship between HRM and economic success and assume a 3-4 year temporal lag which is not included in current theoretical models. They have pointed out that some theories such as the resource-based view include the concept of time but explore it only indirectly. From a sustainability perspective it becomes even more evident that time is an important concept to deal with in HRM because not only performance but also side effects and resource reproductions develop over time. If negative, these side effects could influence an organization's future strategic ability (see also Wright & Snell, 2005). Therefore, it seems necessary to analyse and understand the relationship between today's HR practices and strategies on future supply with highly qualified and motivated HR over a longer time horizon. It takes time for HR to develop due to their 'specific conditions of reproduction' (e.g. Müller-Christ, 2001). The HR base and people (values, attitudes, behaviours) change over time (e.g. Moldaschl, 2005), time-horizons[10] differ interpersonally (see George & Jones, 2000) and cross-culturally (e.g. Beldona, Inkpen & Phatak, 1998).

   Time-horizon in HRM decision-making is reported to be rather short than long-term oriented: "descriptive studies show that many HR managers cope by focussing on the short term and operational challenges, becoming servants of senior management" (Evans, 1999). Grant (1991: 132), for example, acknowledges that "harmonizing the exploitation of existing resources with the development of the resources and capabilities for competitive advantage in the future is a subtle task." The two-dimensional task of exploiting resources and developing the resource base (Grant, 1991), could be interpreted as a duality in Evans language. From a sustainability perspective this duality has to be balanced over a long-term calendar time basis.

Implications for research and outlines for an emerging field

The purpose of this section is to identify central problems for further analysis, and to give implications for theoretical and empirical research on sustainability issues in HRM. Attempts will be made to outline boundaries for a possibly emerging field. The concept of sustainability allows analysing existing research from a new angle. While currently a sustainability perspective is not yet significant in the field of HRM research, this paper has attempted to point out potential fields for further problem analysis and research. From a sustainability perspective, one of the main implications for theory is that HRM research has to give more importance to the development of HR and of the HR resource base over time, to the reflexivity of unintended, negative outcomes on future HR potential and HRM chances of development, and to decision-making under ambiguity in HRM. Implications for practice are

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[10] Ebert and Piel (1973) define time horizon as "that distance into the future to which a decision-maker looks when evaluating the consequences of a proposed action".

that HRM has not only to become more proactive, it seems that it has also needs to become more reflective, broaden its borders and time horizon.

Additionally, more issues can be explored from a sustainability perspective on a micro and macro level of analysis. For example, still unexplored are possible relations between Sustainable HRM, performance and the long-term situation of the HR base. The assumptions in the literature reviewed are conflicting; while some authors (e.g. Thom & Zaugg, 2004) assume a long-term competitive advantage from implementing a Sustainable HRM, others (e.g. Müller-Christ, 2001) expect that costs for sustainability in HRM are investments which reduce an organization's short-term income but which may lead to it's long-term viability because of access to skilled and motivated HR. This makes it uncertain whether sustainability in HRM in practice is going to be adapted. Previous examples indicate that sustainability is rejected from managers if there is no positive relationship between an ethical orientation and a company's competitive advantage (e.g. Salzmann et al., 2005; Whetten et al., 2002). This paper has also reviewed literature which understands sustainability as an economic rationality (e.g. Müller-Christ, 2001). Here empirical studies could explore if this concept with ideas such as investment in the sources of resources or HR exchange relationships are more accepted from decision-makers.

The empirical study from Thom and Zaugg (2004) has indicated that there seem to be cultural differences in the acceptance and perception of Sustainable HRM. Further studies could concentrate on the acceptance of sustainability across cultures and compare the underlying value orientations and the perception of i.e. short and long-term decision-making. Long-term effects of HRM practices and strategies need more extensive empirical research and longitudinal research designs. To handle complex research problems on the research of a sustainability-oriented HRM, the author suggests drawing on and integrating research methods from different research approaches and traditions (qualitative and quantitative) to get a more comprehensive picture of the 'elephant' (Saxe, 1816-1887, in Mintzberg et al., 1998). This multi-method approach is increasingly favoured in global HRM literature (Mendenhall, 1999; Kiessling & Harvey, 2005), and could also be useful to investigate sustainability issues in HRM.

Furthermore, the literature review indicates that investigations of different level of analysis would be appropriate in one study and that interdisciplinary research (e.g. psychologist, economists, and sociologists) could lead to a greater understanding of a Sustainable HRM. For example, there are many fields of research which could contribute to a better understanding and explanation of Sustainable HRM and of the interrelations such as the literature on HR health and self-regulation (e.g. Bandura, 2005), the intended and unintended consequences of employability (e.g. Brown, Hesketh & Williams, 2003), psychological contract, work-life-balance, organizational or self-responsibility in career development, sustainable employment relationships, and sustainable industrial relations.

Conclusions

This paper has outlined the evolution of the understanding of sustainability and offered the first review on recent literature linking sustainability and HR issues. In this literature, the emergence of sustainability in organizations is explained from socially responsible to economically rational perspectives. Based on the literature, the paper has discussed sustainability as a possible perspective to broaden the understanding of strategic success in

HRM (e.g. Boudreau & Ramstad, 2005; Mariappanadar, 2003) and to raise awareness for short or long-term side effects from HR activities on today's HR, organizations and on the future HR base. In addition, it was suggested in this paper that a sustainability perspective could raise new awareness for ambiguities and dualities in HRM (Evans, 1999) and for unintended, negative side effects of HR practices. The paper has proposed a new definition for Sustainable HRM and an extended conceptual model for a theoretical framework based on Wright and McMahan's (1992) work to start bridging the gap between a sustainability perspective and Strategic HRM. Then, the paper has started a more in depth problem analysis on ambiguities, time, and reflexivity and outlined implications for further research in this emerging field. However, if at all an 'emerging field' Sustainable HRM is at its best in an embryonic state. Future developments in practice and application of the ideas in research will decide upon its nascency. As Boudreau and Ramstad (2005: 134) point out "decision makers, opinion leaders, voter, and employees care about sustainability. They want corporations to reduce the externalities that burden future generations. Sustainability is not just good ethics; it is potentially good long-term economics. HR has an important role to play in sustainability".

Acknowledgements

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