

**ADVANCING SUSTAINABILITY INNOVATION WITHIN THE
ORGANIZATIONAL LEARNING SPHERE**

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ABSTRACT

In light of the fourth industrial revolution, human resources management (HRM) is considered to be an integral part of any competitive organization and it is responsible for shaping organizational behavior and culture. With the increasing awareness of the industrial impact on the environment, sustainability innovation is a vital discourse for scholars, academicians, and practitioners. This work uses literature from diverse schools of thought that explored the role of the human resource discipline in advancing sustainability innovation. This paper also presents a unique model for human resource and talent development practitioners towards an authentic response to eco-sustainability innovation. A contextualized matrix on implications for sustainability (Crew 2010) incorporating special approaches for sustainability innovation (McCarthy, Garavan, and O'Teele, 2003), green initiatives of human resource department (Milliman, 2013) and the promotion of sustainability culture (Blake, 2016) was outlined that serves as authentic approach to eco-sustainability for practitioners to realistically carry out human resource initiatives in their respective organization. This study further directs human resource professionals to act as boundary spanners in order to facilitate strategic teams who are paramount to responding to the external environment for organizational performance.

Keywords: human resource management, organizational learning, responsible leadership, sustainability innovation.

Introduction

Organizations are significantly showing a considerable amount of interest in the fields of corporate social responsibility and sustainable business environment (Hansen, Bullinger, & Reichwald, 2011). To fully understand the sustainability concept, it is imperative to note that this idea emanates from the commitment of higher corporate managers. Mid and lower-level managers must integrate sustainability within the business process to impact the social and environmental aspects of the business (Vilanova & Dettoni, 2011). An empirical work by Ketata et al. (2015) found that sustainability innovations typically necessitate knowledge management, especially in dealing with complex issues. It requires extensive communication efforts, motivation, risk-taking abilities, organizational learning, infusion of external knowledge, and consideration of the available resources. Thus, organizations may achieve success depending on their ability to adapt and incorporate knowledge (Ketata et al. 2015). Corporate sustainability is widely accepted as a triple-bottom-line approach in which companies seek to create policies, processes, and procedures that value the well-being of society, the environment, and its financial growth. Those managing competitive organizations spanning beyond national borders, understand the implications of failing to address aspects of ecologically-focused responsibility. Even with the proliferation of social responsibility communication by globalized organizations, those managing human talents remain challenged to forge an identity that would enable practitioners to add value to the environmental sustainability agenda. It is imperative to examine how human resource and talent management disciplines can be a value-added function to provide organizations with a competitive advantage from the standpoint of ecological responsibility.

Method

This body of work utilizes a systematic literature review approach in order to facilitate an expedited and productive review of the related researches concerning sustainability innovation, talent management, and corporate social responsibility. According to Cook et al. (1997), a systematic literature review enables other researchers or scholars to make some significant updates and revision as well as replicate the existing literature, allowing a systematic trajectory of the subject. The initial query focused on using keywords such as "sustainability innovation," "talent management," "corporate social responsibility." Due to a limited number of studies found using the previously mentioned keywords, the researchers widened the search in order to increase the number of hits. This is in accordance with the suggestion of Adams et al. (2016) that search parameters need to be expanded to discover more studies with multiple keywords which are related to the subject addressed.

The downloaded PDF's were categorized based on the research title to make sure there is no duplication. This work analyzed selected papers through reading the research abstract to determine further whether such paper is appropriate to the subject matter being studied. Furthermore, the researchers delimit the review period beginning in the year 1985 up to the current year.

Table 1. Search strings for the systematic literature review

Major Search Themes	Keywords
Sustainability	sustain* OR “triple bottom line* OR efficiency* OR *corporate sustainability OR *sustainable agenda OR *sustain OR eco sustainability* OR sustainable practice*
Corporate Social Responsibility	*responsibility OR CSR* OR corporate social responsibility* OR social responsibility* OR CSR practices* OR corporate and environmental responsibility*
Innovation	innovate* OR green* OR eco-innovation* OR “eco-friendly innovation* OR green business* OR green marketing* OR organizational innovation*
Human Resource Management and/or Talent Management	HRM* OR human capital* OR human resource* OR subordinates* talents* OR employee management* OR corporate HR*

The pairing of Sustainability and Innovation

Over the years, many scholars have expressed their understanding of the term "innovation." Abernathy and Clark (1985) view innovation as the initial introduction to the market of a new product. Cummings (1998) refers to innovation as the first well succeeded application of a product or process. He also described innovation as an individual attitude, an organizational process, or a social movement, which signaled the need to put in place a mechanism for facilitating behavioral change. Rogers (2003), who popularized the discourse on innovation, defines it as an idea, practice, or objective that is viewed as new by those who are expected to adopt it. It has been established that innovation is influenced by processes, organizational environment, and people. A stream of literature attempted to define sustainability innovation and provide some empirical evidence in various fields. For instance, Arcese et al. (2015) argued that sustainability innovation would mean an outside process where knowledge from outside sources is utilized to develop the inner potentials. The current concept of innovation lies in terms of providing entrepreneurial solutions to recent problems. The sustainability challenge is continuously arising that permits the present generation to provide feasible solutions without depriving future inhabitants to meet their necessities (WCED, 1987). However, authors argue that this is not all about how to meet the needs of few, instead, in the sphere of sustainability innovation, it promotes a value proposition for those who were neglected, economically disadvantaged, and the sector that mostly carries societal burdens. Emami and Dimov (2017) posited that innovation solves the increasing number of manufacturing imitated products in the market. For organizations, sustainable management and innovation acknowledge the relevance of capitalizing on human resources, who are considered as the most essential resource. For innovative organizations, some moderating positions appear to be substantial in all aspects. Hence, this capacitates the leaders and the employees (Toor et al., 2009).

Innovation is an essential element (Khajeheian, 2016) and serves as a competitive edge for organizations in competitive environments (Khajeheian, 2016; Khajeheian and Tadayoni (2016). As mentioned by Emami and Dimov (2017) it creates complexity for imitating entities and possesses less risk on the part of the original creator. In order to be innovative, it is imperative that organizations need to appreciate the advantages on investing in human capital;

capacitating the organization's talents to practice innovation; and establish a sense of legitimacy in order to achieve the objectives of the firm (Toor et al., 2009). The success of innovative organizations has been proven by the studies of Zarraga-Rodriguez and Alvarez (2015) and van Kerkho and Szlezak (2016). For small entities, McGuirk et al. (2015) emphasized the prominence of innovative human resource management, which is essential for their success. Moreover, in the case of market saturation, innovative organizations can survive, Kiron et al. (2012) highlighted that sustainability is a crucial feature in managing organizations. In light of this, organizations practicing sustainability should develop and capacitate human capital in order to stay relevant (Toor et al., 2009).

Signaling the importance of continued research in organizational innovation, Rogers (2003) articulates that managers face many challenges in their respective businesses. These challenges are more social than technical. The rejection of innovation is evident and is understandable in that managers compare the real and immediate costs with the proffered and long-term benefits. Rogers (2003) posits that the innovation itself, communication, time, and the social system, influence the extent to which innovation will become part of the intended environment. Organizational functions and subcultures are responsible for determining how a new concept or initiative is valued, hence impacting the diffusion rate within the management system. According to Haanaes et al. (2012), who conducted a study for the MIT Sloan Management Review, the majority of the managers studied agreed that sustainability is a pertinent issue for organizational performance. In this study, managers associated sustainability with product innovation and process innovation. On the same note, Gano-an (2018) emphasized the concept of green innovation as one of the marketing initiatives of shopping malls and provide solutions to address the growing campaign on sustainable business in the Philippines. He also noted that in order to achieve the aggregate goals of sustainability, business organizations must closely work with the government and this action calls for a public-private partnership (PPP). Also, companies' higher-ranking officials must commit to support this ecological undertaking and intensify their efforts in implementing green measures in light of the existing regulatory framework of the government. This movement must always be in transit in line with the other priorities of the organization.

Eco-Sustainability Learning for Innovation

Crews (2010) articulates the importance of aligning HR traditional values with the development of a sustainability program. He emphasizes that the inability to do so will continue to impact leadership performance for the advancement of this paradigm negatively. Within the realm of organizational learning, he asserts the need for human resources managers to use the domains of talent management, training and development, and leadership to intervene in the sustainability agenda. Hassan and Yaqub (2010) iterate the importance of human resource practitioners as boundary spanners given the high uncertainty and rapid change that occur in our highly competitive working environment. Boundary spanning throughout the organization can provide the human resource with the opportunity to learn about sustainability holistically, as it integrates its principles to address arising challenges. In support of McCarthy, Garavan & O'Toole (2003) works, and Hassan and Yaqub (2010) suggest boundary spanners as gatekeepers, external representatives of the firm, resource managers, and agents of change. They support the understanding of boundary spanners as individuals responsible for creating internal and external networks, issue identification, translating knowledge obtained back into the organizational system, influencing and educating both internal and external stakeholders, identifying champions for change, and negotiating for the change to improve organizational response to customer demands. Their work demonstrated that promoting learning requires diverse approaches, and also asserted the impact that boundary spanning may have on

promoting organizational learning. The study of McCarthy, Garavan, and O'Teele (2003) assigns four levels of responsiveness to change for boundary spanners: 1) Use innovative tools and means to continue developing leaders; and 2) develop strategy, policies, and procedures must evolve in response to change. They demand innovative and novel ways for problem-solving to respond to the changes that occur in the business environment. In addition, they call for the following changes: 1) the decentralization of HR practice; 2) increased focus on learning and development; 3) the promotion of professional development policies; 4) the provision of support to facilitate mutual learning and sharing of knowledge and ideas; 5) synthesize the boundaries to enhance the opportunity for learning across the disciplines. The advancement of human talent requires combining diverse competencies to address internal and external challenges. Learning creates an opportunity for the empowerment of existing talents; hence those with access to resources have a responsibility to provide the resources for groups and teams to unleash their potential. Hassan's and Yaqub's work (2010) emphasizes the importance of transforming the organizational culture and developing teamwork to respond to changes within the external environment effectively. Milliman (2013) identified activities for HR professionals to be engaged in to facilitate environmental sustainability within their respective organizations. He suggests that green-focused activities can transform HR to being a leading-edge function in green employment and branding, authentic communication, green interviewing practices, green training and development, employee orientation, demonstrating the importance of sustainability, creating a voluntary green team and individual efforts, measuring performance, and being a green champion. Talent management disciplines are instrumental in innovative teams to find innovative solutions toward cost-effective eco-responsibility initiatives.

Proposed Sustainability Matrix/Model

The authors provided a contextualized matrix for sustainability innovation based on various researches and other scholarly works. This matrix intends to present an authentic approach to eco-sustainability innovation. The organizational learning implication categories were derived from the work of Crews (2010) on strategies for implementing sustainability. Within this category, Crews presented a simplistic organizational learning concept to guide HR in the practice of sustainability. McCarthy, Garavan, and O'Teele (2003) modified the concept of sustainability innovation for the HR discipline. The third component comprises human resource green initiatives by Milliman (2013). The last element is the sustainability culture metrics for learning by Blake (2016). This aspect highlighted the practical measurement system of sustainability practice in the organization where teams, managers, and corporate leaders are expected to work together in order to achieve and embed sustainability culture within the organization system.

Table 2. Recommended model for human resource and talent development practitioners towards an authentic response to the eco-sustainability culture

	Organizational Learning Implications for Sustainability (Crew, 2010)		
	Leadership Development	Training & Development	Talent Management
Intervention Objectives	<ul style="list-style-type: none"> -Identify the role of leaders in aligning business objectives and processes with sustainability. -Provide development opportunities and drive dialogue among all levels of leadership to build a conceptual consensus on sustainability. 	<ul style="list-style-type: none"> -Support sustainability objectives through training initiatives at all levels of the organization. -Integrate sustainability intent throughout mentoring, coaching, and career development processes. 	<ul style="list-style-type: none"> Integrate sustainability objectives into the recruitment and selection process to seek better fit with new hires. -Acquire talent with knowledge and skills to support a sustainability initiative.
Approaches to Responsiveness for Sustainability Innovation (expanding on McCarthy's, Garavan's, and O'Teele's, 2003)	<ul style="list-style-type: none"> -Use of innovative sustainability tools to help leaders create vision -Develop strategies, policies, and procedures for advancing eco-sustainability. 	<ul style="list-style-type: none"> -Facilitate eco-sustainability learning and development activities across all disciplines, teams and groups. 	<ul style="list-style-type: none"> -Enhance human capital for sustainability by combining diverse competencies.
HR Green Initiatives (expanding on Milliman, 2013)	<ul style="list-style-type: none"> -Develop green champions by creating cross-functional teams to address key sustainability issues. - Encourage authentic communication about sustainable development from upper management. 	<ul style="list-style-type: none"> - Conduct orientation on environmental sustainability developments - Educate managers on the importance of eco-sustainability practice in their respective disciplines. -Provide a platform for voluntary green teams and individual efforts in the organization and the external community -Create opportunities for cross-functional teams to collaborate on sustainability innovation initiatives 	<ul style="list-style-type: none"> - Hire green innovation-based talents - Conduct interview in an eco-friendly manner -Use the green practice to attract new talents. -Provide rewards and growth opportunities for green innovation across all functions.

Promoting Eco-Sustainability Culture (expanding on Blake, 2016)	<p>The extent to which leaders are committed to:</p> <ul style="list-style-type: none"> -Provide stakeholders with in-depth knowledge of the operation process, materials, and supplier engagement, and the market. - Take pride in advancing sustainability-based innovation in process, products/services. - Assign the terms 'leadership,' 'innovation,' and 'values,' to the sustainability agenda. - Articulate eco-sustainability as a driving force for innovation and financial growth. -Gain trust from internal and external stakeholders regarding eco-sustainability performance. 	<p>The extent to which managers are committed to:</p> <ul style="list-style-type: none"> - Use sustainability organizations' standards, metrics, guidelines and principles for defining CSR report content and ensuring quality reporting. -Demonstrate how eco-sustainability can be practiced in respective functions to add value to organization. -Provide resources and incentives to managers and team leaders in all functions to engage in sustainability learning and development -Promote the use of strong sustainability specific objectives, goals and targets to measure performance and show evidence of commitment to eco-sustainability. 	<p>The extent to which product and process teams are committed to:</p> <ul style="list-style-type: none"> -Attract sustainability talent to working on eco-sustainability projects. -Motivate and reward team members for creative solutions to enhance sustainability in processes and products. - Promote volunteerism and meaningfully contribute to the community using their skills and talents.
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Managerial Implications and Future Research

This review shares the idea that innovation is not simply an answer to the financial constraints of a competitive organization due to its inability to sell obsolete products or even services. Innovation is not only viewed as radical, incremental, product-based, something new or a streamlined process, rather, but it is also a multi-segmented concept where the sustainability model is integrated involving human capital as subjects who are considered the most important asset of the organization who will champion success both in financial and non-financial aspects. Further, organizations necessitate acknowledging that developing and framing talents is a way to fruitfully achieve the ultimate goals and aims of corporate social responsibility of the firm. This review provides a substantial summary of knowledge that may help to craft a special policy in sustainability innovation in terms of talent management in the organizational context. Based on the available readings, the field of sustainability innovation has gained tremendous interest among scholars and practitioners, thus the researchers suggest that future research may continue focusing its emphasis on "radical" responsible leadership in which those who are responsible for organizational change will authentically transform business culture and practice to advance sustainability innovation. Responsible leadership can advance sustainability-focused innovation. One of the first steps to being a responsible leader is admitting that industrial operations are currently harming the environment and negatively impact the future of our existence. If industrial leaders refrain from holding themselves

accountable for the depletion of the environment, the path to sustainability integration and innovation will continue to be resisted at all levels of management.

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