

SUSTAINABLE DEVELOPMENT AND ORGANIZATIONAL LEARNING: MUTUALLY SUPPORTIVE?

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The author uses a tridimensional approach to sustainable development in organizations which includes social, economic and environmental dimensions. This approach is consistent with the Brundtland Commission Report, United Nations notion and views of various authors that economic growth, social equity, and environmental maintenance are simultaneously achievable. Creating a learning organization is one strategy to improve organizational performance and maintain long-term sustainable competitive advantage. Organizational learning includes creating, retaining and transferring knowledge to benefit individuals, groups and organizations. There are clear and definite links between sustainable development and organizational learning. Within the context of a tridimensional approach to sustainable development, organizational learning needs to address the implications of balancing the demands of sustainable development and at the same time deal with the dynamic complexity of the current business reality at local, national and global levels. Sustainable development is not maintaining the status quo but a continuous process of co-evolution within a changing environment. This needs a dynamic process underpinned by organizational learning to create new approaches, structures and policies. In this paper the author discusses the links between sustainable development and organizational learning and describes practical strategies and activities which managers and practitioners can implement to enhance SD and organizational learning.

Keywords: Sustainable development, Organizational learning, Practical implementation, Management implementation.

Introduction

Currently businesses operate in a very turbulent context where changes occur at an accelerating speed. Information is freely available but it seems there is lack of wisdom when addressing some of the key inter-related challenges such as climate change, loss of biodiversity, depletion of natural resources, and many more. These challenges seem to demonstrate the impact of increasingly consumption-dependent lifestyles on sustainability. In addition, businesses function in a time of uncertainty, contested knowledge and high levels of complexity (Funtowicz & Ravetz, 1993; Wals & Schwarzin, 2012). During these times and within a rapidly changing and very complex context conventional strategies, systems, policies and procedures are no longer effective whether it is in business, governance, resource management, communication, education or in any other field. Consequently, these strategies, systems, policies and procedures must be evaluated, updated and refined to develop and support a more sustainable world. Currently organizations understand the dangers of not embracing sustainable development (SD) and individuals, groups, communities, nations and international agencies are enhancing, encouraging and integrating positive attitudes and developing practical solutions to address specific problems.

Consequently, SD has become one of the most pressing issues in the current global society within which organizations operate (Ramirez, 2012; Wals & Schwarzin, 2012).

The author uses a tridimensional and triple-bottom line approach to sustainable development (SD) which includes the social, economic and environmental dimensions in an integrated manner and where these dimensions have equal value. SD means the ability of an organization to maintain viable voluntary activities and/or activities governed by law within business operations (including financial viability) whilst at the same time it does not negatively impact on or effect the social and/or ecological systems in which it operates. This approach is consistent with the Brundtland Commission Report (World Commission on Environment and Development 1987), UN notion (UN, 1992; UN 1997) and views of various authors (Hart & Milstein, 2003; Elkington, 2006; Linnenluecke & Griffiths, 2010; Bansal, 2005; Smith & Sharicz, 2011) that growth, equity, and environmental maintenance are simultaneously possible.

The concept organizational learning is not a new concept. It was already emphasized in the 1990's when authors (Natrass & Altomare, 1999; Senge *et al.*, 1999) stressed the importance of organizational learning when using a SD approach. There is evidence that there are signs of increasing convergence between the concepts organizational learning and sustainability (Senge & Carstedt, 2001; Molnar & Mulvihill, 2002). Furthermore, Jamali (2006) supports the view that an increased tendency towards learning enhances organizations' ability to meet the challenges of tri-dimensional triple-bottom line approach to SD.

The learning organization is an important factor for organizations to develop and succeed. The learning organization is a strategy to improve organizational performance and maintain a competitive advantage. Some authors regard the learning organization as the only the long-term and sustainable competitive advantage in an increasingly turbulent business environment. Many organizations focus on people as their main asset and on their knowledge as a strategy for competitive advantage (Weldy & Gilles, 2010; Weldy, 2009; Slater & Narver, 1995).

There are numerous definitions for the learning organization. For the purpose of this paper the author has drawn on the view of numerous authors and regards organizational learning as an organization where the core assumptions about the business and its purpose and the mental models of individuals are challenged, fundamental change and new ways of thinking is fostered, systems thinking is integrated, there is a culture of engaging extensive collaborative activity combined with learning and experimentation. Organizational learning occurs when individuals gain knowledge and experiences, thereafter learn from these which create new knowledge and then embed this knowledge in the organizational systems, processes, policies and procedures. Organizational learning includes creating, retaining and transferring knowledge to benefit individuals, groups and organizations (Senge, 1990; Jamali, 2006; Lopez, 2005; Sun & Tse, 2009; Hatch & Dyer, 2004; Easterby-Smith, *et al.*, 2000; Argote, 2011; Argote & Ingram, 2000).

It was clear that there are definite links between sustainable organizational development and the principles for learning organizations and the following questions arose for the author:

- What is the link between SD and organizational learning?
- How could managers and practitioners implement the principles of a learning organization to enhance SD within the organization?

The aim of this article is to describe SD, organizational learning, the link between SD and organizational learning, and practical strategies and activities to enhance both SD and organizational learning.

This is a theoretical paper containing 3 parts. Part 1 focuses on the relevant literature review of the concepts used in the arguments of this paper. Part 2 describes practical implementation strategies and activities to enhance both SD and organizational learning. Part 3 provides management and research implications related to the discussion in the paper.

Literature Review

Sustainable Development (SD)

Due to many scandals and disasters there is increasing pressure on companies to operate in an ethical manner and to consider more than the simple profit-related bottom line of their business operations (Smith & Sharicz, 2011). It is clear that sustainability is here to stay and it is evident that individuals, groups, organizations and governments globally were already adopting different options to focus on more than only financial vitality and economic growth (Edwards, 2005). The pressures on companies to change and adopt SD practices are largely driven by non-financial factors including reputation and image rather than by the economic growth and financial gains (Dimitrov & Davey, 2011). In 2010 the Accenture and UN Global Compact conducted a survey including 766 CEO's worldwide. Results indicated that 93% of the participating CEO's viewed sustainability as crucial to the long-term success of the company. In addition, 75% of the CEO's mentioned that they integrate sustainability strategies and activities to build and protect the product and corporate reputation, grow revenue and potentially lower operating cost (Boerner, 2010). A global study which was reported in the MIT Sloan Management Review and Boston Consulting Group (2011) indicated that companies were adopting sustainability practices at a rate that is faster than expected. Most of the participating companies view sustainability as a core business activity which is as equally important as marketing, logistics and human resource management. It was evident from the study that within the current business context there is a raised global awareness regarding sustainability issues and the pressure related to corporate responsibility and accountability towards the global society, investors and banks were more willing to finance companies which implement sustainability strategies. Eighty-eight percent of the CEO's stated that sustainability related strategies and activities are increasingly important to remain or become competitive (MIT Sloan Management Review and Boston Consulting Group, 2011).

In the current business context SD is a not a new concept. As early as 1987 the Brundtland Commission's Report proposed a SD description to include economic, social and environmental dimensions (WCED, 1987). SD approaches and strategies (including economic, social and environmental dimensions) further received attention at the 1992 United Nations Conference on Environment and Development (UNCED). The aim was to address the urgent environmental protection and socio-economic development issues and the Rio Declaration (Agenda 21, chapter 8.7) which followed from this conference advocated for a National Strategy for SD. The Commission on Sustainable Development followed where the aim was to monitor and report on implementation (UN, 1992; UN, 1997).

Although there are multiple definitions and interpretations there is agreement that there is neither a single definition nor process that will realise sustainability (Wals & Swarzin, 2012). Some authors describe SD as a value judgment. SD means different things to different people depending on their knowledge, background, perception, traditions and values (Becker, 2010; Jabbour & Santos 2008; Wallis, *et al.*, 2010; Velazquez *et al.*, 2011; Prugh & Assadourian, 2003; Filho, 2000). From a theoretical view there are different interpretations. From an economic theory view, SD means a shift from a growth and profitable only economy to a more steady-state economy. When the focus is from an environmental view there is an emphasis on long-term resource viability and usage combined with decreasing human impact on ecosystems. From a socio-biological view, SD should maintain cultural and social systems and need to include respect for nature (Velazquez, *et al.*, 2011; Edwards, 2005; Gallopin, 2003). In addition to different perspectives, SD became an intuitive concept which might be stated as an overall goal of a company regardless of what the core business of that company is (Becker, 2010; Jabbour & Santos 2009; Wallis, *et al.*, 2010; Velazquez, *et al.*, 2011; Prugh & Assadourian, 2003; Filho, 2000).

From a practical view SD is not always clearly defined within the company. This leads to a degree of confusion in discussions and frustration to the leaders, managers and practitioners who want to implement SD. A further complicating factor is that some aspects related to SD can only be assessed by inference from the observable. In addition, there might be a lack of clear guidelines to adopt or implement SD as

well as tested and validated frameworks relevant to a particular company, its internal and external stakeholders and its context (Becker, 2010; Jabbour & Santos 2008; Wallis, *et al.*, 2010; Velazquez *et al.*, 2011; Prugh & Assadourian, 2003; Filho, 2000; Smith & Sharicz, 2011).

Despite the lack of a precise definition of SD considerable consensus has evolved over time to support the overall view that it is morally, ethically and economically wrong to treat the world as a business in liquidation (Velazquez, *et al.*, 2011; Kliucininkas, 2001; Prugh *et al.*, 2000). A common understanding is that SD focuses on longer term outcomes and includes a time period of several generations. Consequently, a the key understanding is that current companies need to work with and fulfil the needs, aspirations and commitments of current generations without compromising the needs, aspirations and commitments of future generations (Becker, 2010; Jabbour & Santos, 2009; Steurer *et al.*, 2005; Garvare & Johannson, 2010; Patra, 2009; Nguyen & Slater, 2010).

Although there is not complete agreement about the definition of SD due to different and sometimes incompatible interpretations there is a growing consensus that such a definition and understanding must contain economic, social and environmental dimensions (Esquer *et al.*, 2008; Valezquez, *et al.*, 2011; Byrch *et al.*, 2007; Laughland & Bansal, 2011; D'Amato & Roome, 2009; Epstein & Buhovac, 2010; Epstein, *et al.*, 2010). This approach necessitates the need to adopt a tri-dimensional triple-bottom line approach which means that the company need to demonstrate appropriate financial viability and prosperity while at the same time manage the social and environmental systems positively (Smith & Sharicz, 2011).

This approach is becoming increasingly popular as it provides the opportunity to integrate economic, social and environmental dimensions in a tridimensional and triple-bottom line approach not only during planning and implementation but also during the performance evaluation of businesses (Esquer *et al.*, 2008; Valezquez, *et al.*, 2011; Byrch, *et al.*, 2007; Laughland & Bansal, 2011; D'Amato & Roome, 2009; Epstein & Buhovac, 2010; Epstein, *et al.*, 2010). Nevertheless, the tri-dimensional triple-bottom line approach poses many challenges. One such challenge is to create and maintain a balance among and achieve excellence in all three (economic, social and environmental) dimensions. Economic performance is usually more easily measurable while the social and environmental impacts are usually longer term oriented and not always easy to measure. Sometimes there are particular measures related to the environmental and social dimensions, but these are not always linked to the economic dimension (Baumgartner & Korhonen, 2010; Hart & Milstein, 2003; Velazquez, *et al.* 2011; Jamali, 2006; Epstein & Buhovac, 2010; Epstein, *et al.*, 2010).

A sustainable organization is constantly able to find a dynamic equilibrium and successfully balance the economical, social and environmental dimensions. In essence it means that this balancing process may require a shift from the maximization profitability and 'doing things better' to maximization of meaning and value, and 'doing better things'. This might mean that SD needs overall system innovations or a whole system redesign which require an integrated redesign of products, lifestyles, processes and structures (Wals & Schwarzin, 2012; Sterling, 2004; McKibben, 2007). It seems that sustainable companies are resilient, create economic value, healthy ecosystems and stronger communities and are better able to survive both internal and external changes and shocks (Baumgartner & Korhonen, 2010; Hart & Milstein, 2003; Velazquez, *et al.* 2011; Jamali, 2006; Epstein & Buhovac, 2010; Epstein, *et al.*, 2010).

Organizational Learning

Organizations do not operate in a vacuum but are complex adaptive systems and in symbiosis with their environment. In addition, this environment is increasingly challenging, highly competitive, very dynamic and demanding. Organizations also face many challenges such as global political, economic and social turmoil, technological complexity, and changing lifestyles and expectations. Furthermore, organizations operate in constantly changing information-based, knowledge-driven and service intensive economies which require speed, flexibility and continuous renewal, legislative changes, management and

organizational changes. These challenges are combined with mergers, acquisitions, restructuring and retrenchment of employees (Naudé, *et al.*, 2011; Khandekar & Sharma, 2005; Pepur, *et al.*, 2010; Price & Chahal, 2006).

In order for organizations to survive and maintain their competitive advantage in a rapidly changing and very competitive business context they need to re-assess objectives, operations and management orientation. Currently, effective management of intangible assets (knowledge, relationships, people, reputation) and intangible capital (networks, brands, talents) is crucial. According to this line of thinking, organizations need to make a shift from the traditional disciplinarian, command and control philosophies of managing employees to an approach where employees are regarded as an intangible asset and an important source of sustainable competitive advantage. This means that organizations need to develop the creative potential of the organization through encouraging creative new ideas, innovation, autonomy and entrepreneurship. Fostering learning in organizations has emerged as a critical challenge for managers given the important role it plays in encouraging creativity and innovation (Philips, 2006; Naudé, *et al.*, 2011; Jamali *et al.*, 2006; Khalil, 2000; Liyanage & Poon, 2002; Curtis & Wright, 2001; Casey & Warlin, 2001).

Recent years have seen an increase in the debate and publications regarding the learning organization and one of the main reasons is that the learning organization approach is very suitable and compatible with the current dynamic global business environment. The learning organization approach provides important insights to organizations who strive to become and remain competitive in a very dynamic environment. A key principle of the learning organization approach is the organizations need to encourage and nurture a positive desire and context where employees can learn, adapt and change. This enhances the ability of the organization to shape its own future (Jamali, *et al.*, 2006; Porth *et al.*, 1999).

A well known definition of learning organizations is that learning organizations are ‘organizations where people continually expand the capacity to produce the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspirations are set free, and where people are continually learning how to learn together (Senge, 1990, p. 3). Along this line of thinking, the learning organization encourages continual organizational renewal and embed core processes to encourage continuous learning, adaptation and change. Senge (1990) described five core dimensions of learning organizations namely personal mastery, mental models, shared vision, team learning and systems thinking.

During an employees’ stay in an organization this person possesses both codified and tacit knowledge. Codified knowledge can be articulated while tacit knowledge cannot be articulated as it is embedded in the processes, policies, networks and relationships of the particular organization. Organizational learning occurs when individual members in an organization gain knowledge and experiences, learn from these (create new knowledge) and thereafter embed this knowledge in the organizational systems, processes, policies and procedures. Therefore, codified knowledge becomes tacit knowledge. Embedding knowledge ensures that the content is captured and accessible even after the employee has left the organization. Learning is usually demonstrated as changes in knowledge, attitude and behaviour. Organizational learning includes three processes namely creating, retaining and transferring knowledge. Knowledge can be transferred between individual employees, within and between units. Through knowledge transfer, individuals, teams and units could learn from others (Naudé, 2009, Lopez, 2005; Sun & Tse, 2009; Hatch & Dyer, 2004; Easterby-Smith, *et al.*, 2000; Argote, 2011; Argote & Ingram, 2000). Another key understanding is that learning occurs in rich social contexts from a diverse range of approaches, philosophies, interests, values, beliefs, and inequities rather than a vacuum (Wals & Smith, 2012; Wals & Jickling, 2002).

Based on the previous discussion it is evident that learning in organizations changes what individual employees and teams do and how they view themselves and their context. It seems that learning invites critical reflection, changes discourse and acts as a negotiating platform to individuals and teams (Hardless *et al.*, 2005; Fletcher & Watson, 2007; Cunliffe, 2002; Fenwick, 2005; Parker, 2004; Cortese, 2005; Hemetsberger & Reinhardt, 2006; Hughes, 2000; Bryans & Mavin, 2003; Driver, 2012).

Sustainable Development and Organizational Learning

Over a period of time authors (Senge & Carstedt, 2001; Molnar & Mulvihill, 2002; Jamali, 2006) have emphasized the importance of organizational learning in the quest for SD. Links between organizational learning and SD have indicated increasing convergence and that organizational learning enables individuals, teams and organizations to better meet the challenges of SD and a tri-dimensional and triple-bottom line balanced approach to the implementation of SD (Smith & Sharicz, 2011).

Within a society where there is an ever increasing sustainability challenges some SD educators and policy-makers are creating an increasing awareness and are emphasizing that in general people need to develop capacities and behaviours that will enable them to contribute to sustainability compatible lifestyles, systems at both an individual and collective level. Sustainability is very complex and is influenced by different internal and external stakeholders in different contexts who have different beliefs, needs and values. In addition, the world is constantly changing and there seems to be an ever-present uncertainty. Along this line of thinking, it is clear that the traditional problem-solving approach (which reduces the world and its challenges to solvable and manageable problems) has become ineffective. Consequently, it is evident that leaders, managers and practitioners cannot approach SD as problems or issues to be resolved and managed. There needs to be a shift from “doing things better” (as in the traditional problem-solving approach) to “doing better things”. This shift necessitates building sustainability competence. Sustainability competence includes the capacities and qualities individuals, teams and organizations need to enable them to effectively and efficiently address SD challenges internal and external to the organization. The shift to SD needs a reflexive, systemic approach and an ever-changing way of thinking. In addition, sustainability competence should equip individuals, teams, organizations and communities to be more resilient and reflective and to be more effectively equipped to manage and respond to change and the emergent crises and to deal with conflicting standpoints and perspectives. The dilemma is that as soon as the set challenges have been met, the context and the related challenge would have changed or shifted once again (Wals & Jackling, 2002; Wals & Schwarzin, 2012; Peters & Wals, nd; Beck, 2008; Wals, *et al.*, 2009). Organizational learning provides the opportunity and the avenue to develop sustainability competency and address the SD challenges.

Peters and Wals (n.d.) list five aspects of sustainability. Each of these five aspects leads to a challenge for capacity building and learning within individuals, organizations and society as a whole. These five aspects include:

- Indeterminacy which means that it is impossible to know in advance what the best course of action for a particular challenge or issue is.
- Value-ladenness which refer to the crucial influence of values on behaviors, lifestyles and systems.
- Controversy means there is a lack of and it is impossible to obtain full consensus among all stakeholders.
- Uncertainty which means that it is not possible to predict the exact or even near exact impact of a selected strategy, activity and/or action.
- Complexity which refers to the complicated interactions among a range of variables which are operating within different intertwined scales.

Sustainability competence need to adequately deal with these five features. Each of these five aspects and competing claims represent a challenge for learning in people and organizations. At the same time competence is needed to develop more resilient and reflexive individuals, teams, organizations and communities that are better enabled to anticipate change and respond to emergent crises (Wals & Schwarzin, 2012).

In some organizations there is a tendency to emphasise the generation of new ideas without really paying attention to creative exploration processes and this usually results in a diverse range of quick fixes. Conversely, within the context of a learning organization systems and processes are created which encourages the development, capture and support of longer-term capacities and to enable and encourage

ongoing transformation. In a tridimensional triple-bottom line SD approach organizations need to create, capture, shape and apply SD related knowledge and insights effectively and efficiently (Jamali, 2006; Smith & Sharicz, 2011).

Jamali (2006) described the common defining characteristics of a learning organization and added that these characteristics are important for SD. These characteristics include:

- challenge mental models,
- foster fundamental change,
- engage extensive collaborative activity,
- revisit core assumptions about business and its purpose,
- implement systems-level thinking, and
- foster a culture of learning and experimentation.

Based on the tri-dimensional triple-bottom line approach to SD used in this paper, it is evident that organizational learning within this context need to address the need to balance the economic, social and environmental dimensions combined with managing an organization within a dynamic and ever changing global context. In addition, the organizational learning approach should pay attention to the Titanic syndrome which seems to be still prevalent in some organizations. The Titanic syndrome is where managers simply do not believe their particular Titanic is sinkable and therefore they do not believe in taking effective, efficient and timely action to remedy any problems. Similar to the officers of the Titanic, managers do not see any need to slow their operation down or change direction when warned of looming business icebergs. When the inevitable then happens, change management is implemented. Sometimes during this change management process, and even when the organization is sinking, the emphasis is on the best way to re-arrange the deckchairs. One of the dilemmas is that the managers responsible for the disaster are usually the same managers who are disinterested or unable to objectively examining their own thinking and mindsets, and the part they played in the original creation of the problem (Pourdehnad & Smith, 2012; Smith & Sharicz, 2011; Smith & Saint-Onge, 1996).

SD within an organization is a continuous process of co-evolution rather than maintaining the status quo. This view necessitates a dynamic process which is underpinned by learning to create and develop new structures and ways of working to change and adjust and to continuously change and adjust to ever changing challenges and conditions (Mitleton-Kelly 2011).

Guidelines for Implementing SD and Organizational Learning

The author has described these guidelines in a linear fashion for structural purposes of this paper but believes that all the aspects contained in these guidelines are interlined and interrelated. Each organization needs to decide in which order it wants to implement these. However, it is advisable that the organization starts with defining SD and organizational learning within the context of the particular organization as a first step to provide an anchor and clarity for further actions.

Define SD and Organizational Learning

To effectively implement SD and organizational learning and attain success leaders need to pay close attention to how these concepts are defined, understood and interpreted in the organization. In an effort to understand the meaning of SD, different types of internal and external stakeholders in a diverse range of different contexts are needed. However, these stakeholders might have a range of different understandings and interpretations of SD. There is a diverse range of SD definitions which means that even when the leaders and top management initiate a SD approach there might be confusion and misinterpretation regarding the concept. Consequently, this leads to a lack of clear guidelines for implementation and a clear articulation of business initiatives. Furthermore, this lack of clarity contributes

to a lack of an integrative and cohesive monitoring and measurement system. Therefore, it is advisable as a first step that leaders and managers in organizations, internal stakeholders (such as employees) and external stakeholders (community members, policy makers) develop a commonly agreed upon, well-defined and clearly bounded interpretation for SD within the context of a learning organizational culture for a particular company. Once an agreement on the interpretation of the concepts is reached, it is important to implement this interpretation and understanding consistently throughout all the company strategies, activities and levels of the company (Wals & Smith, 2012; Wals & Jickling, 2002; Smith & Sharicz, 2011; Montiel, 2008; Bansal, 2005; Daub & Scherrer, 2009; Naudé, 2008; Naudé, 2011). Similarly, leaders and managers need to develop and integrate a common understanding and definition of organizational learning within a SD context in consultation with the practitioners in the organization.

Use a Triple-Bottom Line Approach to SD Combined with Organizational Learning

It is advisable has become fashionable recently that the leaders and managers use a tri-dimensional triple-bottom line approach given that this approach has become a competitive advantage for many organizations for sustained profitability and growth. It is important that the economic, social and environmental dimensions are equally valued and managed in a balanced manner. The tri-dimensional triple-bottom line approach provides the opportunity to measure and evaluate organizational results in terms of profits and profitability, social responsibility and impact on the environment. In using a tri-dimensional triple-bottom line approach it provides a basic practical framework and guidance for organizations on how to proceed to be socially and environmentally responsible as well as economically effective. This framework also allows the organization to measure, evaluate and make statements related to the organization's performance regarding SD. In an attempt to implement a tri-dimensional triple-bottom line approach to SD the principles and notions of organizational learning is helpful. These notions and principles include that individuals and organizations are able to examine the causes of mistakes, take corrective action and learn from these lessons. Within an organizational learning approach decisions cannot be made based on a local and short term view as this will lead to disaster over the long term. Consequently, a systems thinking approach provides more effective results and outcomes. This means that individual persons or organization should not attempt to solve a problem alone but there needs to be a combined effort. Organizational learning should assist individuals and organizations to improve their processes, manage the challenges of SD and address increasing competition (Ramirez, 2012; Smith & Sharicz, 2011; Sisaye, 2011; Smith, 2012; Smith, 2011).

Integrate SD and a Learning Organization Approach into the Business Plan

As a starting point the company needs adequate knowledge about the social and environmental context within which the company operates (Daub & Scherrer, 2009).

There needs to be a very clear strategy regarding SD and organizational learning and this strategy needs to form an integrated part of the DNA of the core business plan and must be hardwired into the corporate structure, every aspect of the management systems and every level of the company. It must not be added work and it needs to eliminate trade-offs between performance, value and sustainability (Smith & Sharicz, 2011; Epstein, *et al.*, 2010; Patra, 2008). A definite course for sustainability management must be clearly outlined at the start of the process and the following questions (Smith & Sharicz, 2011; Daub & Scherrer, 2009) must be addressed:

- Who is responsible for what?
- What are the desired outcomes?
- Are there any conflicts among the key sustainability priorities?
- What are the key stumbling blocks?

- How does the company perceive its responsibility to society (in general) and its stakeholders (in particular)?
- What is the most effective way to develop an integrative approach?

This integrated approach demands an integration of economic, social and environmental goals and objectives combined with a clear link with the company budget and investment initiatives. Furthermore, the selected approach needs to be based on a long term approach, medium term goals and short term initiatives. This approach should provide a basis for decision-making and an operational business plan which includes specific goals and related time-frames and needs to be managed as repeated cycles of analysis, decision-making, implementation, monitoring and evaluation which is embedded at all levels of the organization (Meadowcroft, 2007; Wasdell, 2011).

Implement Effective Leadership

Companies need effective leadership to initiate, implement and evaluate SD initiatives, programs, strategies and activities within an organizational learning context. Leaders in companies need to understand the current business trends and how these impact on their particular company, strategic business opportunities, and the community in which the company operates. Leaders who are pursuing a SD and organizational learning approach need similar skills to other effective leaders. However, however they need an additional mindset to build capacity in their educational, communication, performance management systems and engage in broad stakeholder engagement (Smith & Sharicz, 2011; Epstein & Buhovac, 2010; Epstein, *et al.*, 2010; Naudé, 2011; Harmon, *et al.*, 2010). Traditionally it is the role of top management to provide the specific direction and conditions conducive to achieve effective implementation and to enhance continuous improvement (Rocha *et al.*, 2007).

SD is learned through everyday practice and interaction, when people share information, question, invent and refine a diverse range of sustainability approaches. To enhance SD and organizational learning, leaders need to focus on diversity and creating deliberate connections where a variety of interactions and learning could occur spontaneously among staff, between staff and customers and suppliers, between staff and community or staff and nature (Smith & Sharicz, 2011; Fenwick, 2007).

Effective leaders need to implement and demonstrate reflexive abilities and these include a systems thinking approach, embracing diversity and managing risk, balancing both global and local perspectives, developing a new language and meaningful dialogue, and emotional awareness. In addition these leaders need specific leadership abilities such as innovation, analysis, cross-cultural understanding, change management and flexibility (Waddock, 2007; D'Amato & Roome, 2009; Waddock & McIntosh, 2009; Smith & Sharicz, 2011; Wilson *et al.*, 2006). Authentic, ethical and/or transformation leadership styles have all either directly or indirectly been linked to effective implementation of SD (Angus-Leppan *et al.*, 2010).

Leaders need to demonstrate a shift in thinking and must be challenged to optimise opportunities to create a better world, adopt and accept a SD approach with includes addressing human rights and climate change and at the same time develop future leaders who share this approach. Both current and future leaders (as part of a lifelong learning process) need to foster creativity, systematic approaches combined with holistic problem solving skills (Smith & Sharicz, 2011; Waddock & McIntosh, 2009).

Challenge the Status Quo

To optimise the shift and thinking towards a SD approach within a learning organizational context leaders and managers in a company need to challenge the status quo, question and analyse the current business strategies, activities and practices by being open and explore new ideas and ways of operating. In addition, they need to fully understand the role of external stakeholders such as the government, non-governmental organizations, unions, social partners, and civil society as well as the interaction between

all these stakeholders. Furthermore, the leaders and managers need to respect diversity and understand differences, be flexible and adjust their approach to different situations, and taking an overall strategic approach to the business environment (Smith & Sharicz, 2011).

Build Internal and External Partnerships

Companies do not operate in a vacuum but in an interconnected and global context which means that they need to build effective partnerships with the relevant stakeholders, such as the community in which the company operates, policy makers, unions, government, and others. This line of thinking implies partnerships based on open and honest meetings and communication across personal, company, regional and country. This approach (Meadowcroft, 2007; D'Amato & Roome, 2009; Waddock & McIntosh, 2009; Naudé 2011; Smith & Sharicz, 2011) means:

- a multi-disciplinary approach with strategic networks and alliances,
- equitable relationships with power sharing,
- collaborative innovation,
- multi-stakeholder participation,
- intercultural understanding,
- effective teamwork,
- transparency and accountability,
- exploring differing views regarding SD, align interests and thoughts,
- build mutual trust, interdependence, interrelationships and coordination,
- develop policies, procedures and practices to add mutual value and maximize benefits to communities instead of duplicating efforts and competing with each other,
- engage in dialogue and balance competing demands.

Participation between the different internal and external stakeholders provides knowledge and input which enables the organization to develop policies, reframe problems and find solutions (Loorbach, 2010; Hopkins, 2009).

Measure and Report

In recent years there has been increased pressure on organizations to objectively and fairly measure their activities against identified goals and objectives and meaningfully report on triple bottom line performance. Measuring SD is complex and multi-faceted and it needs to be approached as a systematic business process. A SD performance measurement framework (including planning, implementing and reviewing) is useful. However, significant time is needed to define SD within the context of the particular organization, to survey both the internal and external environments, to establish goals and objectives for implementation and measurement, to identify how the framework will be used, and to identify the resources needed for effective implementation (Smith & Sharicz, 2011; Edwards, 2009; Epstein, *et al.*, 2010; Epstein & Buhovac, 2010; Searcy, 2009; Jamali, 2006; Esquer-Peralta, *et al.*, 2008).

Leaders and managers in organizations need to adopt and implement effective management control systems to communicate to the internal and external stakeholders what the expected behaviours and accompanying outcomes are. In addition, it means that right from the point of implementation certain aspects need to be very clear. Firstly, how and when the impact and returns on SD initiatives, investments, strategies and activities will be monitored, measured and evaluated. Secondly, how individuals and groups will be held accountable for their contributions and consequences of these contributions. The emphasis should be on value-creating activities and both short-term and long-term ways to measure, monitor, evaluate, justify and demonstrate the added value of these initiatives, investments, strategies and activities within an effective and responsible economic framework rather than just cost cutting. Thereafter, leaders and managers need to ensure that these identified expectations are

implemented at the operational level (Laughland & Bansal, 2011; Meadowcroft, 2007; Aras & Crowther, 2009; D'Amato & Roome, 2009; Smith & Sharicz, 2011).

Train Staff

Learning organizations do not happen automatically but individuals and groups need to be trained how to be reflexive and become a learning community. It might be a challenge and depends on the ability and willingness of the involved individuals and groups to reflect (Wals & Schwarzin, 2012). In addition, there needs to be training regarding SD. This training could be done as a stand-alone activity or integrated into other existing training as part of formal and informal development. The focus will be on global responsibility to promote and enhance the understanding of the tridimensional triple-bottom line approach SD. It is also the responsibility of individuals to take ownership of and be committed to their own training and career development (D'Amato & Roome, 2009; Naudé, 2011).

Create an Environment for Organizational Learning

The leaders and managers need to create, develop and maintain a context and a culture within which organizational learning is encouraged and promoted. Employees need to experience a context where they feel psychologically safe to learn and experiment with different ideas for organizational learning to be effective. The context facilitates learning processes and outcomes (Bunderson & Sutcliff, 2003; Edmondson, 1999; Contu & Willmott, 2003; Argote, 2011).

There is the need to create an organizational culture that supports SD behaviours, enhances development of the competencies and knowledge related to sustainability adoption, encourages learning, innovation and reflective thinking. This culture will create a context where the individuals and groups are enabled to recognize crucial information, share knowledge and skills effectively. Within this approach and open model which stimulates fresh thinking and new ideas to replace the conventional and hierarchical models are introduced. Open source networks and other similar methods could be used effectively (Hopkins, 2009; Waddock and McIntosh, 2009; Smith & Sharicz, 2011; Morsing & Oswald, 2009; Rimanoczy & Pearson, 2010; Espinosa & Porter, T, 2011).

Ensure Effective Communication

Based on the increased focus on corporate responsibility companies need to increasingly manage a growing demand for and flow of information in a transparent, responsible and accountable way which includes effective communication with a range of internal and external stakeholders. Effective communication has many advantages. Firstly, clear and effective communication is essential for meaningful collaboration and interaction, increases the reputation of a company, confirms its SD focus and is a source of competitive advantage. Secondly, within the context of the current information age the ability to organize, create and disseminate information has direct impact on teamwork and collaboration. Thirdly, leveraging applicable communications technology and capitalizing on lateral communication patterns tend to alleviate complexity and uncertainty and improves transfer of information among teams and networks. Lastly, communication enhances articulation of ideas, makes tacit ideas part of the conversation and changes conversation into experimentation, trial and implementation (Hopkins, 2009; Waddock & McIntosh, 2009; Beeby & Booth, 2000; Hurley, 2002; Jamali, *et al.*, 2006).

In order to enhance effective communication within an organization policies, processes and procedures regarding effective collection and sharing of information are crucial. This means that organizations need to decide how to effectively manage communication strategies to moderate risk and disseminate the message clearly and with integrity. Based on the global and multi-faceted nature of SD it is clear that SD needs a global and integrated approach related to information and communication technology (ICT) to support and share knowledge effectively. Organizations need to move towards a

shared approach and distribute the relevant information and knowledge to different individuals and groups across the different levels within the organization. In addition, organizations need to select an ICT infrastructure that is most suitable to that particular organization and the context in which it operates (D'Amato & Roome, 2009; Hopkins, 2009; Laughland & Bansal, 2011).

Management Implications

Smith and Sharicz (2011) and Jamali, *et al.*, (2006) highlight some of the management implications related to SD and organizational learning and these include:

- Companies need to explore and experiment with different management approaches that capitalise and build on increased empowerment, teamwork, trust, communication, commitment and flexibility and move away from approaches that focus on hierarchy and control. Integrating this different management approach the organization will facilitate the emergence of learning organization disciplines and dynamics.
- Current accounting practices might work against the development of sustainability depending on the accounting system that is in place at the particular organization. For example, if these practices focus on bottom-line, economic-only considerations, it means that a tridimensional and triple-bottom line approach to SD is unlikely to occur.
- The governance structure of the organization might hamper or impede on SD. For example, efficiency should not be demonstrated only through cost-cutting efforts and outcomes but by value-creating activities. The development of a more strategic rather than compliance-based approach regarding SD needs to be the overall focus and this will encourage a tridimensional triple-bottom line SD dynamic.
- Organizations need to transition from a pattern of adopting quick fixes which usually leads to haphazard implementation of strategies, policies, practices and activities and top management needs to lay a foundation where a tridimensional triple-bottom line approach is part of everyday practice at all the levels in the organization.

Research Implications

There is a need for increased and continuing research regarding organizational learning and SD to increase the overall understanding, fill gaps in theories and empirical evidence, and to respond to social and technological developments. Research related to knowledge creation, organizational capabilities, new organizational structures and technological developments provide challenges but also opportunities for organizational learning. When organizations need a longer-term focus further research is needed to provide guidelines to organization regarding the approaches and methods needed to make the needed organizational shifts (Argote, 2011; Smith & Sharicz, 2011).

An ideal approach is to develop a generic framework which combines a tridimensional triple-bottom line approach to SD combined with organizational learning based on solid theoretical knowledge and through consultation with directors, managers and practitioners in companies who need and want to implement such a framework. Consultation will ensure that the frameworks have practical value and are not purely theoretically inspired. These developed frameworks could then form the basis for further empirical research in a range of targeted industries and contexts.

At a company level, a framework provides a guideline that could assist directors, managers and practitioners to identify the relevant aspects which need to be included in SD, develop more structured systems and create relevant outcome indicators and measures. In addition, it provides formal system for ongoing consistent monitoring, improvement and evaluation of the attainment of outcomes against indicators. Furthermore, frameworks provide a basis that organizations could use to identify fundamental

linkages, evaluate its current approach to SD and to make the needed changes (Becker, 2010; Wallis, *et al.*, 2010; D'Amato & Roome, 2009).

Conclusion

The author uses and promotes a tridimensional triple-bottom line approach to SD where social, economic and environmental dimensions are regarded as equal dimensions and need to be simultaneously achievable. Creating a learning organization is one strategy to improve organizational performance and maintain long-term sustainable competitive advantage. Furthermore, there are clear and definite links between sustainable development and organizational learning.

Based on the complexity of both SD and the learning organization it is clear that an overnight change and shift is highly unlikely. This metamorphosis needs to be a gradual dynamic change process to capture and integrate the dimensions of SD combined with the principles of organizational learning (Jamali, *et al.*, 2006). It seems very clear that sustainable development and organizational learning are mutually supportive.

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