

(Mirvis, Googins, & Kinnicutt, 2010). Also organisations have to reflect on the way they do business and how decisions are made to succeed (Lyon , 2004).

Organisations have to undertake a true transformation in order to create their own path towards inclusive forms of sustainability (Edwards, 2009). Change of norms and values related to the environment and socioeconomic wellbeing is vital to successful transformation (Doppelt, 2010; Beer & Nohria, 2000). Unfortunately this transformation is often very difficult for organisations and therefore less likely undertaken (Edwards, 2009). It is important to collectively gather knowledge through interaction and communication in order to promote knowledge diffusion and change a particular practice (Newell *et.al.*, 2003; Orlikowski, 1996).

2.4 Limitations of sustainability implementation

Organisations often face barriers when implementing sustainability into their strategy and projects. Doppelt (2003) has identified seven types of these limitations that organisations often fail to overcome and he calls them blunders. He suggests solutions to them and points out that by becoming aware of these blunders reduces the risk of them taking place (Doppelt, Overcoming the Seven Sustainability Blunders, 2003). The blunders are following:

- Patriarchal thinking
- The silo approach to environmental and socio-economic issues
- No clear vision of sustainability
- Confusion over cause and effect
- Lack of information
- Insufficient mechanisms for learning
- Failure to institutionalize sustainability

2.4.1 Patriarchal thinking

Organisations often adopt a patriarchal thinking where employees only do what management orders. Therefore the employees abandon personal responsibility and

create a false sense of security in the organisation. The most important step to avoid this blunder is to disturb the organisational control mechanism in order to point it towards a new way of managing. Employees have to be open to new ways of thinking and taking actions and therefore the false sense of security needs to be undermined (Doppelt, *Overcoming the Seven Sustainability Blunders*, 2003). Project groups in project organisations have a certain degree of autonomy and that is usually higher than individuals have in non-project based organisations (Forsyth & Danisiewicz, 1985). High autonomy of project teams minimizes the likelihood of patriarchal thinking to take place (Doppelt, 2003) and it requires a steering group made up of department managers and project managers to integrate the project group into the organisation (Hovmark & Nordqvist, 1996).

2.4.2 The silo approach to environmental and socio-economic issues

Executives often see sustainability as a special program that is not intergraded into the organisation's or project's processes (Doppelt, *Overcoming the Seven Sustainability Blunders*, 2003). Although Badiru (2010) explains how project sustainability indicates that sustainability exists in all aspects of the project. Doppelt (2003) calls the imperfection of project sustainability the silo approach to environmental and socio-economic issues. He suggests that project teams in the organisation should be mixed up in order to bring fresh perspective and new ideas to the table, this requires involvement of people from every function of the organisation and key stakeholders.

2.4.3 No clear vision of sustainability

No clear vision of sustainability is Doppelt's (2003) third blunder and often it reflects in organisations having a negative vision that focuses on what not to do. That does not go hand in hand with sustainability and depresses human motivation. The alternation of organisational goals towards sustainability is Doppelt's (2003) advice and he recommends backcasting in order to do so. Backcasting is a tool used in strategic planning for sustainability. The main ideology behind it is to generate a desirable future and from there look to the present and find ways to move to the desired future by using strategy, pathways and planning (Vergragt & Quist, 2011). The ideas produced with backcasting are often perceived as a political standpoint and therefore they lose their value (Dreborg, 1996). It is also vital in the vision creation process

that many employees are involved in the process, that way it is more likely that they will understand and incorporate it better (Verhulst & Boks, 2012; Lewis *et.al.*, 2006).

2.4.4 Confusion over cause and effect

The fourth blunder is confusion over cause and effect where the main focus is usually on the symptoms of sustainability challenges instead of designing out root causes. Organisations spend a lot of money on mitigations of emissions and discharges when they should be focusing on the causes of these results (Doppelt, Overcoming the Seven Sustainability Blunders, 2003). Hart & Milstein (1999) point out that addressing pollution to minimize resources use and to improve community and stakeholder relations are just superficial actions that do not conduct to a sustainable organisation. In order for organisations to focus on the cause not the effect Doppelt (2003) suggest that new operational and governance strategies be implemented.

2.4.5 Lack of information

Organisations often fail to communicate effectively the purpose and strategy of their sustainability efforts and Doppelt (2003) describes it as lack of information. This is often seen in project based organisations where the project divisions make it difficult to have unified strategy and for knowledge to be diffused across projects (Newell *et.al.*, 2003). Trainings, sign posting and scattered events are unsatisfactory to describe the commitment the organisations have made to sustainability (Doppelt, Overcoming the Seven Sustainability Blunders, 2003). In the change management literature the emphasis is on giving important stakeholders as much information as possible early in the project process. It is also important to constantly repeat the change messages in a clear and consistent way (Verhulst and Boks, 2012; Lewis *et.al.*, 2006). Human behaviour, social values and attitudes towards the world and environment are facilitated by communication and humans construct their reality on the basis of perceptions and experiences (Godemann & Michelsen, 2011). Therefore transparency and honesty in communications is the key to avoid the fifth blunder (Doppelt, Overcoming the Seven Sustainability Blunders, 2003). By constantly communicating the messages across to employees with structured dialogue the members feel more involved in the process (Lewis *et.al.*, 2006). Eventually sustainability will become the languages of the organisation (Doppelt, Overcoming

the Seven Sustainability Blunders, 2003). Languages are a vital part of communications and it constructs reality and social actions as well as allowing humans to find orientation and coordinate action. The meaning of our world is expressed with the relationship between words and the boundaries of our languages points to the boundaries of our world. It is therefore important to learn to express sustainability with words (Siebert, 2011). Sustainability communication is the human process of dealing with future development of society towards sustainability. It provides a framework for understanding a wide variety of social systems and actors such as the interactions amongst individuals, between individuals and institutions, between and within institutions, in the media and politics as well as on different levels; regional, national and international. When changes in individual attitudes and behaviour are connected to sustainability communication the modifications in lifestyle take on a special meaning, however only emphasising the importance of the concept is not enough to trigger change in a population. Communication about sustainability is about communicating knowledge (Godemann & Michelsen, 2011).

2.4.6 Insufficient mechanisms for learning

Organisational learning and the motivation for employees to test new ideas are important to overcome barriers to change. Doppelt (2003) calls failure in these areas insufficient mechanisms for learning. Organisation must alter their feedback and learning mechanisms so that employees and stakeholders are motivated to develop their skills, knowledge and understanding. According to Lewis *et.al.* (2006) the management literature recommends adapting a two-way communication route with the employees and highlights the importance of being a good listener in order to provide productive feedback. Communications along with educational procedures make individuals able to actively participate in shaping a sustainable society by endorsing individual engagement, encourage political education and strengthening civil society (Godemann & Michelsen, 2011). Training and education is one of main ways to overcome barriers to implementation of sustainability (Esquer-Peralta, Velazquez, & Munguia, 2008). Sustainability communication is managed with methods and tool to influence the process. One method is empowerment of strategies, which is about helping people recognise non-sustainable actions and apply knowledge about sustainability in order to rectify them. The ultimate goal is to involve people in

shaping the conditions of their own life. Education processes for sustainability have the mission of sharpen individual awareness in both private and personal life. In order for them to be able to take action against non-sustainable doings, evolve their problem-solving skills and make suitable changes in their behaviour. (Godemann & Michelsen, 2011). The critics on educating for sustainability point out that the education lacks grounding in educational theory and that it is rather politically driven (Bormann, 2011).

2.4.7 Failure to institutionalize sustainability

The last blunder Doppelt (2003) talks about is the failure to institutionalize sustainability. Few organisations have successfully implemented sustainability-based thinking into everyday processes, policies and culture. One of main difficulties with the implementation of sustainability is the problem of how humans think, human values and perceptions might not be in line with sustainability values (Millar, Hind, & Magala, 2012; Marshall, Coleman, & Reason, 2011; Brown, 2005). Doppelt (2003) recommends that parameters be adjusted by aligning systems and structures with sustainability. This is a continuous process and the organisation needs to incorporate new ways of thinking and acting in how it does business (Doppelt, *Overcoming the Seven Sustainability Blunders*, 2003). Focusing on involvement and empowerment is important to get the employees engaged and enthusiastic in the implementation process. Which in turn will make them participate actively and enables new sustainable culture to prosper inside the company (Verhulst & Boks, 2012). To implement sustainability change it has to be rooted in personal value systems because the initial sources of sustainability barriers can be traced to personal cognitive frameworks (Millar, Hind, & Magala, 2012). In order for companies to live up to their values as being a sustainable organisation they have to train their future leaders. Not only do they have to deal with complex economic, social and environmental problems but also practice leadership that makes a difference for the business and the world. Those companies that are ahead in this process have an internal steering committee of executives in order to bring different departments together. On top of that they have board of directors that have overview over their sustainability performance. Publishing of reports to show their progress in the area is also a factor in the process (Mirvis, Googins, & Kinnicutt, 2010).

2.4.8 Summary of limitations of sustainability implementation

Doppelt's seven sustainability blunders describe the barriers organisations and project teams face when implementing sustainability. Keeping those blunders in mind reduces the risk of them taking place. To be able to recognize the benefits of implementing sustainability into projects and organisations it is vital to translate the sustainability strategy into measurable goals (Edwards, 2009; Epstein and Roy, 2001). But it can be hard for organisations to link project performance to higher-level goals and therefore the project's contribution to sustainable development is not always clear (Boswell, Wallace, & Boswell, 2005). Gilbert Silvius states that the impact of sustainability is not yet recognized in project management because of the way projects are managed, measured and reported does not fit with the sustainability concept. Therefore there is a growing need to practically implement the concept in the management of projects (Maltzman & Shirley, 2012, cited Gilbert Silvius).