Employee Involvement in the Implementation of a Sustainability Strategy

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A Thesis in the Field of Sustainability and Environmental Management
for the Degree of Masters of Liberal Arts in Extension Studies

Harvard University
September 2009
Abstract

Organizations have started aligning their priorities with new world realities. Whether a result of external pressures or internal commitment, businesses are seeing the need for a sustainability strategy. Aligning the three responsibilities of sustainability (social, economic, and environmental) with organizational strategy can be transforming. An effectively implemented sustainability strategy produces a learning organization and adds to its competitive advantage. To be effective the strategy needs to become part of way the organization operates. Implementing a sustainability strategy is not an easy task. This research studies the role employee involvement plays in the success of implementing sustainability. The research describes four different implementations and conducts a cross-case analysis. Factors that influence employee involvement within a sustainability strategy are discussed. A comparison of employee and people elements within existing management systems is presented. The research outcomes reaffirm the hypothesis that effective employee involvement, supported by integrating sustainability within an organization's core operations, will provide the impetus to change as the organization moves toward sustainability. Employee involvement needs to be planned for and included in the implementation of a sustainability strategy.
Acknowledgments

I am deeply grateful to all the sustainability managers and professionals who contributed to this research. I appreciate the time and help they offered throughout this process. Despite their challenging careers and heavy workloads, they took the time to have a candid conversation about their experiences. If anything, this shows their commitment to sustainability and the personal dedication they have to advance the field. Personally, I am thankful for their efforts inside and outside their organizations. They serve us all.

I have to thank my family and friends, especially my husband and children for allowing me the time to dedicate to this research. I have always believed that the economic, social and environmental responsibilities of an organization are not mutually exclusive. To be allowed the time and resources to research sustainability and employee involvement has been very rewarding and reassuring.

And finally I am deeply indebted to my inspirational mentor, Dr. Robert B. Pojasek, Adjunct Lecturer on Environmental Science, Harvard School of Public Health. With patience and understanding, he challenged me to raise the bar and demand more of myself. He was always there with his constant support, feedback, and encouragement. The wealth of his knowledge and experience helped me shape and deepen my understanding of the topic and produce better research. Above all you are an inspiration to us all for implementing the teachings of sustainable living in your personal life as well as the professional one. Thank you!
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Chapter I
Introduction

A staggering statistic on the World Trade Organization’s website reports that “fifty one of the one hundred largest economies in the world are corporations. The top five hundred multinational corporations account for nearly seventy percent of the worldwide trade; this percentage has steadily increased over the past twenty years” (WTO, 2009). As the world faces an increasing array of environmental, social and economic challenges, businesses must lead the way towards transformative solutions. These challenges are no longer just a part of risk management and long-term strategic planning. They now affect day-to-day processes.

A successful business realizes it requires a license to operate within a community. It also recognizes that this license can be contested both locally and globally. Now the challenges a business confronts go beyond the license to operate to include availability of resources, volatility in pricing, availability of markets, global climate change, increasing regulations, turmoil and instability, among many others. These issues strike at the core of shareholder value, future growth and financial stability. Today, companies answer to an increasing number of stakeholders. Customers, suppliers, shareholders, employees and other stakeholders demand more than just financial performance. They demand that businesses and industry use “green” processes, cut emissions and reduce resource use all while maintaining financial growth and social responsibility. Over time, several management programs and standards have been developed and implemented to improve competitiveness and ensure compliance with varied and increasing regulations. Most recently development that takes economic, social and environmental
factors into consideration, without exhausting the world's resources, is being advocated and referred to as sustainability.

Implementing sustainability practices has not been an easy task, however. Much of what is suggested by sustainability “is counter-intuitive and problematic in the context of long-term” traditional business success (Goldsmith & Samson, 2007). And although the core values and intent of sustainability are generally agreed upon, the methodology for integrating such practices within the existing operational framework has lagged. In some cases, sustainability programs were implemented in reactive haste and reduced to a checklist of initiatives and programs unrelated to core business processes. The results were mixed and some programs did not survive (Goldsmith & Samson, 2007).

Furthermore, in hard economic times companies are focusing on core operations and cutting back on new programs that have not been fully integrated. In previous economic downturns, sustainability and environmental programs have been reduced to bare bones programs that fulfill the purpose of compliance. In this current downturn, such reductions will be more difficult. Global climate change has put carbon emissions at the forefront of the challenges facing businesses, a challenge that must be met while maintaining not just financial success but the social right to operate as a business. The political climate in the United States is ripe for increasing regulation on carbon emissions, and such regulation now seems inevitable. As the international community grapples with how to set and enforce limits on carbon emissions, organizations world-wide are preparing for and adjusting to the upcoming reality.

Now is not the time to cut sustainability out of an organization’s business strategy. It is no longer a luxury or a marketing tool, but a necessity. Organizations that do decide to put their sustainability initiatives on hold will adversely affect their future, putting them far behind the
learning curve. They will also be prevented from strengthening their core competencies and expanding their existing knowledge base. Sustainability, if done right, would strengthen an organization’s economic performance, make its core operations more efficient, and save resources. Sustainability is the key to finding opportunities within an organization that will prepare it for the challenges in its business environment and help it achieve its targets and goals.

Traditionally, businesses have environmental and quality management programs operating in silos separate from the operations and business systems. Then management adds a sustainability program, and the employees find themselves accountable for complying with many different requirements. A need exists to develop integrated management systems for quality, environment, health and safety, social and financial programs. A number of business excellence frameworks are boosting the enhancement of quality management systems and integrated management systems as part of their core values and criteria. These standards and frameworks also promote enhanced performance by offering best practice guidance for effectively involving employees. This foundation of integrated management systems and business excellence programs could provide a proactive base for any organization seeking a positive vision of a sustainable future (Pojasek, 2007).

Sustainability is a comprehensive strategy and framework that incorporates all other programs and permeates business processes and operations. Researchers have suggested that an employee and process focus is essential in integrating management systems and implementing a sustainability program (Pojasek, 2007). The question could be asked, how does employee involvement enhance efforts to manage change when implementing a sustainability strategy?

Integrating the environment into business processes is done at many levels and requires proper alignment with business strategy and core values. Employee involvement taps into the
employees’ abilities to enhance the processes in a way that traditional “top-down” management cannot (Riordan, Vandenberg, & Richardson, 2005). With increased stakeholder and employee engagement, sustainability programs provide “increased resilience in the face of uncertainty” (Goldsmith & Samson, 2007) and a framework for a “system of systems” (Karapetrovic & Wilburn, 1998).

Many sustainability programs, however, are operated using “top-down” strategy. Usually, these efforts rely on management of change programs to seek employees’ full cooperation. Quality programs and business excellence frameworks are much more proactive with respect to employee involvement. These programs create a “bottom-up” strategy that works in a complementary manner with the more traditional top-down strategy. The hypothesis of this research is that effective employee involvement, supported by integrating sustainability within the organization’s core operations, will provide the impetus to change as the organization moves toward sustainability.

This research will use the case study method (Yin, 2003). Evidence will consist of documentation and archival records. Interviews (Stewart & Cash, 2003) will be a main source of evidence. Cases within the evolutionary and maturation process of environmental management and sustainability will be researched. Four cases will be chosen and studied for implementation methods, degree of integration of sustainability within core operations, and effectiveness of employee involvement. The cases are chosen to provide examples of theoretical categories and backed up with real life evidence. The unit of analysis within each model will be an employee performing a job. This is to highlight the importance of employee involvement and process focus. The methods are discussed further in the Methods section.
The field of sustainability research and its applications is fairly young; however the field benefits from its multi-disciplinary properties. Some of the research fields influencing and shaping the discussion are quality management, environmental management, policy, business operations and strategy, organizational behavior and corporate social responsibility. The latest research in quality management recommends the benefits of systems integration with the many quality programs, including ISO 14000 (Klassen 1993, Waddock 2004, Chinader 2001). Quality management programs have consistently stressed the role of employees in process improvement and organizational effectiveness. Environmental research in this area focuses on tearing down the “green wall” and integrating environmental concerns early in business operations and process design (Garvare & Isaksson 2001, Dorfman & Haveman 1999). Some researchers have taken the concept of Total Quality Management and extended it to Total Responsibility Management bridging the two fields (Broekhuis & Vos 2003, McAdam & Leonard 2003, Vanagas & Zirgutiene 2005, Waddock & Bodwell 2004). Recently some models have conceptualized the application of an integrated sustainable system (Edgeman & Hensler 2002, Garvare & Isaksson 2003). A few researchers have recommended the use of business excellence programs as a working framework for sustainability (Pojasek 2000, 2007, Garvare & Isaksson 2001).

This research will extend the discussion further by using a multi-disciplinary approach and a multiple case study method to compare the implementation and results of a sustainability strategy within organizations using various management systems and frameworks with increasing levels of employee involvement, integration and maturation. The research will examine the practical issues of the implementation and study the results of different approaches with respect to employee involvement. To further understand the challenges and opportunities, a
look at the evolution of the field and its applications is warranted and will be presented in the Background section.

As the field of sustainability research matures, the value of employee involvement becomes more evident. Any organization can hire outside consultants to implement an eco-efficiency or quality initiative that will cut costs or emissions to a certain extent and it has been done many times. What is more challenging to an organization—what remains a lingering question on researchers and business leaders’ minds alike—is how then to continue these efficiency gains after the initial skirmish is won. What drives an organization to become an innovative and learning one? The answer to these questions is within the hypothesis of this research, and employee involvement is the key.

It is one thing for a manager to set goals and a path for employees to follow in order to achieve these goals, and another to work collaboratively to look at the system as a whole and learn how to improve the process from within to achieve the sustainability goals. In organizations moving on the path to sustainability, dedicated individuals are working to enhance their organizations from the bottom up. These employees are armed with knowledge, training and support. And here is where the true gains are found and continue to be found (Senge et al, 2008). This research will help in understanding the maturation process of sustainability as the organization embarks on its journey. The organization will evolve on this path and may appear in a different form as it moves along this path in fulfilling its set mission and vision. The research will use real world examples of companies that have succeeded in implementing a sustainability strategy by involving of their employees. The research will then discuss the best practices found to enhance employee involvement during the implementation and maturation of a sustainability strategy.
Past research has defined sustainability and attempted to find the best operational frameworks for it within organizations. Studies have shown how to implement a sustainability strategy and how to balance the three responsibilities--economic, social, and environmental--. Many articles have been written to provide tools for mapping processes, finding opportunities for improvement, and enhancing efficiencies of operations. Studies have been recently published on employee environmental education and awareness (NEEF, 2009). My research in particular will:

- Study the missing link that affects the success of the sustainability strategy and its continuity, employee involvement.
- Examine existing studies of employee involvement in the various programs and standards currently available as well as their effectiveness.
- Benefit from existing data on employee engagement in management programs.
- Recognize the pivotal role of engaged employees in the success of a sustainability strategy in particular. The finding offers a novel approach to examining the implementation and operation of sustainability within an organization.
- Review the methods used by organizations to involve employees and the results, adding a key component to the research of sustainability management.

Sustainability needs to be integrated into the way the organization is operated to be effective. This can only be accomplished if attention is paid to employee involvement and engagement.
Chapter II
Background

Implementing Sustainability

Sustainability is not a new concept. It was discussed as a term in the forestry field back in 1713. Hans Carl von Carlowitz, a forestry worker in Germany, introduced the term when he suggested that the number of trees that are cut should equal the number of trees that are able to grow again (Zhao, 2004). In 1972 the idea of limits to global growth to achieve a social and economic balance was suggested by a major report (Meadows et al, 1972). Yet more recently, in 1987, the World Commission on Environment and Development defined sustainability as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987).

As companies embark on their own paths to sustainability, they find that it is not a simple task to manage the social, environmental and economic bottom lines. Implementing any strategy involves organizational programs and employees. In most cases, environmental and quality management programs within organizations have been managed separately from business operations and are not involved in the overall business strategy or finances. Many organizations have an additional separate program referred to as sustainability, or corporate social responsibility. Coordinating these silos makes it difficult to manage for this triple bottom line. Some organizations have benefited from tweaking existing or newly implemented quality management systems and business excellence systems. The key is to integrate the goals of these systems throughout the everyday work processes and not to reduce them to an audit or checklist.
at the end of the year. To use the full potential of these systems the missing link will have to be engaged employees.

As we consider a sustainability strategy it becomes vital to use a systems approach and study the employees’ role in an overall framework that integrates all functions and departments. A systems approach means looking at the macro level first, then studying the interrelationships to try to reach the cause or root of the problem and find innovative and comprehensive solutions. This approach is contrary to the reactive mentality that seeks to prevent or react to accidents or problems by adjusting certain parameters or adding controls that could create difficulties in other parts of the system. A systems approach looks at the cause and improves the process and system itself rather than controlling the output or a part.

Leading organizations that have already adopted this strategy have found quickly that sustainability cannot be considered a destination or a goal at the end of a journey. It is, instead, an ever expanding horizon that an organization strives to reach and that no organization will ever fully achieve. The journey is that of continuous improvement and opportunity. Some organizations have made considerable strides in this journey while others are just exploring the possibilities and advantages that it brings.

Sustainability must become part of an organization’s operations to be effective. Otherwise it is only policy and will not be instituted at the employee level for any substantial length of time. In addition to compliance to standards and regulations, organizations have numerous social and economic requirements. Pojasek (2008, November) talked about the five basics that are required for sustainability to be translated from the strategy level down to the facility and local level. These factors are “rarely considered” (Pojasek, 2008, November), when implementing a sustainability strategy but are necessary for its success:
1. Business continuity and risk management
2. Responsibility
3. Conformance and Compliance
4. Performance
5. Continual Improvement

All businesses need to conduct risk management and long-term planning to hedge against economic cycles, natural disasters, regulatory changes, and any operational risk that affects the organization and its continuity. This means long term strategic planning that goes beyond risk management to understanding the effect of operations on organizational reputation and market performance. Organizations must be aware of changes in social norms, resource availability, political stability and trends, climate, and regulations.

The three responsibilities discussed are the economic, environmental and social. The organization has responsibilities to its shareholders, employees, customers, suppliers and all stakeholders, including the local communities it operates within. When organizations take sustainability to mean environmental stewardship they address only one of these responsibilities. Each project, process, and decision has an economic, environmental, and social aspect. The three responsibilities are interrelated and must be addressed together.

Organizations need to comply with all regulations and standards within these three areas of responsibility. Many management systems can be used to do so: ISO 9001 for quality management, ISO 14001 for environmental management, and OHSAS 18001 for occupational health and safety are a few examples. On the economic side, Sarbanes Oxley Section 404 and the COSO Framework are operational controls to make sure that the financial system is solid.

Performance programs work with conformance programs. Programs like the business excellence frameworks that are now applied in many countries enhance the performance of an organization. They provide a non-prescriptive method to score performance in many key areas of
managing an organization, ensuring continuity in quality, performance and risk management. In most organizations conformance, compliance and performance systems are separate and are not well integrated.

Continual improvement is a must for sustainable business and is driven by conformance and performance systems. These systems present an opportunity not commonly seized to propel employee behavior and involvement.

For help an organization can turn to many human resource, legal, and management systems on its sustainability journey. Each system will affect the performance of employees. This research will focus on those that are closely linked to process, especially the quality and environmental systems. The research will also demonstrate the link between these systems and how employees do their jobs. This then translates into a pathway to engage employees to enhance the processes with which they work and find opportunities for continual improvement.

Most conformance, compliance and performance programs contain within them elements that cover employees and other affected people. The employee elements in each program may have a different focus and intent. Most cover the need to train employees on their roles and responsibility to ensure alignment with the program’s. Others may have a more developed component. It is worth a detailed look to investigate what these programs contain and what they may be missing when it comes to employee involvement. Table 1 compares the emphasis and people elements in the most popular of these programs and detailed below.
Conformance and Compliance Programs

Quality Management Programs

The Japanese were the first to extend the scope of quality management to processes and other parts of the organization in the Total Quality control movement. Total Quality was a shift in the quality movement since it became more of a philosophy (Broekhuis & Vos, 2003). At the time, managing quality was met with skepticism and its economic benefit had to be proven to executives (Waddock & Bodwell, 2004). The scope of quality management also started shifting from the product towards the customer and then the organization as a whole.

ISO Quality Standards

International standards such as the ISO 9000 series were developed and adopted globally as generic and generalized standards of total quality management in an organization. The ISO family of standards is used to establish auditing principles of quality practices in organizations and to provide a public display of adherence to quality practices (Affisco, Nasri, & Paknejad, 1997). Initially standardization helped to promote quality and compatibility of global products. The focus of the standards then grew with revisions to a total quality management system.

The ISO standards are based on the eight quality management principles: leadership, customer-focused organization, systems approach to management, involvement of people, continual improvement, factual approach to decision making, process approach, and mutually beneficial supplier relationships. The principles are imbedded within the eight clauses of ISO 9000 that comprise the quality manual for an organization, and together they describe the quality management system (Levett, 2005).
<table>
<thead>
<tr>
<th>Purpose</th>
<th>ISO 9000 Standards</th>
<th>ISO 14000 Standards</th>
<th>Business Excellence Frameworks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>To establish auditing principles of quality practices in organizations and provide a public display of adherence to quality practices.</td>
<td>It provides a framework to systematically trace and manage any environmental issues the organization faces by helping it establish and operate an environmental management system.</td>
<td>A leadership and management framework that describes the elements essential to organizational excellence and continuous improvement.</td>
</tr>
<tr>
<td>Framework</td>
<td>Based on the eight quality management principles; leadership, customer-focused organization, systems approach to management, involvement of people, continual improvement, factual approach to decision making, process approach, and mutually beneficial supplier relationships.</td>
<td>ISO 14000 series uses the Plan Do Check Act (PDCA) cycle and requires organizations to evaluate their current and potential environmental exposure in terms of impact and compliance with legislation.</td>
<td>The principles of business excellence are: Leadership and constancy of purpose, customer focus, results orientation, management by processes and facts, people development and involvement, continuous learning innovation and improvement, partnership development and public responsibility.</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Heavily process oriented and ability to conform to customer and contract specifications</td>
<td>Development of an Environmental Management System whose main objectives must be pollution prevention and success in chosen policy.</td>
<td>Heavily business results oriented and customer satisfaction.</td>
</tr>
<tr>
<td>People involvement in principle</td>
<td>The principle of people involvement describes steps to encourage ownership of processes, seek improvement opportunities, training, and knowledge sharing.</td>
<td>No stand alone people element; within the Implementation and operation phase does discuss employee training, awareness, competence and communication.</td>
<td>The principle of people involvement encourages fostering the right culture, building employee capabilities, creating high performance work systems, and maintaining communication channels.</td>
</tr>
<tr>
<td>Results of People Involvement</td>
<td>In most facilities employees are trained in order to conform with the goals and objectives as they relate to their roles.</td>
<td>Risk of being owned by environmental manager exists; may be avoided by involving employees in setting goals and objectives.</td>
<td>A non prescriptive framework that evaluates the organization and its results. Focuses on training and compliance to goals.</td>
</tr>
</tbody>
</table>

Table 1: Comparison of People Involvement Elements in ISO 9000, ISO 14000, and Business Excellence Frameworks
Four of the above eight principles are about “people”, but the standard does not develop these principles to a great extent when it comes to employee involvement. Instead the standard is heavily customer focused with an emphasis on the organization’s ability to conform to the customer’s requirements (Affisco, Nasri, & Paknejad, 1997). Although on the macro level the principle of people involvement is stated, the details within the standard focus more on training the employees to conform to the set goals and objectives. It is not a very participatory model and is heavily controlled and extensively documented. It has to be said that some organizations do involve their employees in setting these goals and objectives. The ISO 9000 standards are also heavily process focused and audit for conformity of clauses. Since the balance between process, people and technology is seen as vital to the organization there was a further need to develop standards for people involvement in management systems (ISO/TC176) (ISO, 2008).

Most organizations implement the ISO standards through the quality management department, and thus the quality manager is responsible for assuring that the company meets the goals. How the goals and objectives are set and met is critical though, and the principles promote using a process approach. Critics of ISO 9000 standards point out the need for a high level of documentation and paperwork, say that the system is rigid and too general and object that it does not foster creativity but rather seeks consistency and conformity (Barnes, 1998; Larson, 1999). This criticism was blunted after ISO 9001:2000 came out.

Environmental Management Programs

In the 1990s, the Montreal Protocol and the Rio Summit encouraged a new generation of organizations to take progressive environmental action and seek eco-efficiency, resource reduction and sustainability (Zhao, 2004). To this day, the financial benefit of environmental
management faces skepticism from management. “On the business side, bearing in mind the environmental effects of performance measures like flexibility, throughput, and speed does not come easily to most managers. The effect of waste reduction on costs provides the most direct evidence of the value that environmental improvement can bring to a business, and pollution prevention is one strategy essential to making this link. But cost savings are just one indication of manufacturing excellence” (Haveman & Dorfman, 1995).

ISO 14000

Environmental quality standards such as ISO 14000 have helped to define specifications for organizational environmental management (Affisco, Nasri, & Paknejad, 1997). The standard has become a global benchmark by which organizations assess their environmental performance (Rondinelli & Vastag, 2000). Although the ISO 14000 series is not explicitly based on quality principles, it uses the Plan Do Check Act (PDCA) cycle and “requires organizations to evaluate their current and potential environmental exposure in terms of impact and compliance with legislation” (Chin & Lau, 2003). It provides a framework for systematically tracing and managing any environmental issues the organization faces by helping it establish and operate a management system. Some organizations have chosen to use ISO 14000 standards and expand them to implement a sustainability strategy with some success. Others are using the standards to improve their own practices to match international standards. The importance of business integration to environmental progress is implicit in the ISO14000 standards (Dorfman & Haveman, 1999).

ISO 14000 also shares common management principles with the ISO 9000 series and emphasizes continual improvement (Chin & Lau, 2003). While ISO 9000 focuses on customers, the ISO 14000 standard, however, reaches a broad range of stakeholders. This standard has a
strategic focus by clearly stating the need for environmental considerations to become part of the overall management system (Pojasek, 2008), and, although it does not have an element of employee involvement it does discuss the training, awareness and competence of employees. It is important to make this environmental management system a company-wide program and not “owned” by the environmental professionals alone (Pojasek, 2008). There are many synergies between the two ISO standards and opportunities for integration.

ISO 14001 is an environmental management system (EMS) standard. Critics say that it lacks the ability to efficiently move the organization towards sustainability on its own because the standards assume that a company that certifies its EMS can deal with the associated environmental impacts. It “does not measure the actual environmental performance” of an organization (Krut & Gleckman 1998). Environmental improvements may very well occur but they cannot be verified externally (Rondinelli & Vastag 2000).

It is important to mention that ISO is preparing ISO 26000, a guidance document for social responsibility, which is scheduled for release by early 2010. ISO 26000 is not a management system standard. It provides guidance on the following core subjects: organizational governance, human rights, labor practices, the environment, fair operating practices, consumer issues, and community involvement and development. The standard aids organizations in defining social responsibility and integrating it within existing management systems. Many systems are available to track and manage financial performance and responsibilities. ISO 14000 is a management standard for development of an environmental management system. ISO 26000 was developed to address the need to define and clarify an organization's social responsibility and relate it to governance and outcomes.
Regional standards sometimes precede international ones. The Australian Standard on Corporate Social Responsibility (AS8003) was published in 2003 to provide “a mechanism for entities to voluntarily integrate social and environmental concerns into their operations and their interaction with their stakeholders, which are over and above the entity’s legal responsibilities” (SAI, 2004). International standards have many benefits, and they may even the playing field for smaller organizations globally.

**Performance Programs**

Performance programs complement conformance programs and can be used in conjunction with them. They help provide “leading indicators” that will produce future results. These programs are linked to conformance programs by the “Eight Quality Management Principles” that are found in the ISO 9001 series of conformance standards.

*Business Excellence Frameworks*

Business excellence frameworks were introduced in 1987 to help companies succeed in an increasingly competitive environment (Pojasek, 2007). Frameworks like the Malcolm Baldrige National Quality Award (MBNQA) in the US, the European Foundation for Quality Management Award (EFQM), and the Australian Quality Award further extend the scope of quality to include the organization as a whole and its stakeholders. “More than 75 business frameworks have established themselves around the globe” (Pojasek, 2008). The principles of business excellence are: Leadership and constancy of purpose, customer focus, results orientation, management by processes and facts, people development and involvement, continuous learning innovation and improvement, partnership development and public responsibility.
Obvious similarities exist between quality management and business excellence principles; however, the latter takes the framework beyond the processes and the borders of the organization. It is also a results oriented framework with an emphasis on management excellence (SAI Global, 2007). The assessment and scoring of the organization within each category is then done by systematic questioning. The questions follow the guidelines of the PDCA cycle. Many organizations choose to implement a business excellence framework for enhancing performance without seeking the national awards. Some organizations choose to implement both the ISO standards and a business excellence framework. Although they complement each other, many overlapping areas would benefit from an integrated system. Business excellence frameworks are not meant to be prescriptive; they do not tell the organization how to reach the goals set exactly, but rather measure improvement and results. That helps to maintain an overall organizational goal and mission alignment towards continuous improvement.

The business excellence frameworks discuss the employee element in a broader way than the ISO standards. Because the emphasis of these frameworks is management excellence and continuous improvement, they encourage fostering the right culture, building employee capabilities, creating high performance work systems, and maintaining communication channels. These frameworks highlight the importance of the employee, but, as stated earlier, it does not describe how to engage them. The scoring is also skewed towards business results and customer satisfaction while the human resources category represents only ten percent of the total score.

**Investors In People**

In the UK many managers realized after implementing various ISO standards and quality programs that there was a missing link. They needed more support with people issues. The group Investors In People (IIP) came to aid these organizations and fill in the gaps. The framework is
highly results oriented and non-prescriptive. Currently it is the UK’s leading people management standard (IIP, 2009). The standard has expanded to 20 countries and is being applied by organizations of various sizes.

The standard is based on the PDCA cycle. It is primarily focused on people and has ten principles. Each principle has indicators and evidence the organization would have to provide to qualify for the award once audited. The principles are: Business strategy, learning and development strategy, people management strategy, leadership and management strategy, management effectiveness, recognition and reward, involvement and empowerment, learning and development, performance measurement, and continuous improvement.

For the involvement and empowerment principle, the organization is asked to provide evidence of employees involved in decision making that affects the performance of an organization at a level appropriate to their role (IIP, 2009). The standards had been criticized to be somewhat weak on auditing. As with the business excellence frameworks this is a non-prescriptive standard. It also emphasizes human resource management methods but does not integrate them within the work processes directly.

**Continual Improvement**

“Process improvement” programs help drive the continual improvement that conformance programs and performance programs require. Initiatives like Lean Manufacturing and Just-in-Time inventory control were used to achieve resource efficiency. These principles extended the concept of quality beyond the organization to the supply chain.

*Lean*

Another popular quality program being tied to sustainability and quality improvement is lean manufacturing. This program provides organizations the tools to “eliminate waste while
delivering quality products on time and at least cost.” (EPA, 2009) Lean is being promoted by the EPA for its perceived environmental benefits. It shifts the process from a push model of batch production to a highly optimized and controlled one-piece pull process. This draws the focus to non-value adding activities and eliminates them. This is done by implementing the Kaizen process improvement and value stream mapping. Although Lean does not specifically target the environmental performance of the company, it inherently improves it by eliminating the waste.

Lean employs Japanese terminology and requires a few well trained, dedicated professionals within the organization to spot opportunities for improvement. Other tools of quality management such as Just in Time production or Six Sigma can be used within the Lean framework.

Critics of Lean claim the use of the Japanese terminology, and the intensive training required of the employee to achieve the level required to select improvement opportunities, makes employees in general apprehensive about the program. The selection of these suggested projects is also left to the trained individuals and is not tied to any structure (Pojasek, 2008). Lean has been implemented in many manufacturing facilities only to fade away after a few years. Many managers claim that once the low hanging fruit has been picked it becomes harder and less efficient to implement it, because it focuses on waste and its elimination.

A Converging Trajectory Towards Integrated Systems

The programs outlined provide the necessary tools, mechanisms and framework to guide an organization towards sustainability and achieving employee involvement within that strategy. They all require resources for planning, implementation, monitoring and re-adjusting. These programs are heavily intertwined, and, unless completely integrated and used towards the organizations mission and vision, they will be eventually be an added burden on resources. There
is a recent push by some research for a customized self-assessed quality management system based on the integration of these programs (Chin & Lau, 2003). The ultimate objective is to achieve continuous improvement and not certifications. The integration of these systems prevents fragmented efforts and promotes better use of resources.

Quality management tools enhance environmental performance, and the reverse has also been shown to be true (Pil, 2003). The disciplines are inter-related and synergetic. It is only natural, in an effort for continuous improvement, that researchers start calling for the integration of these management systems (Klassen, 1993; Waddock, 2004; Chinader, 2000). The British Standards Institute has also issued a sustainability management system (BS 8900) (BSI, 2008).

Corporations have a financial reporting responsibility through programs like Sarbanes-Oxley. Such programs could be further integrated into the integrated management system, providing an easier transition for the organization and more efficient management.

With the proliferation of several quality and environmental management standards and various other reporting measures, organizations can use resources more efficiently and reduce redundancy by designing a fully integrated system. “The focal point of quality managers’ attention and responsibility will broaden from the quality of the product and services toward environmental management, workplace health and safety, and production and operations management” (Karapetrovic & Wilburn, 1998). The key is to achieve true integration not mere overlap by supporting communication between the management systems and employee involvement. By identifying linkages between these systems and unifying goals and objectives, a customized sustainability management system can be designed.

Sustainability provides a framework for a “system of systems” (Karapetrovic & Wilburn, 1998). Most organizations already have several quality management systems in place and some
implement a business excellence framework; therefore, it is more productive to alter the existing management systems into sustainable excellence systems.

As shown in Figure 1, “business sustainability extends the use of business excellence frameworks to a much broader stakeholder context” (Pojasek, 2008). Some researchers suggest that the customer-focus concept has been extended to meet the needs of various stakeholders (Garvare & Isaksson 2001). Others find a strong link between organizational sustainability and business success (Goldsmith & Samson 2005).

Many organizations have started to integrate their management systems. However, the sustainability program remains separate. The integrated systems are at the facility level and the sustainability program is largely focused at the corporate level. Integrations occur mainly with overlapping quality management systems that reduce resource use in compliance and auditing. Integration can be done in house or with the aid of specialized consultants. The key factor to measuring its success is that the system becomes one to the employee and yet the auditor can easily see the compliance with varying regulations and standards. It becomes part of what every employee does every day. It should be an integral part of their work.

Efforts have been made by researchers to provide a model for a sustainability framework based on the business excellence principles (Zhao, 2004). The BEST business excellence framework (BBE) was suggested in 2002 (Edgeman, 2002):

B- sustainability for bio/physical
E- sustainability for economic
S- sustainability for social; and
T- sustainability for technological
Modeling for a Path Forward

The business excellence construct with which BBE is most closely identified is the EFQM (Edgeman, 2002). The BBE model maintains that sustainability and business excellence share the same goal of optimization of resource use.

Garvare and Isaksson (2003) suggested that based upon the process view, “technology could be seen more as an enabler more than an output”. Thus, they introduced a “3E model” that is based on the triple bottom line approach, Economic, Environmental, Ethical and proposed measurement standards for each dimension based on quality, environmental, and sustainability reporting standards.

Figure 1: The focus on Business Sustainability (Source: Pojasek 2007)
Others proposed a business sustainability framework based on the business excellence frameworks and using a business sustainability assessment matrix to allow for independent scoring across the dimensions of the framework. The framework would then incorporate the individual management systems within it. This model emphasizes an employee and process focus (Pojasek 2000, 2007).

**Bridging the Gap between Theory and Practice**

While the research has provided organizations with broad guidelines and suggestions, deployment and integration into business process remains a complex task. Managers seeking to integrate their systems and environmental concerns within their operations are faced with many dilemmas. Many tools have been developed to help guide the implementation of a sustainability framework including process guides and maps (Handfield et al., 2001).

Researchers have found that certain conditions must be present in order for a sustainability framework to succeed. These conditions include but are not limited to (Dorfman & Haveman, 1999): cultivating awareness and accountability by asserting senior management commitment, goal setting and employee involvement and responsibility, and integrating environmental issues within core business processes.

In an attempt to apply the broad definition of sustainability to an organization, several authors introduced the idea of the triple bottom line,--economic, social and environmental (Topfer, 2000). For organizations the practical definition of sustainability is usually derived through alignment with strategy and stakeholder consultation (Goldsmith & Samson, 2005). “The organization implementing business sustainability is always responsible for determining what is appropriate for its operational context” (Pojasek, 2008).
Many organizations lack the clarity about what sustainability entails and have instituted initiatives, some costly, that do not relate to the organizations mission and strategy and do not provide the desired outcome (Goldsmith & Samson, 2005). The Global Reporting Initiative GRI is one of the standards that provide a framework for organizations to report on their sustainability activities (UNEP, 2007). It is a standard form of lagging indicators for organizations that want to disclose their sustainable performance publicly. Some progressive organizations are seeking more meaningful and leading reporting standards that are relate to the resources available locally to the facility being measured.

One of the recurring themes and recommendation for success throughout the research is employee involvement and awareness. The work is done by employees and they have the best knowledge of the processes and the problems they encounter running them. It is, therefore, only logical to include them and encourage their participation in this strategy.

**Moving Towards the Involved Employee**

Employee involvement or engagement, has been defined as: “a heightened emotional and intellectual connection that an employee has for his or her job, organization, manager, or co-workers that, in turn, influences him or her to apply additional discretionary effort to his or her work.” (Gibbons, 2006). So for any strategy to succeed, organizational leaders need employees who are engaged and connected to their jobs, applying that extra effort willingly to implement change. Employees must be on board and aware of the importance of applying the strategy in their daily work.

In this knowledge-based economy, many factors make employee involvement a competitive advantage for an organization. Studies have shown the relationship between employee involvement and increased productivity, rates of retention, and increased customer satisfaction.
(Gibbons, 2006). Recent research has shown that there is a concrete correlation between employee involvement and the cost of goods sold (Gebauer, 2005). A leading employee research firm found that companies with higher engagement have 5.75% better operating margins than those less engaged. (IRS Research, 2006).

Researchers note the differences between exerting external control mechanisms on employees to induce involvement and internal self-control mechanisms that require true commitment, not mere compliance with company goals (Manz et al, 1987). “Commitment is about generating human energy and activating the human mind. Without it, the implementation of any new initiative or idea would be seriously compromised. Human beings can commit themselves in two fundamentally different ways: externally and internally. Both are valuable in the workplace, but only internal commitment reinforces empowerment” (Argyris, 1998). No matter how many external control mechanisms the organization imposes on the individual employee, these have to pass the filters of the internal self-control mechanism. This means that the organization will need to align the individual and organizational goals to prevent any conflicts of interest. This is done through awareness training tying the goals of the process to the overall goals of the organization and then linking it to short-term and long-term rewards.

Studies have shown that employees want to be involved with sustainability initiatives. The participants in one survey reported overwhelmingly that they prefer to be employed by a company that practices sustainability; 96% said they would like to work at “a successful company that also aspires to be good” (Willard, 2002). This creates a necessary sense of pride and internal fulfillment.

A distinct contradiction occurs in the conformance and compliance methods of most management systems and achieving employee commitment and involvement. Most of these
programs train employees on specific roles and objectives. They break these objectives into the tasks and train them to perform the tasks accordingly. Little involvement or empowerment results from telling the employees exactly what to do and expect them to do it. What is expected in this model is conformance. To achieve involvement the employee should have the opportunity and channels to suggest change and achieve it. The freedom to innovate and create should be cultivated, without the threat of penalty yet under the guidance, help and supervision of managers and fellow employees.

Employee involvement within organizations can mature from a simple conformance model into a fully involved employee. This is done by creating the right culture and aiding the employee with the right framework and integrated management system. The management systems are there to help the employee improve the processes and assist the organization not to place extra burdens on the employee. The employee should not have to put on different hats to perform a job for each management system. Rather employees should be always thinking about the three responsibilities in every task-- environmental, economic and social. Once a bottom up change builds to a certain size the leadership of the organization should then be willing to adjust systems and structures to accommodate that change (Beer, Eisenstat, & Spector, 1990). A fully integrated management system would make it possible to consider all responsibilities at once and thus make involvement of the employee easier.

**Managing for Change**

Traditionally, when an organization implements a new strategy or mission a number of change management programs are put in place to help ensure the strategy succeeds. These change management programs are run from the top down and the overwhelming view has been that there will always be change resistors within the organization. And, despite all efforts, some
employees will not follow instructions and may instead prevent progress. After all management efforts have been exhausted the organization should deal with the change resistors (Ordiorne, 1981). Research has shown that change resistors have their legitimate concerns including, but not limited to, realization that the proposed change is flawed (Lawrence, 1969).

The dominant school of thought has been that organizations should be able to react and respond to changes in their business environment. This meant the organization was agile and could accommodate change. The Lewin/Schein’s Change Theory suggests a model for achieving change by (Hayes, 2002):

- **Unfreezing**: where the new strategy vision is defined and planned and the organization is becoming motivated to change.
- **Implementing the change**: a moving status that requires a clear and well defined vision of the future.
- **Refreezing**: A final stage where new behavior becomes habitual and a new identity is established.

To achieve such a change, organizational work processes are redesigned during the change stage and employee job requirements are defined in detail to ensure compliance. This model is a strict top-down recipe for change. Such change programs are usually short-lived and fail to deliver the envisioned results. When employees actions are defined in detail from above they cannot result in internal commitment, engagement or empowerment.

Nowadays, organizations need to go beyond this reactive mode to an anticipatory one. Organizations that use a sustainable strategy are continuously learning, anticipating and growing ahead of any changes in their business environment. Sustainable organizations, therefore, become leaders in their industries and can better weather challenges. Profound change takes
place when the employees who are most knowledgeable with the processes can communicate, innovate and implement continuous improvement projects. Employees are assets who need to grow by learning, honing their skills and providing direct feedback. Sustainable change is only achieved when the employees are engaged, and the change brings strides towards a learning organization that has in place the processes and mechanisms to achieve its goals and vision.

The modern approach to effective organizational change acknowledges the need for employee participation. Table 2 highlights the contrasting assumptions about change. Today researchers advocate change that is based on business problem-solving and a deep understanding of the organization. They argue for a bottom up approach that is supported and complemented by leadership commitment (Beer, Eisenstat, & Spector, 1990).

<table>
<thead>
<tr>
<th>Contrasting Assumptions About Change</th>
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<tbody>
<tr>
<td><strong>Programmatic Change</strong></td>
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<tr>
<td>Problems in behavior are a function of individual knowledge, attitudes and beliefs.</td>
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<tr>
<td>The primary target of renewal should be the content of attitudes and ideas; actual behavior should be secondary.</td>
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<tr>
<td>Behavior can be isolated and changed individually</td>
</tr>
<tr>
<td>The target for renewal should be at the individual level.</td>
</tr>
<tr>
<td><strong>Task Alignment</strong></td>
</tr>
<tr>
<td>Individual knowledge, attitudes and beliefs are shaped by recurring patterns of behavioral interactions.</td>
</tr>
<tr>
<td>The primary target of renewal should be behavior; attitudes and ideas should be secondary.</td>
</tr>
<tr>
<td>Problems in behavior come from a circular pattern, but the effects of the organizational system on the individual are greater than those of the individual on the system.</td>
</tr>
<tr>
<td>The target for renewal should be at the level of roles, responsibilities, and relationships.</td>
</tr>
</tbody>
</table>

Table 2: Contrasting Assumptions about Change (Source: Beer, Eisenstat, & Spector 1990)
In contrast to the top-down change programs, researchers believe a more effective way to achieve enduring organizational change is a method that is participatory and focuses on the tasks and business problems at hand. In this method the role of the leader is to cultivate an environment that encourages change and does not force it. This is done by accommodating stakeholder needs and interests and by engaging employees.

**Research Implications**

Building on existing research this thesis will prove that sustainability requirements create an imperative for a comprehensive framework that organizations must use to move beyond the integration of the management systems to achieve business sustainability. Researchers from many fields have contributed to this multi-disciplinary topic. Sustainability is not merely an integration of quality and environmental management systems or an integration of the corporate social responsibility agenda into the total quality management program. This research will demonstrate that, for an organization to successfully move towards sustainability, it will need to implement a holistic and overarching framework aligned with its mission and strategy and with sustainability goals integrated within its business processes and worker tasks. The thesis will show that this approach will result in organizational business excellence.

This research will focus on a process-oriented and employee-centric approach to implementing a sustainability strategy, down from the corporate level and up from the facility and task level. It is a strategy that aligns the integrated management system with the overall business system. The goal is to achieve a good foundation for a bottom up approach that contributes to the success of the strategy. Research has shown that a proactive implementation is affected directly by top management support, employee involvement, training, teamwork and a
motivation or reward system (Daily & Huang 2001). This reduces the need to manage and mitigate change using a “top-down” approach alone.

The research will benefit from a recently renewed interest in the quality and training fields and in the topic “employee involvement”, proving that operational excellence can be achieved by engaging one of the most important stakeholders, the employee (Apolstolou, 2000). Using the Eight Quality Management Principles that are the basis for the ISO 9000 series of standards and are mirrored in the Business Excellence Framework, and emphasizing employee involvement, organizations have a better chance of successfully implementing and achieving sustainability.
Chapter III

Research Methods

The case method was used for this research (Yin, 2003). Interviews (Stewart & Cash, 2003) were integrated within the research as a subordinate research method. The case method is the predominant method of organizational study and widely accepted by the organizational research community. The study of organizational business processes involves real-life applications and requires a method with flexibility that allows for multiple data collection methods and evidence analysis.

The topic of this research is multi-disciplinary and has been addressed by several fields as shown in the background section. The focus of the research question, however, is new in the field of sustainability. A comparative comprehensive case study has not yet been attempted, to the knowledge of the researcher, to investigate the effect of employee involvement on the implementation and maturation of a sustainability strategy. However, interest is growing, in employee involvement programs. A few surveys have gauged the topic and attempted to study the environmental education and awareness of employees (NEEF, 2009) and the effect it has on their participation in a sustainability strategy and its success.

Research Protocol

The research protocol followed the recommended steps to conducting case study research (Yin, 2003) (Eisenhardt, 1989). Figure 2 below illustrates the research protocol that was followed. The research started with the definition of the research question. This was done after an initial literature review to focus on a key element that adds to current research in the organizational sustainability field.
Figure 2: Research Protocol

DEFINE

- Research Question and Hypothesis
- Initial Literature Review

DESIGN CASES

- Identify Cases
- Establish embedded units of analysis
- Establish data collection protocol
- Identify interview candidates and develop interviews

DATA COLLECTION

- Case A
  - Conduct the “Employee Involvement” case study: collect evidence

ANALYZE

- Analyze case studies. Write individual reports
- Evaluate
- Check logical consistency for construct validity

CROSS ANALYZE, EVALUATE & CONCLUDE

- Conduct Cross Case Analysis
- Modify Hypothesis
- Develop findings and conclusions
- Write cross case Analysis

Establish and Maintain Research Database
Four cases were then selected based on polar theoretical models of implementing a sustainability organizational strategy. The cases were chosen to focus on useful and realistic models that would fill conceptual categories (see Figure 3).

The research is a multiple case exploratory study with embedded units of analysis. Each case explores a main unit of analysis, which is an organizational model for managing and implementing a sustainability strategy with various degrees of employee involvement, leading to the fully integrated sustainable development framework with active employee involvement (see Figure 3). The embedded units of analyses within each case are “workers performing a job” to focus on employee involvement, process change and improvement, and the integration of sustainability goals within the core processes. It is at the employee level where the organization’s vision and mission are translated into actions that realize goals and objectives. It is primarily the employees’ commitment that makes any management vision or strategy a success; otherwise the vision of the top would become a passing fad and companies might be accused of green washing. Organizational variables were studied as well within each case study.

The research sought to prove the hypothesis by assuming the approach to implementation was valid in each case. The emphasis was on analyzing the advantages and disadvantages of having employee engagement during the implementation phase of a sustainability strategy.

Interviews, archives, documents, and literature were used as evidence and data collections methods. Interviews were conducted with various sustainability managers in a diverse set of organizations to obtain results that are applicable across organization types that constitute the four models. Twenty field interviews were conducted to ground the work in real life evidence. The data was then analyzed within each case and across cases and compared to similar and contradicting literature. This sharpened the hypothesis and provided construct and internal
validity. A detailed discussion of each of the first three protocol steps follows below. Analysis within each case and across cases will follow in the next chapter.

**Research Question**

Business sustainability is a strategy and vision set at the top corporate level. Employee involvement, however, is intrinsically an operational facility level issue. To answer the question “How does employee involvement enhance efforts to manage change when implementing a sustainability strategy?” the research studied the practical implementation of the top level strategy in facilities and how it translates to everyday employee jobs and tasks.

Many previous business case studies have highlighted the importance of leadership and top management commitment. Few, however, have examined the role of employee involvement and how that affects the implementation of sustainability, quality, and environmental programs. It is a new and growing interest.

Since quality and environmental improvement programs focus on processes, it was appropriate to study how each management model will influence process change and improvement. It was also necessary to follow the decision-making procedure for process change within each management model studied. The ultimate goal of the research was to highlight the effect of employee involvement in a comprehensive integrated sustainability framework for business excellence. Other organizational variables were also taken into consideration.

**Case Selection and Design**

The cases were based on theoretical models to avoid the uncertainties of the business environment and changes in programs and to allow confidentiality to participating organizations. Each case study is a model of implementing and managing a sustainability strategy in a business.
The models were then be supported by evidence collected from real life business organizations. Several sources of evidence were used to establish each model.

Figure 3: Range of employee involvement in business sustainability implementation

Many factors influence the implementation of a new strategy or program. After consulting the research and considering the research problem at hand, two critical factors were chosen to define the case studies as shown in Figure 3. The first factor is the degree of integration of the sustainability strategy within the core processes of the organization. This factor investigates how far the sustainability goals have been integrated into everyday tasks and to what degree are they a natural criteria and consideration when employees perform their jobs. The second factor is the level of employee involvement in a sustainability strategy. The difference between the two highlights the level of commitment the employees have to the sustainability journey as explained in the cases below.
Case A: The Mature Model

Employee involvement and integration within processes are present

The sustainability strategy would be implemented with leadership support and at the facility level. This is a case where both bottom up and top down meet to work on the implementation of the strategy. The employees would be prepared with extensive training and awareness programs that extend beyond their job duties. Goals and objectives are set collaboratively and the employees develop suggestions and changes to the processes to achieve the objectives. The final approval of these changes might be at a higher level committee or management level. The program might then be implemented with little resistance or change management practices. The employees view their work through one integrated system and they judge each project and initiative using a triple criteria; financial, environmental and social. An integrated management system may be used and quality programs and/or business excellence programs provide the needed framework for employees to get involved in continuous improvement and organizational sustainability. The systems are coordinated and integrated enough to make them practical for the employee to use. The programs are tools not goals in themselves. The suggested changes would affect this one system rather than extend the effects and to study them on several management programs and their respective managers. In this case the implementation should be improved. The program itself might be more affective at enhancing the performance of the core processes of the company and achieving its set objectives. This program would have greater momentum and would transform the organization into a learning one.
Case B: The Motivated but Limited Effect Model

Employee involvement without integration within the core processes

The company has an active employee involvement program and culture; however, it does not have a sustainability strategy. The company then decides to add a sustainability program or strategy. This decision could be made at the top level in this case or be facility driven. The employees are involved in the implementation of this program. The employees form cross-functional green teams to assess and study opportunities within the organization. There might be a sustainability manager in this model to support the employees. The ideas generated and implemented are mostly focused on non-core processes, in other words there is no systems approach in this model. It would not be an overall systems view of the organization’s processes from supplier to customer and with little direction or resource support. The effort is piecemeal and is done within the limited authority of the employees participating in these teams. The initiatives and projects implemented may then affect other programs and are not applied towards an overarching mission. In this model, top level management may be aware of the efforts and condones them but does little to support them or follow up on results and set expectations and goals.

The danger in this model is that the effort is voluntary and based on employee motivation that might wane. The employees might put this effort to the side when their everyday job demands increase. How far a grassroots program diverts an organization to a sustainable track may then depend on its size and how much influence these teams have within the organization. This program might produce many anecdotal results but lacks the resources to establish measure and metrics. It is important to consider that this might be a step in the maturation process of a sustainability strategy.
Case C: The Emulating Model

Neither factor exists in the implementation

The company in this case would implement a sustainability strategy by implementing green initiatives and several “green” programs. Most of the programs come from the sustainability department or manager. The sustainability strategy is set at the top level, a position is established and the sustainability manager studies what has been done in similar organizations and industries. She then implements such programs in her own organization. This model uses imitation and outside learning as opposed to looking within for opportunities for improvement and might not engage stakeholders. The program ideas, projects, structures and objectives are set and developed in the sustainability department, perhaps with the help of a few interested and motivated employees.

There is widespread communication and mandates to employees to start recycling or retrofitting facilities, most projects are sent from the sustainability department to the rest of the organization. In this model there remains a silo culture and the sustainability manager may face resistance and has to cross functional boundaries and to achieve the top level goals by requesting manager cooperation and compliance. The burden of developing new programs, measuring success and supporting the sustainability program/strategy falls in this model on the shoulders of the sustainability manager. It is therefore a top-driven strategy and might in this case become an added program to the ongoing programs and certification. In this case the employees are faced with a new objective and mission from above, a change they are not involved in but is thrust onto them. This may produce mistrust and anxiety and the resistance to this implementation is expected to be high. It might become an added burden to the employee since they have to comply with several programs and they may not realize how to fit this “new” objective/program within their jobs. It is then of interest to see what kind of results and continuity such a program would achieve.
Case D: The Mandate Model

A top down implementation with integration

In this case the vision of sustainability is either the leaders’ or that of top management or it is thrust upon the organization as a regulatory or operating necessity. The culture of the organization does not encourage or accommodate employee involvement. Although quality programs, audits and certifications are regularly renewed, the organization goes through the process as a checklist process and does not fully utilize the benefit of quality management systems to engage its employees. The change is purely top-driven. The program is run by a sustainability officer. The goals and objectives are set at the top level and trickle down to the employee through the levels of management hierarchy. Employees are accountable and have to report on their goals. Progress is measured and new goals are set. This case, however, does not tap into the true knowledge-base of the employees. It achieves compliance but fails to elevate that to true learning and commitment. This might create resistance to change and might not enhance the process or take the sustainability program to the core processes.

In this case the structure and foundation is present to move the organization along the maturation process; however, the issues are cultural and might be harder to tackle. One approach to progress in this case is using the existing quality management systems and trying to extend their reach and influence by integrating the sustainability goals within them. This is to prevent employees from wearing multiple hats when dealing with new projects and easing the burden of achieving goals for multiple programs. A one-system view for the employee can help, but the program remains top driven and operated.

The various interviews and evidence collected served to fill in the gaps on this range and provide evidence for pattern matching on this wide spectrum. The maturation process of
sustainability programs/strategy within organizations was researched to find out how the models fit as the organization progresses. The findings are discussed in the following chapter.

The design quality and validity of the cases were tested. By tracing the recommendations and conclusions back to the initial research question, construct validity was established. The researcher established a database of evidence throughout the research process. A multiple case approach was taken for theoretical replication and to further test conclusions.

Evidence Collection Methods

As highlighted earlier, one of the strengths of the case study method is the ability to gather various types of evidence. The types of evidence used by this research consisted of: documentation, archival records, interviews, direct observation and artifacts. Documents included peer-reviewed articles and case studies, newspaper articles, sustainability reports, annual reports printed and available online, organizational publications and other documents. Archival records were comprised of computer files and records, such as organizational charts and budgets, and contact information.

Interviews (Stewart & Cash, 2003) were one of the most important sources of evidence. The researcher interviewed fifteen business organizations in addition to five academic researchers and consultants. The interview subjects were sustainability professionals and top-level managers in a diverse group of companies that varied in size from small privately held companies to large multinationals. Four of the organizations belong to the resort, travel and tourism industry, two came from the wood and paper industry, two from the cosmetics and chemical industry, two from the food industry, four from diverse electronic and engineering based industries, and a flooring company. The organizations chosen were committed to a sustainability strategy and had started implementing one. They were in various stages of the implementation as some are
considered leaders in the field while others were embarking on their journey. To protect confidentiality, examples given throughout the research have been modified and cited without identifying the organizations involved, but such examples are current and real world. In some instances the example may refer to the company by the industry it belongs to. This research is based on virtual case models. Support for these models is found in real life examples through the interviewed organizations and in literature. The commitment of these organizations to sustainability and the investment they have made towards that is to be commended and it is not the goal of this research to criticize their actions. The purpose was to study their models of implementation and find out what role employee involvement played in the results they achieved. Under the condition of anonymity, the interviews became candid expressions of lessons learned from sustainability professionals. Several other professionals working on studying sustainability and establishing some guidelines for employee involvement were interviewed as well.

The researcher was granted an exemption from the Harvard University Human Subjects Committee to conduct the interviews. The interviews were face-to-face or telephone-guided conversations rather than survey oriented. Qualitative and quantitative data were collected during the interviews and through e-mail and personal contact with the interviewed. They were also available through the organizations’ web presence and sustainability reports when present. Some unpublished data and reports were provided directly through e-mail.
Interview Framework and Questions

The Plan, Do, Check, Act (PDCA) cycle has been adopted from the quality field and adjusted for the interviewing framework. To study the implementation of a strategy over time, the interviewing framework was built around an organization’s: Approach, Deployment, Results, and Improvements (ADRI). The ADRI framework (SAI Global, 2007) was used to evaluate the two key factors being considered, because it is an effective framework to evaluate the timeline of the implementation, the intent and the results. It gives a more detailed approach over time and throughout the learning cycle and follows the plans through, from the initial approach all the way to final improvements.

Within each segment the questions focused on the integration of the sustainability strategy into the core processes and employee involvement. This focus helped to understand and study the effect these factors have on implementing a sustainability strategy, the change management efforts and to fill in the gaps in the cases. Below are some of the subcategories highlighted and discussed under each of these factors.

- **Employee involvement**: Leadership support, Training, Processes and Programs, Rewards and Incentives, Knowledge sharing and continuous learning

- **Integration within core processes**: Organizational Structure, full integration of utilization of management systems, application of business excellence principles.

The questions were then written to be open-ended and to spur a conversation. They were used as general guidelines and were supported with many follow up questions not included below.
<table>
<thead>
<tr>
<th>The Sustainability Strategy Implementation Cycle Evaluation Framework</th>
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<tbody>
<tr>
<td><strong>Approach ‘Thinking and Planning’</strong></td>
</tr>
<tr>
<td>What is your organization’s vision and working definition of sustainability?</td>
</tr>
<tr>
<td>How do you plan your sustainability program specifically to get more effective involvement of the employees? How do you align the planning with the way the business is operated?</td>
</tr>
<tr>
<td><strong>Deployment ‘Implementing and doing’</strong></td>
</tr>
<tr>
<td>How have you been able to implement the program to be sure that the planned involvement of the employees actually happens and is monitored and measured? How is top management involved in the implementation?</td>
</tr>
<tr>
<td>How are the employees prepared for their involvement in the implementation? Explain to me the training the employees go through to be prepared to participate in the sustainability strategy/continuous improvement program?</td>
</tr>
<tr>
<td>How are the integrated management systems used to further encourage effective employee involvement?</td>
</tr>
<tr>
<td>Help me understand the degree to which employees are involved in planning and implementing changes that can affect their work and help the company be more competitive. How has this situation come to be?</td>
</tr>
<tr>
<td><strong>Results ‘Monitoring and evaluating’</strong></td>
</tr>
<tr>
<td>How are you monitoring and measuring the results of the implementation process?</td>
</tr>
<tr>
<td>How do you collect feedback from employees? What kind of feedback have you received?</td>
</tr>
<tr>
<td>How do you communicate and interpret your sustainability program’s results?</td>
</tr>
<tr>
<td><strong>Improvement ‘Learning and Adapting’</strong></td>
</tr>
<tr>
<td>How are employees rewarded for their active participation in these projects?</td>
</tr>
<tr>
<td>How are the management systems updated and adapted to the new goals and needs of your organization? How do you evaluate the performance of your management systems?</td>
</tr>
<tr>
<td>What is the process to review and evaluate the approach and deployment of the sustainability strategy as a whole? How do you measure its success? What have you learned from this strategy implementation and how have you used it?</td>
</tr>
</tbody>
</table>
Limitations

Initial resistance to participation was anticipated and met by some interview candidates; however, the condition of anonymity, limiting the duration of the interview and collecting background research on the various organizations before conducting interviews through the various media available helped ease that resistance. Organizational information and process flows are considered privileged by most companies and the topic of sustainability is a fairly new one and subject to many interpretations. Organizations were understandably somewhat apprehensive about this research.

It was difficult to find quantitative and financial information documented by the organizations that is linked to environmental management policies and directly tied to employee involvement. Some organizations lacked the benchmark data to support such results.

Employee involvement metrics are not usually studied on a separate basis in organizations and are usually sub-items in the various other quality management systems or the continuous improvement programs. Many companies conducted general surveys through their human resource department to measure employee motivation and obtain feedback, but this did not necessarily translate to the interests of this study directly. More standardized measures of employee involvement are now available to organizations; however, some are still heavily qualitative and most are conducted within an overall business excellence program. It was beyond the means and access of this research to go through all surveys and detailed audits of the various organizations to find an empirical measure of employee involvement. The virtual case models eliminated the need for such measures and enough evidence was found in real world examples to support the cases.
The business environment is often fast changing. New programs and initiatives are introduced that affect processes being studied by this research. The case method also helped adapt the research to those changes since it is a flexible method that is designed to deal with real-life study. In addition to the above limitations, the research methods present their own limitations. The case study method provides little basis for scientific generalization (Yin, 2003). This is reduced by the multiple case study approach taken by this research. Both the case study method and the interview method allow for researcher bias to be introduced (Yin, 2003) (Stewart & Cash 2003), but this is prevented by adhering to the research protocol. There are many pitfalls and limitations to the interview method as well (Stewart & Cash 2003). Interviewing is a skill that involves formulating neutral questions, structuring the interview and selecting the right interviewees for the topic (Stewart & Cash 2003). The researcher had limited interviewing experience and developed that skill by preparing and planning for the interviews. Both research methods resulted in a large amount of data that had to be sorted, analyzed and evaluated to ensure construct validity (Yin, 2003) (Stewart & Cash 2003).

Employee involvement research has also “been criticized for relying on single respondents”, (Riordan, Vendenberg, & Richardson, 2005) to explain the organization’s efforts. This gives a limited view of the climate and culture within an organization and may not “capture important process issues”. Therefore, any study relying on single respondents might over- or underestimate the effects of employee involvement. This can be overcome by interviewing or surveying a statistically significant segment of employees. The time and budget constraints of this research did not allow for such surveys. The research had to abide by the set schedule of nine months, which does not allow for greater depth in the research.
Chapter IV
Results

The case study method relies on several sources of evidence and data. This research used interviews as a subordinate method. As detailed in the methods section, several organizations were interviewed. The organizations’ implementation model was best matched to the models described in the cases. The responses to the interviews were correlated and supported by documentation and literature. Pattern matching logic and cross-case pattern tactics were used to analyze the findings (Yin, 2003). Each case was then analyzed for construct validity and internal consistency. This process allowed for unique patterns to emerge within each case. In addition it solidified the cases and aided in the cross-case analysis. As the focus of this research is the effect of employee involvement on the implementation model, the results categories match those of the interview method: Approach, Deployment, Results and Improvement.

The findings for each case are presented below. It is worth mentioning that for the purposes of this research, the implementation of a true sustainability strategy does entail integration of sustainability goals within the processes. The models presented in Cases B and C (the Motivated and Emulating models) do not have the dimension of integration within the processes and core operations. They are presented here to demonstrate their real-world presence as a model of implementation. Some organizations start their journey of sustainability as Case B or C and evolve to a more mature form of sustainability as they integrate the goals within the core processes. The focus of the cross-case analysis will be on the two very different but developed models of implementation in Cases A and D (the Mature and the Mandate models). Most of the organizations interviewed fit within the models presented by Cases A and D since they were
leading organizations with developed sustainability programs. A few, however, did fit in models presented by Cases B and C and the construct validity of these cases was well supported by literature.

**Within Case Results**

<table>
<thead>
<tr>
<th>Case A: The Mature Model</th>
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<td><strong>Employee involvement and integration within processes are present</strong></td>
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**Approach ‘Thinking and Planning’**

- In this model the definition of sustainability was customized to fit the organization’s needs and to reflect its mission and vision. Organizations defined what sustainability means to them in terms of operations and created buckets or categories on which to focus (such as; energy, waste reduction, social and community responsibility, etc.) The created categories they can specify goals within and include on scorecards.
- Most of the organizations in this model had a corporate VP of sustainability who transcended the organization and had an overview of the entire operations.
- The goals and scorecards in this model were done in a participatory manner built through cross-functional teams and executives. Employee's input was sought and included. This approach is supported by literature. The organization as a whole thus shares a common understanding of what is important, where the problems lie and why this change is needed (Beer, Eisenstat, & Spector, 1990).
- Employee involvement was planned for with communication, training and feedback tools. Although the literature supports a plan for employee involvement, researchers are quick to point out that training alone and a change in attitude will not change behaviors. A change in behavior requires the combination of having a clear vision that is detailed operationally, that focuses on tasks and processes, and that prepares the employees with the right training. General “one size fits all” training is of little benefit to most. Along with the awareness training and general communications, organizations need to address job specific training that explains how this new strategy will affect what people do and what the business is.
Deployment ‘Implementing and Doing’

- After charting the scorecard and goals, they were communicated throughout the organization. The organizations in this model view employee involvement as a continuing effort and challenge. They engage their employees through training, daily emails, monthly newsletters, quarterly reviews, and team events. They are proactive in looking for internal communication vehicles to raise awareness at a high level or they may pick one of the initiatives or projects that have been successful and try to make sure that they get it into a variety of employee communication vehicles.

- The conformance and compliance systems are customized and held under the larger umbrella of sustainability.

- Management systems may or may not be integrated. It was found that organizations within this model tend to integrate their management systems as they move along the path of sustainability. Most have accomplished a fully integrated and customized management system that encompasses safety, environment, quality and sometimes performance programs. Some are still undergoing or studying this process. System integration is generally a goal sought after, however, most sited lack of resources or the complexity of the task as retarding factors. Some researchers support integrating the management system after the strategy has been initiated and implemented. They argue that a delayed integration would support a bottom up approach and allow for a more customized integration that allows for employee input. They argue that when the bottom up approach has built up enough critical mass then management should reshape the new systems to accommodate the change.

- Performance programs are used as an important vehicle to weave the sustainability initiatives throughout the organization.

- Lifecycle management tools are integrated within the product introduction cycle and process early on. Formalized processes exist for product development that includes the goals and criteria of sustainability and are linked back to the organizational scorecard.
• An attempt is made to bridge the cultures of the various functional and operational departments of the organization by unifying the language of sustainability and its goals throughout the departments and processes.

• The employee makes a suggestion for process improvement through an accessible process. The idea or project is then judged for its merits by a cross-functional committee.

• Employees are rewarded for their improvements and their projects. This differs in organizations as some prefer a team reward approach while others favor individual awards and certificates.

• Many resources are made available for employees who seek to improve processes or research sustainable alternatives to existing technologies.

**Results ‘Monitoring and Evaluating’**

• Employee involvement metrics are not fully developed yet. Organizations measure through performance evaluations and if the goals and objectives were met or not.

• Employees are encouraged to participate in awareness and educational events. Some organizations within this model offer work time towards such events.

• Metrics for employee performance are tied to the overall scorecard and sustainability goals.

• Most organizations use lagging indicators to report improvement results.

• Web-based tools are used to share lessons learned and monitor projects and progress.

**Improvement ‘Learning and Adapting’**

• The organization conducts both internal and external audits and values documentation of results for their sustainability goals. The organization owns the results of audits and publishes a total overview of challenges and advances.

• There is no debate over sustainability and no backtracking. The value added of implementing a sustainability strategy in this model has been proven and there is strong commitment to the strategy.

• The organizations in this model believe that “no one is sustainable”. There is a path and a strategy but the goals are ever changing and the horizon is ever expanding. They view this journey as a continual. The emphasis is changing, but the path is the same.
• The employee is a stakeholder who is engaged and respected. The culture encourages transparency and involvement. It thrives on continuous improvement.

• Literature shows that in this case although the change may appear successful, the organization continues to take action to prevent people from reverting to past behavior. System changes are made to align the new accomplishments with future goals. Organizations continue to monitor and measure for outputs and how people relate to one another (Shultz, 2007).

**Case B: The Motivated but Limited Effect Model**

**Employee involvement present without integration within core processes**

**Approach ‘Thinking and Planning’**

• Sustainability in this model is driven by a group of motivated and concerned employees. The definition of sustainability is broad and the Brundtland Commission definition is generally the adopted one.

• The scope of the implementation is heavily influenced by the authority, position and power of the members of the motivated group. Literature agrees that leaders of change are not always CEOs and sometimes they “do not occupy positions of obvious power in corporate hierarchy” (Senge et al, 2008). More often than not these leaders are pragmatic people who have a deep understanding of how the organization works and are looking beyond quick fixes to complex problems.

• Employee involvement is voluntary. These are mostly ad-hoc groups working on the periphery and trying to implement small changes within their domain (Beer, Eisenstat, Spector, 1990). Once results are achieved they may be noticed and championed by upper management.
Deployment ‘Implementing and Doing’

- The employees develop project ideas and process improvements and present them to the appropriate departments. An idea champion gathers support and momentum for the project and defends its merits.
- Limited resources are available for sustainability training and the initiative has to come from the employees themselves to request such training.
- Limited resources are available for communication. An added burden is placed on the volunteering employees to support and maintain the sustainability program.
- The sustainability committee or group is separated from the other functional and operational departments. This is usually a cross-functional group of interested and concerned employees.
- Quality and environmental management systems are in place but are operated in silos and are run as conformance and compliance programs.
- E-mails and web-based tools are used to organize and engage employees.

Results ‘Monitoring and Evaluating’

- Successful projects are rewarded and mentioned in organizational communications.
- Results are communicated in anecdotal form and savings are sometimes quantified.
- No metrics have been developed for employee involvement.
- The core group of employees involved conducts reviews and shares lessons learned. These may then be communicated to the organization as a whole.
- The scope and size of the projects in this model is directly related to leadership support. The more leadership support the group has, the more members are encouraged to expand their goals and reach.

Improvement ‘Learning and Adapting’

- This model organization does not implement an overall sustainability strategy. The culture may welcome employee involvement in some aspects but sustainability goals are not driven into the goals of processes and departments in general.
• The sustainability program is then reduced to limited and numbered projects that do not relate to the process directly but may affect the environmental or social performance of the organization.

• The program is at risk of losing momentum in this model if it does not evolve to garner further leadership support and develop into a comprehensive sustainability strategy. This is a sustainability program in its infancy. It is a good start and a bottom-up approach especially if it is process-centric. However, it will need to attract leadership support to spread and sustain results. Sometimes results alone cannot garner executive support. Corporate culture and politics might stand in the way (Senge, et al 1999). Members of this group might be seen as “missionaries” or tree-huggers and they are shunned by other departments or divisions. Outsiders may feel threatened by the team’s efforts due to “new behaviors, new business practices, and improved business results. In many situations, anyone would be potentially threatening. The combination can be overwhelming” (Senge, et al 1999).

Case C: The Emulating Model

Lack of employee involvement and integration

Approach ‘Thinking and Planning”

• The organizations in this model have a broad definition of sustainability and some interchange sustainability for environmental management.

• The organizations have general and broad goals that are not tied to the processes or incorporated within individual departments.

• Organizations in this model were found to reduce the implementation plans to selecting a performance program such as Lean and then implementing it.

• Employee involvement is not a consideration or concern at this stage. The change model in this case is a programmatic one that is based on rolling out the various programs and training modules. It does not revolve around performance enhancement and problem solving.

• Some researchers view this model as the “do something and be counted” model (Goldsmith, Samson, 2007). In this case sustainability runs the risk of becoming a fad. The planning then is reduced to checklists of practices the firm should or should not
engage in. The true motivation of this change is not sustainability but fear of doing nothing or a marketing strategy in reaction to internal or external pressures.

**Deployment ‘Implementing and Doing’**

- A sustainability manager or small department is in charge of implementing the sustainability program in this model. This is not an effort that brings down walls between departments nor does it foster cross-functional collaboration. In contrast, the burden in this model is on the sustainability manager to be a liaison between these departments and try to push the programs to them.
- The goals and objectives of the program are set by the sustainability manager.
- The initiatives and projects are inspired from benchmarking other organizations within the same industry and through implementing technological advances and updates.
- Projects do not relate directly to the core processes.
- The employees are trained to operate the improved process and the objectives are explained to them.
- In this model the sustainability manager is the idea-gatherer and generator. It is the role of the sustainability department to develop the projects, study their feasibility and implement them.
- Employee cooperation is sought at the implementation phase of the project to obtain and sustain the calculated results.

**Results ‘Monitoring and Evaluating’**

- Metrics are specified for each project and may be accumulated for the program as a whole. The results do not truly represent a sustainability effort since most of the projects are in a vacuum and do not relate to a sustained effort. The initial report may have shown results but it is difficult to keep the reporting up in this model.
- It is the role of the sustainability manager to maintain and monitor the metrics for the projects and initiatives.
- No employee involvement metrics are maintained for sustainability projects.

**Improvement ‘Learning and Adapting’**

- Sustainability is run as a separate function and operated in isolation of the management and performance programs.
• Although performance programs maybe suggested by the sustainability department the influence of that department on the program after implementation is limited.
• The goals and objectives set through management systems and performance programs are not tied into an overall sustainability strategy.
• This model depends highly on the sustainability manager. The success rate is then tied to the manager’s ability to act as liaison between departments effectively and champion the sustainability goals within those departments.

Case D: The Mandate Model

A top down implementation with integration and low employee involvement

Approach ‘Thinking and Planning’

• Organizations in this model defined sustainability and provided and operational definition. This process is not participatory and occurs at the top level.
• Literature points out that although functional managers have the ability and access to cross-functional communication, it is the line managers who have the most knowledge of the processes and should be included in the change planning (Senge et al, 1999).
• Employee engagement needs a degree of power sharing between work teams and leaders (Schultz, 1999), this was lacking in Case D. There was little authority granted and that fosters ambivalence and holds back progress.
• Goals and objectives are set at the top level. Executive cross-functional committees study the goals of the strategy and relate them to each department or division’s goals.
• Most of the organizations in this model had a corporate VP of sustainability and environment. The two were tied together. The position is an overarching one and has an overview and influence on operations.
• Employee involvement was not sought at this stage. Although most programs contain communications relating to employee involvement, they did not actively seek it. As with Case C, this case also implements a change program and targets attitudes of employees in the hopes of changing behaviors.
Deployment ‘Implementing and Doing’

- After goals and objective are set, they are pushed down to departments and further down to the processes and individual tasks. They are communicated throughout the organization.
- The employees are provided with training. This is general awareness training and then detailed training on their own tasks and processes. They are told what to do and what not to do. Training is scripted.
- The conformance and compliance systems are customized and held under the larger umbrella of sustainability.
- The manager in this case is highly authoritative and does not allow for mentoring or coaching.
- The responsibility and authority of everyday tasks still lies with middle management and implementing changes controlled by them.
- As the goals and objectives are sent down through the management systems, the three responsibilities are not equally considered. Safety is always first, compliance second, financial third, then comes environmental stewardship and social issues.
- As with Case A, management systems may or may not be integrated. The integration in this model tends to be a fragmented and does not present a one-system view to the employee. The employee continues to put on different hats for different systems.
- The organization follows a hierarchal structure. Improvement ideas and projects from employees go directly to the reporting manager. If the idea has merit, the manager then passes it on to higher manager or implements it. The employees in this model also have access to a general suggestion box.
- The sustainability program grows out of conformance programs and compliance systems. They are expanded to include sustainability goals but with the same conformance attitude.
- There is little attempt to bridge the cultures of the various functional and operational departments of the organization. The operational and functional managers are separate and although they communicate there are different cultures and languages within the departments.
• Employees are rewarded for their improvements and projects. There are division competitions and results are announced by leadership.

• In this model there are rigid structures in place and change management programs are implemented to obtain employee buy in. Compliance is sought from employees. This view is supported by literature results; “Management single-handedly defines work conditions for employees, the employees will almost certainly be externally committed.” That commitment is external because all that is left for employees is to do what is expected of them (Argyris, 1998).

• The employees lack a sense of clarity about what sustainability is and what it entails. They understand what the changes in processes are and how to implement them because that is what they are trained to do. Literature surveys reported that in such models employees feel confused over how environmental and social aspects are addressed.

Results ‘Monitoring and Evaluating’

• Employee involvement metrics are not developed or maintained. Organizations measure through performance evaluations and if the goals and objectives were met or not.

• Most organizations use lagging indicators to report improvement results. Most managers view their sustainability participation as primarily an elaborate reporting effort.

• Web-based tools are used to share lessons learned and monitor projects and progress.

• The everyday tasks of employees are not directly tied to the overall sustainability objectives.

Improvement ‘Learning and Adapting’

• The organization conducts both internal and external audits and values documentation of results for their sustainability goals. There is a lack of transparency in this model.

• Leadership support for sustainability is firm and well established. There is a mandate from the top for the organization to become more sustainable. The lower levels cannot relate that mandate to the daily tasks they perform and may doubt its sincerity.
• Most improvement projects are big capital investment or technological improvement projects that provide measurable improvements.
• The organization seeks continuous improvement and after initial accomplishments, the goals become harder to achieve.
• The culture is quasi-military and encourages conformance. Results and performance are highly monitored.

**Cross-Case Analysis**

The above cases are varying models of implementation of a sustainability strategy. They are all valid. All cases reported improving results in sustainability and environmental performance. The degree of success and its relevance to the core processes varied greatly with the mature model being the most steadily performing case. There are variances and patterns that emerged upon analysis.

Literature shows that Case B (The Motivated) may have a better chance at growing into a flourishing sustainability program than Case C (The Emulating). The change in Case B comes from within. There are many examples in literature of employee groups that were working on the periphery and achieve good results that capture executive attention and support. In Case B the organizational climate fosters employee involvement and welcomes it, it is then the role of the leaders to monitor these changes and support them with system changes. In some examples, one division of the corporation starts implements a sustainability strategy with successful results. The headquarters and executives then start paying attention and extend the application of the sustainability strategy through out the organization. In contrast, Case C has the change implemented in a top-down method. It is an outward-looking model and therefore runs the high
risk of becoming a fad. The changes in Case C are based on implementing programs and initiatives and not problem solving.

The key difference between Cases A and D (The Mature and the Mandate) was employee involvement. When pattern matching logic was applied to these two cases it was found that contrary to previous assumption both cases may have integrated management systems or seek them. The integration in Case A was customized and done with sufficient in house resources to create a completely integrated system under a sustainability umbrella. The integration in Case D was mostly done by consultants and is a product of gathering only the similar elements of management systems together creating a fragmented system.

The goal sought from the management systems in Case D was compliance and conformance while in Case A it was process improvement. That is a very distinct difference that had a profound effect on the implementation of the sustainability strategy. This was also reflected on the training provided to employees on these systems.

The mature model in Case A provided employees with much more resources for training on a wide-range of topics pertaining to sustainability in general and process improvement in particular. The trainer in Case A was more like a mentor and training used less of lecture format and was more task-and competency-based. The amount and type of training in Case D, the mandate model, differed. Training was intensive on the process requirements and improvements needed to be implemented by the employee. Employees were told what to do exactly. The solutions were specified by managers and employees were trained to implement them. There was minimal to no training provided outside the required conformance training.

Unifying the communication message and having a shared language within the various departments of an organization was another important factor. Case A had a unified message
across departments and a shared scorecard while in Case D the various departments were still very much isolated and separate.

What Case A managed to conduct successfully, and Case D failed at, was the important linking of the overall sustainability strategy to the everyday tasks of the employees. Through the participatory culture, the proactive communication, the employee training and the cross-functional team dynamics, Case A succeeded in providing a direct link between the employees’ actions and the overall organizational goals. This resulted in increased employee involvement.

Case A showed many projects that achieved small yet meaningful results (Schultz, 2007). Small improvements affect the life span of the program and contribute to its vitality. They were found to be more attainable due to lower risks and costs. They reinforce the feeling of accomplishment and control, and create interest and motivation among employees.

Finally, most organizations had implemented several management systems. Although these systems have people elements within them, they were not being used to influence or achieve people involvement. Managers reported that the people principles were underdeveloped in these systems.
Chapter V
Discussion

The Case for Employee Involvement

The question addressed by this research is 

“How does employee involvement enhance efforts to manage change when implementing a sustainability strategy?”

The unit of analysis used within each case is “a worker performing their job”. The discussion below reaffirms the set hypothesis that effective employee involvement enhances efforts to successfully implement a transforming sustainability strategy.

The organization is the sum of its people. Any policy or strategy is implemented through and by the people. It is therefore common sense and basic logic to assume that every organization would seek and value employee involvement. Yet once processes and procedures are set in place they form structures and a culture. Some of these structures then become too rigid to allow for employee input and involvement. Employees develop mental modes of their role within the organization and informal relationships in addition to the formal ones. These roles are formed from the direct and indirect messages that the organization’s leadership, structure, and culture send out. At one point in time these roles were developed to make things operational and achieve the desired goals. Much time and effort was spent on developing these roles and procedures. Therefore, any change to the status quo challenges these roles and relationships, and must acknowledge their presence and address them to be successful.

If the general climate within the organization is that of conformance, the employees will be skeptical of any announced ambitious sustainability goals. They might find a way to conform to the new strategy, or they might resist it. Employees’ perception of how genuine the change is
will affect the successful implementation of it. When an organization plans to implement a sustainability strategy, it has to take the organizational climate into consideration and plan for employee involvement from the onset. This plan should not be limited to placing motivators for employee involvement and change. It should also include removing any de-motivators (Shadur, Kienzle, & Rodwell, 1999).

![Figure 4: Factors that influence employee involvement in a sustainability strategy](image)

The outcomes of this research showed major factors that directly influence employee involvement when implementing a sustainability strategy and thus affect the success of the
strategy (Figure 4). Each of these factors affects the unit of analysis “the worker” directly and proves the set hypothesis.

- Organization culture
- Leadership support and action
- Communication
- Training
- Integration within core operations
- Rewards and Monitoring

**Organizational Culture**

Organizations that have a culture that supports the employee, maintains open communication, collaboration and encouragement have higher employee involvement (Shadur, Kienzle, & Rodwell, 1999). The implementation of sustainability in such organizations came as a natural extension of the already participatory culture (see insert, “A Smooth Progression into Sustainability”).

The research outcomes showed that support and commitment are key to providing an organizational climate that encourages communication and participation (Shadur, Kienzle, & Rodwell, 1999). An organization that does not have a culture that encourages involvement will have to recognize the need to plan for employee involvement programs within the implementation strategy. Many organizations have found that investing in their employees results in enhanced organizational performance (IIP, 2009). The research also found that organizational culture is more of an influencing factor when it comes to employee involvement than structure. Organizational structure itself reflects on the culture; however, some organizations have managed to open channels of communication and engage their employees with little initial change to their existing structure.
Although the unit of analysis for this research is the worker, “no man is an island”. Teamwork is essential for the success of sustainability. Teams build synergies and require more from the employee. They build consensus and break down walls and departmental barriers. They also require more leadership support.

**A Smooth Progression into Sustainability**

An innovative and leading organization, 3M was one of the first companies involved in the Rio conference in 1992 and the World Business Council for Sustainable Development. Tenets of the 3M culture are: “minimal hierarchy, intentional informality, strong support for creativity and innovation. People are trusted to make the right decisions on their own and they’re rewarded for taking initiative. Challenging leadership is welcomed. When 3M employees show potential, they can expect broad responsibilities and multiple, varied assignments in their careers. The most effective leaders within 3M understand the value of teamwork, they promote openness and cooperation, and they actively share information and knowledge.” (3M Company, 2002)

When 3M expanded its Pollution Protection Pays program to become a sustainability program, it came as a natural extension and employee welcomed it. Employees had been incorporating the environment within their design and operations. Sustainability was operationalized and given clear goals. And although the focus from the onset was on manufacturing, the communications went out to all employees and their involvement was sought.

**Leadership Support and Action**

“Actions speak louder than words”, “leaders should walk the talk”, these are common mantras repeated among employees and researchers alike. If there is a contradicting message coming from leadership, employees will opt for the status quo. There might be a general understanding that the “sustainability talk” the executives speak is for outside consumption and internally its business as usual. This perception is especially increased if the same leaders have been in place for many years and throughout have stressed very different goals. It is therefore, the role of
leadership to communicate the new mission to the employees sincerely and clearly and provide evidence of genuineness with action.

Managers reported that the presence of executives in sustainability training courses and cross-functional team meetings had a profoundly motivating affect on employees. Providing the employees with the needed time, support, and resources were clear signs of leadership support. Interest was also shown by demanding results and following up on them. The metrics chosen to report these results sent a clear message to employees about what really matters.

Although the main focus of this research is creating a bottom-up dynamic to implementing sustainability, it does not deny the need for top-down support and action. Both are needed to accomplish true change. No employee involvement initiative can be sustained without support from the top levels. It is the executives’ role to make sure that sustainability is made part of the vision and mission of the organization. Managers need to become mentors and create a climate in which change is encouraged and learning is facilitated.

**Communication**

Communicating with employees is done at many levels. It is not limited to newsletters, e-mails, web tools and direct communication. Employees also get their messages from the goals and objectives set by management, the performance evaluations, and the rewards system. Often the day-to-day operations take the lead and communication is not set as a priority. Continual enforcement in communication is needed.

It is important to create a language for sustainability that is shared among the various departments, one language across divisions and departments and a unified message and mission. The employee needs to have access to communication channels within and across departments. A unified language fosters cross-functional communication. This can be done by using
Sustainability is a vague concept to most employees. The challenge is to filter it from general top-level communications down to the next levels and then to translate it into processes and tasks. The leaders of the organization need to explain to the employees what they want to change, why they are changing it, and why it is necessary. It helps if the employee sees a direct link between the tasks they perform and the overall organizational goals. This is a difficult task to communicate. Managers reported that as an ongoing challenge.

Employees are used to getting a high volume of communications about safety and the relationship between process control and safety. There may be room to extend that communication to include sustainability. One approach an organization reported was extending the effects of process failure to the employees’ personal life. This is done by mapping the processes beyond the boundaries of daily consideration of the employees. For example, if a process fails and results in polluting a water source, the organization points out that the water source is the one serving the community and the employees’ families. It also affects the fish they eat. Putting a personal face on the consequences adds a sense of commitment and brings the overall goals closer to the employee.

Training

All implementation plans have training within them. Training provides the employees with the necessary tools to perform and implement the new strategy (see insert, “Building Competencies and Awareness”). The type of training and amount provided varies greatly. The research found that it is necessary to provide employees with basic awareness training and extend that to sustainability training. Most training, however, is task-oriented or role-training. In
short, employees are script-trained and told exactly what to do and how to do it. There is little room left for employee participation and process enhancement. In this case the increased responsibility comes without authority. This sends a conflicting message and reduces the effectiveness of the system to a checklist. It is especially true when it comes to management systems training.

Mature organizations reported high volumes of training in many fields ranging from general awareness to technical courses. Training differs according to the level of the employee. Training should enhance the understanding of the business and processes. Employees should be given the tools necessary to examine these processes, propose changes to them, and understand the consequences of these changes.

**Building Competencies and Awareness**

An organization set a goal for zero waste. That included offices and facilities. All waste containers were removed. Recycling and composting bins were placed instead. The remaining trash was labeled “landfill” then measured and routinely checked for opportunities of recycling. At the beginning most employees were not fully aware of which waste went where. While most employees did recycle, some employees took their waste home with them as they wanted to conform to the new policy but did not know how to. Others disregarded the policy and continued to dump all waste in the landfill bin. The company organized a trash day and asked all employees to go through the trash collected. They explained how each item is categorized and its final destination. The employees were struck by the volume of waste and understood the importance of the policy. Employee involvement in the recycling program rose to 100%. The company decided to maintain trash day as a routine event and randomly examines the contents of trash bins on a monthly basis.

Extra resources and e-learning modules should be made available to all employees. Training sessions are needed for cross-functional teams and with the presence of executives. This stresses
the need for cross-functional communication and collaboration. It also reinforces the fact that sustainability is not the responsibility of one department or other, rather a strategy that encompasses the entire organization.

Younger employees are coming into the job with a higher level of environmental awareness. Sustainability was reported to be one of the concerns of employees during the hiring and recruiting process. People extend the ideas and teachings of sustainability to their personal life and the circle of influence grows.

**Integration within Core Operations**

The task of aligning organizational goals with those of the employee is not merely a communication and training exercise. It has to be reflected deeper within the everyday operations. This is helped by integrating the sustainability strategy down to the core operations of the organization and taking it to the process. If there is no direct link between the sustainability strategy and the core operations, the employee might understand that this is merely a marketing campaign and not a genuine effort. In that case, it will not affect her directly or the task she performs. What the outcomes in the results section point to however, is that integration within core operations alone is not the solution. As with Case D, the Mandate, organizations may very well push sustainability goals down to the task level and then seek conformance not involvement. To achieve employee involvement, the employee needs to maintain ownership of the process and have the tools necessary to analyze it and enhance its performance.

Employee involvement along with integration within operations ensures a sustained change. Organizations that follow the mandate model rely on top-down implementation with little bottom-up feedback. This means that ideas for process improvements come from the top and
middle managers. This usually entails technological improvements to the process, capital investment projects, and some product substitutions. The well of ideas gets drier as time passes. When employees are engaged in the process there is a constant supply of ideas that are not generally seen or considered from the top level (see insert, “An Employee’s Approach to Waste Reduction”). The employee involved with the process sees directly what is wrong and, provided she has the feedback mechanism to report her ideas, can suggest the change to her manager. Mature organizations with a high level of employee involvement reported a high volume of improvement projects and ideas from the employees. The projects vary from minor adjustments to major process changes and capital investments. Such organizations regularly exceed their set goals with the aggregate of these smaller yet successful projects.

### An Employee’s Approach to Waste Reduction

A hospitality worker spent most of his work day refilling vending machines with soda cans. The soda cans came to the site wrapped in plastic rings per six-pack and then packed in cardboard boxes. The cardboard boxes were then shrink wrapped and put on wooden crates. The employee spent most of the time unpacking the soda and the process generated a large amount of waste. Furthermore, the employee developed wrist pain from removing countless cans of soda from the plastic rings for extended hours. He suggested to his superior that they talk to the supplier and arrange for different packaging. The supplier welcomed the idea and redesigned the packaging into collapsible reusable plastic carts. The employee can now perform his task in one third the time and the process does not produce a waste product saving both the supplier and the organization. This process may not have been on the manager’s radar for improvement opportunities. The employee felt confident enough to contribute and had the means to introduce an idea and achieve results.
Rewards and Monitoring

Merits and rewards reinforce the overall communication message and tie the actions to the goals and objectives. Organizations differ in their preferences to reward individual or team. Some organizations prefer to reward the individual based on the team’s recommendation, making the reward even more meaningful. Rewards ranged from a percentage of the savings achieved to certificates and acknowledgements for simple projects. Results are advertised within the organization and a sense of pride in accomplishment is then achieved. Many organizations have found that a healthy competition among divisions helps in setting challenging goals and drives performance.

Most organizations report their sustainability performance in lagging indicators. Some are considering moving to more progressive reporting. The most common metric for employee involvement was the number of projects and initiatives suggested and implemented. There is a need to develop metrics for employee involvement and to relate them to overall policies and programs.

Facilitating the Change

Organizational change involving a sustainability strategy and aiming for employee involvement is a complex yet achievable challenge. It is critical to have a thorough implementation plan that takes employee involvement into consideration. Below are research outcomes that influence the implementation and affect its results.

Defining Sustainability

It is paramount to get a definition of sustainability that is operational and customized for the organization. There is no cookie cutter definition that can be directly implemented. The three
responsibilities are known--economic, social, and environmental--and agreed upon. Any definition, therefore, should come from all three, not just one. In Case A the mature organizations managed to define sustainability and develop it into a scorecard that is shared amongst divisions and departments.

Many organizations use the term sustainability interchangeably with environmental management and stewardship. This is very risky since it reduces sustainability to one of its three responsibilities and diminishes its effect on the organization. It is also important to note that sustainability is not a program put in place to reduce the carbon footprint of an organization. That may be one of its goals but not its entire mission. Climate change is merely one of the many environmental problems that organizations need to address.

Most sustainability managers fit within the department of Environment Health and Safety. Some organizations have vice presidents of sustainability but the current general view of a sustainability manager is similar to that of an environmental manager in most organizations. This presents a challenge since traditionally the environmental management department has been isolated and the manager is seen as the “police” and the overseer of compliance. The transition from EHS to sustainability has to be accompanied by a clear definition of sustainability that expands the influence to engage all stakeholders. This takes communication, cross-functional cooperation, top level support, and time.

**Formalizing Processes and Providing Channels for Feedback**

Small “green” organizations may have sustainability built into their culture by the founders. They enjoy an organic culture that fosters communication between employees and engages them. Often that is reflected on the organization’s products, its inward and outward messages, and heavily supported by the leadership and processes. As organizations grow in size and the
hierarchy builds up, there is a need to formalize some processes. There is a fine line between a heavily scripted process and a well controlled one that allows space for improvement. Efficiencies are gained by standardizing some of the processes and quality control measures are also necessary. But there needs to remain room for the employee to provide the valuable feedback to improve the process. One of the organizations interviewed reported starting out with thirty different product introduction processes across departments. The product introduction process was unified and Life Cycle Management tools were built into the resulting process.

**Resistance to Change**

In one of the facilities interviewed, a process was under study for not achieving its design targets. The line employees working on the process came up with their own plan to enhance it and increase efficiencies. Their direct manager was a very bright engineer and had his own ideas about how to improve the process. He developed his own counter plan. The manager’s plan was one possible solution and since he had a direct reporting line to the facility manager and environmental manager, his idea reached to the top. It was presented and chosen. The manager’s plan was implemented and did in fact enhance the process. Two weeks later the line employees stopped applying the new process and reverted back to the old process. The design parameters once again were not met. The environmental manager was aware of the counter plan by the line employees and asked to review it. Although not as elaborate as the engineer’s plan, it seemed to be another solution to the problem. He asked the manager to implement the plan. The process was improved and the improvement was sustained, the employees accepted the new process and did not go back to the old one in this case.

No one is more knowledgeable of the process than the employee performing it everyday. That employee holds valuable knowledge as to what the bottlenecks are and what changes would or wouldn’t work (see insert, “Resistance to Change”). After all, it is that same employee that would be asked to implement any change to that process; therefore, their input is not merely
informational but would also establish buy in and personal interest in the success of this change. Organizations reported having cross-functional committees to judge projects presented by employees. This is a way to bypass obvious organizational politics between employee and direct superior. It is also a way to judge the project in a multi-faceted manner and spread the ideas across departments.

**Addressing the dilemma of middle management**

This research advocates the combination of a bottom-up and top-down approach. These two approaches meet at the middle. Middle managers are required to meet the goals set by the top level. They are the link between top management, functional managers, operational managers and workers. They are regularly expected to perform miracles. They are asked to break down the higher goals to process goals and objectives. All the requirements of compliance and conformance pass through the middle manager, who must be provided with the necessary tools to perform these tasks.

Some managers may fear the loss of authority with increasing employee involvement and participation. This should not be the case. The manager should be part of the decision-making process, be it cross-functional committee or otherwise. Integrated management systems ease the burden of reporting placed on middle managers and provide them with a single view of the system. This enhances the manager’s vision of the overall process and aids her in deciding how the proposed project would affect the system. Any project results will then feed into the overall departmental goals and objectives.
Systems Integration

One of the outcomes of this research is that management system integration was not a differentiating issue the purpose and use of the system, however, was. Technology is a tool and will not guide behavior but rather assist it and make it more manageable and feasible. It is not a goal in itself. Management systems provide unique opportunities in the people factors they contain. They are based on the quality principles and share common appreciation for worker involvement. They do not conflict with the bottom-up approach, they support it.

Full and comprehensive integration is important under an umbrella of sustainability. A fragmented system that holds some parts but not others is not fully integrated. The goal of the integration should be enhanced performance and not mere conformance. Management systems will be as effective as their integration and overseers. Management systems provide the added benefit of documentation, the burden of which can be reduced with integration.

The employee should see one comprehensively integrated system. The unified language of sustainability should be used to communicate inside and outside the system. The integrated system is a tool to implement sustainability and not a separately run program. Sustainability provides the coordination and the glue across all boundaries. It organizes the strategy down to the processes through the management systems. That is why it is essential to have a clearly defined sustainability strategy and cross-functional involvement throughout the organization. Management systems provide the form to push the organizational scorecard into goals and objectives at the process level.

Research Questions not Yet Answered

There needs to be a conscious effort to engage employees. Organizations that seek employee involvement need to examine their existing culture, structure and processes. Employee
involvement needs to be planned for and included in the implementation of a sustainability strategy. This might lengthen the planning phase but it ensures the engagement of a key stakeholder -- the employee. It will result in a more widely accepted program that makes certain the change is sustained and maintained by engraining it in daily tasks and processes. Employee involvement reduces resistance to change as is evident by the various examples and outcomes of this research. It needs to be nurtured and maintained through communication and training and can not be taken for granted. This results in a transformative change process and has the potential to create a learning and innovative organization.

Currently there are few, if any, metrics set to measure and monitor employee involvement. Researchers need to find out what metrics can effectively monitor employee involvement. Pojasek (2009) has recently introduced the idea of using a business excellence framework as a reporting measure for leading indicators like employee involvement. He advocates the use of both conformance and performance programs as they complement each other, and measure both the leading and lagging metrics. This is a novel approach that could lead to development of future metrics. Researchers also need to determine how these metrics can be correlated to organizational policies, and human resource practices. There is growing interest in employee involvement within sustainability in particular. It needs to be expanded and built upon. What is the relationship between integrated management systems and employee involvement? Each management system has its own people elements, how do they relate to actual employee involvement? Why is there a gap between theory and practice? This research establishes the importance of employee involvement in implementing a sustainability strategy. Further research is needed to study the role of employee involvement because it is a complex and multifaceted topic.
Chapter VI

Bibliography


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