Stakeholder’s Perspectives on Integrating Sustainability in Project Management

Dissertation submitted in part fulfilment of the requirements for the degree of MBA in Project Management at Dublin Business School

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2. Declaration:

I, ASHISH ZAMBRE, declare that this research is my original work and that it has never been presented to any institution or university for the award of Degree or Diploma. In addition, I have referenced correctly all literature and sources used in this work and this work is fully compliant with the Dublin Business School’s academic honesty policy.

Signed: ASHISH ZAMBRE

Date: 21ST August 2015
3. Acknowledgements

I would like to express my gratitude to lot of people on completing my dissertation. First of all, I would like to thank you GOD for making what I am as of today. I would like to thank my supervisors, Professor Patrick O’Callaghan and Professor Brid Lane for guiding me and providing me knowledge all through the time of my dissertation. Thank you for providing me guidance from the start to finish by your valuable feedback, intellectual insights and assistance in craving path to my process of dissertation.

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4. Abstract

In today’s world, the way business and organisations deal with their procedure of lading their work is more project driven and moreover they are driven by sustainability goals than ever before. It is evident that for a project to be successful the inclusion of sustainability is clear but the vision and approach for the two domains are different, so it would be interesting to investigate the link between them. Especially by examining, the comprehensive importance of stakeholders in project management processes. Hence the research aims to study the influence of stakeholder in providing positive contributions and their impact analysis for project management practices. Several participants or stakeholders were selected who are working on projects related to sustainability goals as their prime concern, out of which four were finalised. An important finding that was discovered that different stakeholders had different perspectives related to the three performance indicators of sustainability which is People, Planet and Profit, but still more significance was given to the economic factors and the inclusion of environmental and social aspects were rarely measured in the management and delivery of their projects, although they categorise their projects as sustainable.
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6. Introduction

Depletion of natural resources by its exploitative use as being one of the major reasons of global warming and climate change issues are perhaps the greatest threat to our current livelihoods (Panwar, et al., 2011). In a generation of such crises, there is a humongous need for the development of renewable form of energy that serves the need of the present without compromising the ability of future generations to meet their needs (Brundtland, 1987). These sources of energy are called sustainable energy for e.g. wind energy, solar energy, geothermal energy (GEA Writing Team, 2012, p. 773). Acknowledging this view, both business and public organizations have been expressing their interest and commitment to environmental and social causes (Benn, et al., 2014, p. 136). Consequently, the way in which government and business organizations operate is shifting significantly by putting more emphasis on societal and environmental issues. As an example of the environmental issues, a report from Carbon Disclosure Project for the year 2014 (www.cdp.net, 2015) shows that over 304 investors with US$22 trillion in assets under management having asked the world’s highest carbon emitting companies on reduction of its carbon emissions. Also, there is an upward trend seen in the number of companies establishing emissions-reduction targets, with an increase of 14% over three years to reach 79% of responding companies (227) as compared to 65%(196) in the year 2010. Hence over the past few years, companies and government from many countries have been executing more projects that relate to societal and environmental issues.

6.1 Background and Overview

The link between project management and sustainability is relatively new (Hwanga & Jian, 2013). Lot of projects today are driven by sustainability goals than ever before and amendment of organizations goals or strategies with the need for sustainability as a critical factor for project success is clear (Brones, et al., 2014). But, the reasons for driving an organization towards sustainability can be from different causes (Benn, et al., 2014, p. 224). For example, while clients or employees can request and suggest enabling the drive in an organization, recommended certificates and CSR (Corporate Social Responsibility) options can present new opportunities in
emerging markets; governmental regulations can simply compel the organization to meet certain standards. At the same time, other reasons might refer to the ethical obligation (“it is the good thing to do”) and strategic vision. Furthermore, knowing that projects driven by sustainability involve various stakeholders such as government institutions, Profit/Non-profit environmental organizations, NGO’s and business organizations, locally affected residents or individuals leads to a realization that the quality requirements level of the project also going to be increased (Manetti, 2011). Thus, by looking at these scope and objectives, it has been interesting to conduct a research on the perspectives of stakeholders involved in these projects. The intent or reason behind conducting this research is that the change of perspectives might affect the project execution and the project success factors. Moreover, by using project management tools such as stakeholder management (Project Management Institute, 2013, p. 391) would be helpful in knowing and analysing the stakeholder’s problems and conflicts can be reduced by setting a better strategic plan at the earlier phase of a project. One such example is the formulation of new regulations by the government or the improvement of corporate strategic plan. Therefore the main objective of this research is to investigate the perspectives of stakeholders on sustainability in projects and project management.

From the wide variety of definitions of sustainability (also known as sustainable development - SD) across different literatures, the research proposal intends to use the most common one from Brundtland’s report (Brundtland, 1987), which state “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. After the introduction of the concept of sustainable development from Brundtland’s report, there has been extensive discussion including the formulation of three fundamental concepts of sustainable development (Harris, 2000), which are:

- Environmental protection
- Economic growth
- Social equity

These are also known as 3P’s: People, Planet and Profit. Harris (Harris, 2000) states that sustainable solution can be achieved by balancing the 3P’s by setting choices and priorities equally to all 3 of them and without any possibilities that one P will have more profit at the expense of
another. Since each P is related to actors and interdependency is crucial among them, it appears that sustainable development is multi-actor characteristic in nature where stakeholders are getting involved in the decision making process (Bergmans, 2006, pp. 117-125).

In 2008 World Congress of the International Project Management Association (IPMA), the opening key-note presentation called upon the project management profession to “take responsibility for sustainability” (McKinlay, 2008), the consideration of the principles of sustainability in project management was still in its infancy. The purpose of integration of sustainably into project management highlights the complex aspect of professional project management, not only from technical point of view but also because the project manager should deal with organization factors that are beyond its control. Later at IPMA expert seminar on 2010 (Turner, 2010) several discussions on the integration of sustainability in projects and project management were raised and although until now several researches has been done in this field, for example by authors such as Barnard et al (Barnard, et al., 2011), Hope and Ebbesen (Ebbesen & Hope, 2013), Eskerod & Huemann (Eskerod & Huemann, 2013), still it is an emerging field of study (vom Brocke, et al., 2012). However, Turner (Turner, 2014, p. 312), observed that “Sustainable development in temporary organizations such as projects and programs is rarely contemplated or considered” and ultimately he concluded that the standards for project management “fail to seriously address the sustainability agenda”. More recently, Silvius and Schipper (Silvius & Schipper, 2014) concluded that “the relationship between sustainability and project management is … picking up momentum” and that the majority of studies was published in the last four years. With all these insights and knowledge developing, Silvius concludes that an overview is needed. This proposal aims to contribute to this overview by providing a structured review of the available literature and study on sustainability and project management. With this review the research aims to answer the main research question:

6.2 Research Question and sub-question

“What are the perspectives of stakeholders on integrating sustainability in projects and how it could be integrated into project management?”
To address the main research question, three sub-questions are themed and interpreted as below:

SQ1: “what are the perspectives of stakeholders on sustainability in projects?”

SQ2: “what are the similarities and dis-similarities between their perceptions?”

SQ3: How could an investigation of stakeholder’s perspectives measure sustainability integration in project management practices?

With these aims the research objective is to investigate whether stakeholders’ perspectives on sustainability can give a positive contribution to project management practices. The research will confront theory with practice. An overview of sustainability concepts and theories would be explored and it will investigate how sustainability has been adopted by society and business organizations. Subsequently, in its empirical part, a deep focus on stakeholders’ perspectives in project management would be done.

Another purpose of the research is to fill the scientific gap in the literature studies. As seen from above, although sustainability being new to project management, there is an extended literature on sustainability in project management and stakeholder analysis concepts, no work has been done to know about stakeholders’ perspectives on sustainability in projects and project management. In addition to that, it is expected that this research can contribute to other research that is being conducted by different researcher in the field of sustainability driven project management.

6.3 Research Roadmap

Having given the background of the research topic and the research question formulated, a formal dissertation road map will be presented. Chapter two will examine the literature on the topic of research which is basically divided in to three themes. The first theme will give a background on stakeholder management. The second theme will present various aspects of sustainability and project management, including the basic principles of sustainability, how and why it is important to integrate sustainability in project management practices followed by challenges, impact and current research on the field of study. Later in the third theme, would present the analysis of the
stakeholder’s perspective and how their engagement helps in achieving sustainable outcomes. In the third chapter the methodology of the research would be discussed. Chapter four would present the analysis of data collected from the interviews and chapter five would have discussion on the review of the researchers work, findings. This particular phase would lead the researcher to help answer his research sub-questions and eventually his main question. In the end, chapter six would present conclusions and recommendations including summarising of the research findings and recommendation for future research. Figure 1 gives the basic approach used as a roadmap in the research.

![Figure 1 Roadmap of dissertation](image-url)
6.4 Scope and Limitations of the Research

Although a lot of measures would be engaged to ensure high quality of research, there would be limitations needed to be considered.

- As qualitative based research is considered, there would be a lack of statistical analysis or generalisation, which is more a characteristic of quantitative research (Kohlbacher, 2006). Instead research would be more of an interpretive way with analytical generalizations using the perspectives gained from the interviews conducted.

- Limited information from organizations in their sustainability approach.

- Limited information available on the innovative ideas developed by companies in fear of competitions to them.

- To overcome this a clear understanding of the research would be given with probable benefits that the organization may get.

- A word of trust would be exchanged with any form of documentation if needed.

- Due to the time constraints of the research, not more than four critical interview respondents would be chosen out of many reviewed. To support the analysis of data collected, argumentative analysis tools will be used such as Toulmin method. The data from the interviews would be strictly used for analytical purposes needed for the research. Data such as the participants name and the name of the projects they are involved in would not be stated due to confidentiality reasons.
7. Literature Review

7.1 Literature Introduction

The first theme will give a background on stakeholder management. The second theme will present various aspects of sustainability and project management, including the basic principles of sustainability, how and why is it important to integrate sustainability in project management practices followed by challenges, impact and current research on the field of study. Later in the third theme, would present the analysis of the stakeholder’s perspective and how their engagement helps in achieving sustainable outcomes

7.2 Literature Theme 1 - Stakeholder management

The birth of stakeholder concept, as stated by Freeman and Reed, is credited to Stanford Research Institute, which defined the stakeholder as “those groups without whose support the organization would cease to exist” (Freeman & Reed, 1983). Freeman brought the stakeholder concept in theory through his textbook, “Strategic Management: A Stakeholder Approach”, which defined stakeholder as “any group or individual who can affect or is affected by the achievement of the firms objective” (FREEMAN, 1984). Freeman is regarded as the father of Stakeholder management concept (Laplume, et al., 2008) and since the past 30 years most researches have cited him as the foundation of stakeholder management theory. Since its foundation by Freeman, stakeholder theory developed rapidly and by 1995, dozens of books and hundreds of articles published dedicated to stakeholder concepts (Friedman & Miles., 2002). The concept of stakeholder theory was examined on various organizational levels, such as CEO values as a critical stakeholder (Agle, et al., 1999), common people (Argandona, 1998), Firms resources (Barney, 1991), relationship between stakeholder model and firms financial performance (Berman, et al., 1999), evaluating firm corporate social responsibility (Clarkson, 1995), (Clarkson, 1988).

During recent times a number of articles focused on value creation using stakeholder theory such as (Argandona, 2011), (Phillips, 2011), (Sachs & Rühli, 2011) while some focused on stakeholder theory on project management. A very good example of inception of stakeholder theory in project
management is by the introduction of the stakeholder concept as a new knowledge area in PMBOK guide in 2013 (PMI, 2013) which defined stakeholder management as, “Stakeholders are basically an individual, group, or organization who may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project”. Every organization will have stakeholders who are impacted by or can impact their activities in a positive or negative way and some may be completely not involved (Jepsen & Eskerod, 2013). While some stakeholders may have a limited ability to influence the project, others may have significant influence on the project and its expected outcomes (Gunsteren & Gunsteren, 2011). In project oriented process, the ability to correctly identify and manage these stakeholders in an appropriate manner can mean the difference between success and failure (Roeder, 2013).

7.3 Literature Theme 2 - Impact of sustainability in project management

As the stakeholders management is critically defined, this theme would then check the impact of sustainability in areas of project management. Starting with gathering the basic concepts of sustainable developments which is important to give an overview to the. Further the relationships between sustainability and project management would covered including the reasons for its integration, challenges and impact analysis. It would also cover current research in the area of integration of sustainability in project management.

7.3.1 Basic principles of sustainable development

In order to understand about sustainability in projects and its integration in project management, it is essential to know more about the evolution of sustainable development (SD) concepts and its importance that form the building blocks for its incorporation in project management area. By gaining deeper insights on the basics of sustainable development would help to get a clear overview on sustainability and eventually its integration into project management.
The concept of sustainability can be first analyzed since it became a part of sustainable development in 1987 in a report, “Our common future” by World Commission on Environment and Development (WCED) (Brundtland, 1987). Also known as Brundtland’s definition, WCED defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Since its inception and more recently up to 10 to 15 years, the concept of sustainability has gained significantly in its recognition and importance (Silvius & Schipper, 2014). Silvius and Schipper also debates, can humans develop prosperity without compromising the future. Even though Brundtland’s definition is used by many author and researchers in their citations and can be considered as a standard definition, it does not limit the scope of sustainability but it does, however touch on the importance of intergenerational equity and wide areas of its inception possibilities (Robert, et al., 2005). In reaction to which Labuschagne and Brent (2005) (Labuschagne & Brent, 2005) write: “There are currently over 100 definitions of sustainability and sustainable development, but most agree that the concept aims to satisfy social, environmental and economic goals.” Numerous other researchers view that the concept of sustainability can be visualized on wider levels while some authors acknowledge it as being supported by three basic pillars: social, environment and economic goals (Azapagic & Perdan, 2014). These three pillars however is been thought to be derived from Brundtland’s report (Brundtland, 1987) which highlights three main objectives that sustainable development needs to address

- Between the poor and the rich
- Between current and future generations
- Between humankind and nature

Based on these objectives, various principles, strategies and goals relating to sustainability were defined by many authors and organizations, a recent one being given by Margaret Robertson (Robertson, 2014):

- Consumption of natural resources must be minimized and use of renewable energy must be considered.
• The economic and environmental benefits of using green, renewable energy must be educated in small to large scale companies.
• Old traditions of exploratory use of fossils and other natural resources should be discontinued and a new effective and ecological use must be given importance.
• Human potentials such as co-operation, intellectual development and love for the nature should be stimulated.
• Organizations and individuals should contribute to a common good and just not focus on private good.

The three pillars of SD were further developed and modified by researchers such as by Mulder (Mulder, 2006), called as triple bottom line or the 3 P’s of SD: People, planet and profit where people are related to social system, profit is related to economic system and planet is related to environmental system. These 3 P’s are explained in simplest way by Potthast and Meisch (Potthast & Meisch, 2012) where ‘People’ refers to social costs and benefits, influencing public opinion and their values, perceptions and interests of citizens. Planet refers to ecological costs and benefits dealing with norms and goals regarding ‘natural capital’ and public environmental goods asking not to trespass ecological limits (air, water, climate, biodiversity, forests, soil ) and finally ‘Profit’ refers to economical costs and optimizing benefits keeping in mind the objectives of sustainability in economic sphere should be about improving this processes of optimization. The three spheres of sustainability is clearly explained by Seoka et al. (Seoka, et al., 2012), as shown in the figure 2 below:
The discussion of sustainability further advances internationally such as the United Nations Conference on Sustainable Development (UNCSD) (Development, 2012) describes sustainability in simple terms as a processes of meeting today and tomorrow’s human development goals without compromising on the ability of the natural systems to continually provide its natural resources, upon which the economy and society depends (Sustainabledevelopment.un.org, 2015). In the conference, sustainable development was recognized as an overreaching goal for institutions at national and international levels and a high importance was given for the need to enhance the integration of sustainable development in the activities of companies all over the world. However in the same year, the 2012 BSR/Global Scan study objects that, “The most important leadership challenge facing business today is the integration of sustainability into core business functions.”
To help understand better, the three pillars of sustainability and sustainable development is visualized by Kurucz, et al. (Kurucz, et al., 2013), as shown in the figure 3. Sustainability is achieved at the center of the three merging circles of the three SD pillars. A gradual effort of continually enlarging the sustainability circle by continued effort in integrating sustainability through three ways of eco-system, socio-system and techno-system would mean a progressive effort where all the organizational and human activities sustainable with a goal of achieving sustainable future.

The above processes of integrating sustainability seems to be simple but building sustainability in to an organization is not an easy task (Rowe & Bansal, 2013). Every organization or business has a goal to be successful and make profit, either in the terms of money of increase its business value. Compared to traditional methods of making profits and make decisions based solely on the bottom line, there is a need for companies to think long term taking sustainable measure along the way of making profits (Rowe & Bansal, 2013). More attention needs to be given on building strong employee relationships and sustainability visions need be deeply embedded in them so that every single person should think himself accountable for all his or her sustainable activities. Having done this sustainable companies also need to thrive, surviving shock like global recession, executive scandals, labor strikes, boycott by environmental activists (Rowe & Bansal, 2013).
Furthermore, companies all around the world are facing these global challenges which is affecting its business operations (Virakul, 2015). An excellent way of addressing these challenges is by applying SD concept in business organizations through corporate social responsibility (CSR), corporate governance (CG) and sustainable policy and practices and embedding them at a strategic level. This is evident today from the mission statements of several companies such as Apple, Adidas, TATA group and they accredit their success with an ideal of reconciling different and sometimes opposing views, values and goals of their consumers, employee, shareholders and community, collectively their stakeholders, delivering sustainable results to the society while protecting environment, health and safety of their stakeholders (Sustainability, 2012)

7.3.2 Theoretical concept of Project Management

The previous section described sustainability and sustainable development in detail. Before the link between sustainability and project management would be analyzed, the idea or the concept of project management would be described.

Project management has been defined in different ways by many authors and organizations but probably the most authoritative definition is stated by Lester (Lester, 2013) as defined by BS 6079-2:2000, “A unique processes, consisting a set of coordinated and control activities with start and finish dates, undertaken to achieve an objective confirming to specific requirements, including constraints of time, cost and resources.” In simpler terms, PMI (Pmi.org, 2015), a major international organization, globally recognized advocacy for project management defines project management as, “A temporary endeavor undertaken to create a unique product, service or a result”. Furthermore, project management then is the application of skills, knowledge, tools and techniques to meet project requirements.

The basic principles of project management has evolved since the early 1900’s and accelerated after 1950’s (Richardson, 2014). Even earlier, there are various projects which are quite impressive in their scale sand cannot be imagined without the use of some type of project management such as the great pyramid of Giza, the Great Wall of China but they dint follow what we call modern project management style of design, rather they can be termed as formal project management that
basically guided the work processes and managed the variables involved (Richardson, 2014). Effective use of project management skills, tools and techniques flourished during the World war in military, complex research and development such as military weapons systems (Meredith & Mantel, 2011). Consequently the use of project management tools and techniques spread across various industries for instance construction, automobile, events, election campaigns, IT, logistics, weddings, parties (Meredith & Mantel, 2011). The more complex the project was, called for the use of even more complex project management tools and techniques.

Furthermore, project management is a technique that provides proficiency to its users such as individuals and organizations by application of it powerful tools and techniques, enhancing the ability to plan, implement and control activities, simultaneously providing expertise in the way it uses its people and resources (Meredith & Mantel, 2011). Project management activities are divided in several life-cycles or frameworks, in simpler terms phases such as planning, controlling, executing, monitoring and closing (PMI, 2013). However several authors and project management literatures term and use these phases differently (Meredith & Mantel, 2011). Irrespective of the phases and definitions, the main challenge of project management is to accomplish project goals and objectives in time and within the scope, quality and budget of the project, also called as the project constraints (Pmi.org, 2015). However other aspects and elements need to be considered. This new element is the expectations of the stakeholders, which is very dynamic and keeps on altering during the project execution (Roeder, 2013). Customers may have unrealistic and ever demanding expectations, even worse, they may keep on changing their requirements during the project execution. Coordinating the project teams and the client’s perspectives is not an easy task and in due course there might be possibilities of conflicts arising on the project outcomes but it is important to keep all the project variables aligned since the project success depends on team work, in the sense, the project stakeholders should be well balanced and with focused views (Meredith & Mantel, 2011). As in the research conducted by Duggal (Duggal, 2010), while achieving other criteria such as meeting business case objectives, quality of delivery, benefits realization, project managers need to broaden their perspective to include criteria to satisfy stakeholders and deliver business results.
7.3.3 Sustainability in projects and project management

In today’s rapid organizational developments, the impact of sustainability concerns indicate the current way of producing, managing, consuming and living may have negative effect on the future (Magaril, et al., 2014). Hence a change is needed on sustainability terms. Also, change in organizations in form of a new product, plant, business or resource is many case is organized as projects (Silvius & Batenburg, 2009). Therefore it could be argued that (more) sustainable society needs projects.

This category would brief on the discussion of sustainability in to two segments. Firstly the reasons for the integration would be summarized, following which several researches that have been done concentrated in the field of integration of sustainability in project management would be explored. And lastly, the challenges and impact analysis of sustainability integration in project management would be explored.

7.3.4 The reason for integration of sustainable development

Growing environmental concerns, in parallel with increased natural energy costs and manufacturing costs coupled with stricter governmental and community regulations, are few of the many reasons for the change in the way of people doing business across the world (International Institute for Sustainable Development (IISD), 2015). It is widely accepted fact that, companies that do better with regards to environmental, social, corporate and governance issues can increase shareholders value for example, effectively managing risk, accessing new markets while anticipating regulatory actions and finally contributing to sustainable development in the markets in which they operate (International Institute for Sustainable Development (IISD), 2015). In addition to that, companies have realized other areas which benefit them to grow their business by adopting to sustainable business practices in their projects as (Virakul, 2015):
- Appealing to stakeholders values by building trust and building a socially and environmentally responsible brand image.
- Increased trust leads to increasing business and opportunities with nongovernmental organizations, research institutions leading to launching of environmentally conscious products and services.
- Increased sustainable products leads to increased partnership and investment opportunities craving to become recognized as positive economic force in the industry.

Companies have also realized the benefits of sustainable business in increasing their productivity and lowering costs such as (Sustainabledevelopment.un.org, 2015):
- By adopting to alternative sources such as solar and wind power has reduced their dependency on fossil fuels and nuclear power resources.
- Reduce transportation costs for example by the use of solar power that generates electricity right at the factory instead of transporting it from the power stations and reduce packaging costs through improved product design and production processes along with encouraging recycling of reuse materials in the creation of future products.

One of the major factor such as reduce overall risk to the business by adopting to sustainable management practices can help to protect the business in a number of such as (Rowe & Bansal, 2013):

- By adopting to sustainable development provides companies with greater protection against litigations arising from social and environmental issues.
- Increased to company staff, customers and other linked stakeholder community by eliminating the use of toxic substances.
- Enriched relationships with governmental, environmental and other regulatory authorities simultaneously decreasing the risk of being targeted by media, environmentalist or other consumer advocacy groups.
The above could be summarized as shown in figure 4 below taken from source (Gerlach, 2015)

![Diagram](image)

Figure 4: Connected Business as a driver for Sustainable Innovation. Source (Gerlach, 2015)

In today’s world there is high importance given to sustainable business practices which has forced organizations to be more transparent and disclose a wide variety of information about their activities including their sustainability (Soderstrom, 2013). As a result, corporations have extended their traditional financial reporting in to sustainable reporting which Soderstorm (Soderstrom, 2013) defines as, “the communications which corporations make, concerning their corporate social responsibility (CSR) activities, including social and environmental impacts in additional to their financial performance.” There is a philosophical shift from previous financial reporting standards which focused on human resources, employee relations, marketing activities, accounting, and production to a more integrated sustainable reporting consisting of other areas of social and environmental implications (International Integrated Reporting Council, 2011). Due to such a high pressure, companies have started considering application of sustainable practices in their various
department and indirectly the way they do business and conduct projects, to which project management is relatively new and studies relating to project management and sustainability is still an emerging field (Silvius & Schipper, 2014), although there are signs of incorporation of its ideas in several literatures of recent years (Bo & Bignami, 2014), (Eskerod & Huemann, 2013), (Gareis, et al., 2013). The researches and findings of relationship between sustainability and project management would be discussed in the next section.

7.3.5 Current research on integration of sustainability in project management

While the implications of sustainability in project management is discussed, it is interesting to get the views of several other researchers, so as to help the author find the gap of his proposed research.

There are various suggestions by authors such Bignami and Bo (Bo & Bignami, 2014, p. 18) states that, “Sustainability in project management is about integrating economic, environmental and social aspects in the content and management of projects”. While Brocke et al (Brocke, et al., 2012, p. 173) suggests, “Sustainability in project management is about considering the full life-cycle of the project”. Some studies focuses implication on sustainability for business strategies and policies as (Perrini & Tencati, 2006) (Schieg, 2009) and thereby on content of projects/changes, but pay little attention to the implications of sustainability on project management processes and on the competencies of the project manager. Whereas some projects (Eid, 2009), (Gareis, et al., 2013) focuses on the impact of sustainability on the process of managing projects/changes, but again little attention to the stakeholders contribution of projects and project management to sustainability.

7.3.6 Challenges for sustainable integration and its impact analysis

After getting an overview on sustainable development principles, project management background, connection between them and several literatures on them, the contrasting factors
between sustainability and project management would be discussed and finally the principles and aspects of sustainability influence on the societal and organizational context of a project would be discussed.

Silvius and Schipper (Silvius & van den Brink, 2014) states that, “projects and sustainable development are probably not natural friends”. This distinguishing characteristics could be summarized by their natural differences as illustrated in the figure 5 below.

<table>
<thead>
<tr>
<th>Sustainable Development</th>
<th>Project Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long term + short term oriented</td>
<td>Short term oriented</td>
</tr>
<tr>
<td>In the interest of this generation and future generations</td>
<td>In the interest of Sponsor / Stakeholders</td>
</tr>
<tr>
<td>Life-cycle oriented</td>
<td>Deliverable/result oriented</td>
</tr>
<tr>
<td>People, Planet, Profit</td>
<td>Scope, Time, Budget</td>
</tr>
<tr>
<td>Increasing complexity</td>
<td>Reduced complexity</td>
</tr>
</tbody>
</table>

Figure 5 Comparison of Sustainability and Project Management Processes (Silvius & Schipper, 2014).

Sustainability is about both short term and long term, looking not only at the current generation but more actively for the future generations whereas projects are short term. In sense, organizations should consider long terms benefits of their actions and not focus on short term gains, whereas projects are temporary and focused on project sponsors and stakeholders involved (Silvius & van den Brink, 2014). Sustainability is about balancing the three pillars: Social, Environmental and Economic and is implemented in life-cycles making it more complex, whereas projects are focused on the results and work in simpler project lifecycles (Silvius & van den Brink, 2014).

With this contradicting views, Silvius (Silvius & van den Brink, 2014) argues that to analyze the impact of sustainability on project management, project management processes should address two basic questions: “How do the principles and aspects of sustainability influence the societal and organizational context of the project? And: How is this influence relevant or translated to the project?”
To answer these questions Silvius (Silvius & van den Brink, 2014) identified 10 areas of impact that provides ground for understanding the implications of integrating sustainability in projects and project management.

- Project Content: Integration of sustainability would change the project constraints and would provide new definition for success factors of project, for example the inclusion of environmental and social aspects in the project charter, objectives and goals.

- Business Case: the project outcomes needs to be justified by the inclusion of non-financial factors such as social and environmental aspects.

- Project success: principles of sustainability should be integrated right from the beginning of the project, reflecting the definition or perceptions of success of project.

- Materials and procurement: while project execution, the materials and procurement processes should integrate the aspects of sustainability such as non-bribery and ethical behaviour of the project participants.

- Project reporting: the project flow in the project lifecycles from planning, initiation to closing along with the definition of project scope and objectives will be influenced by the inclusion of sustainability aspects.

- Organizational learning: Continued efforts must be exercised on learning from previous mistakes of project such as sustainability suggests minimizing wastes.

- And finally, last but not the least, Project team and the project Stakeholders: in the management of the project teams, sustainability aspects such as, equal opportunity and personal development must be put into practice. Since the principles of sustainability is
about “balancing or harmonizing social, environmental and economic interests, both short
term and long term and both local and global” as stated by Silvius (Silvius & van den Brink,
2014), there is a high chance in the increase in the number of stakeholders for example
nongovernmental organizations, environmentalists and human rights community.

Silvius (Silvius & van den Brink, 2014) states that these areas provide basics on understanding of
integrating sustainability in project management and would additionally relate to three areas of
project management. Firstly, these implications would relate to standards, processes and
methodologies of project management. Secondly, the competencies of project manager thirdly,
would affect the way companies plan and govern their projects.

Having gained deeper insights into the literature encompassing project management and
sustainability, the researcher then focused on literature involving the stakeholder’s engagement in
sustainability in project management, in order to cover the overall research objective of
stakeholders perspective influence on sustainable outcomes of project.

7.4 Literature Theme 3 - Stakeholders perspective – Improve sustainable outcomes
of projects

After critical analysis on the theory of stakeholder management and sustainability impact on
project management practices, the researcher now focused on the influence of the stakeholder
contributing to successful sustainable outcomes in the project management practices.

7.4.1 Stakeholders Perspectives Analyzed

Achieving sustainability is organizational projects today is become extremely important today,
although integrating sustainability is highly complex comprising of diverse stakeholders (Bal, et
al., 2013). Some stakeholders are considered important such as the project sponsor, while other are generally not considered important and their non-recognition in decision making processes may results in discrepancies in the smooth flow of the project and may also cause a complete failure of the project (Bal, et al., 2013). Chinyio and Olomolaiye (Chinyio & Olomolaiye, 2010) states that ineffective management of the stakeholders can affect its smooth running of projects, indirectly affecting its functioning, development and even survival. They also mention that stakeholders form an important asset when their view are aligned with organizational goals but they are antagonistic when they oppose to the mission and their unwillingness to continuously support the objective can be fatal and may lead to complete failure of the project. This is due to different stakeholders may have different views and perspectives on the ways of implementation of sustainability and their different opinions may cause conflicts and may dramatically increase the complexity of the situation (pmi.org, 2015). Hence it extremely important for a need for systematic approach to engage with stakeholders especially when it comes to sustainability in projects.

7.4.2 Stakeholder Engagement- Analyze Perspectives- Sustainable outcomes

An excellent approach for successful engagement of stakeholders is to consider them equally important and gain their support and trust while work together to plan and develop new business solutions (pmi.org, 2015). Stakeholder engagement helps knowledge management (KM) which are also considered elements of organizational capabilities on sustainable development that deals with stakeholder related innovation, in sense, collective knowledge gained from effective engagement of stakeholders affects a firms sustainable innovation orientation (Ayuso, et al., 2011).

Several authors have proposed various methods of engaging the stakeholders for sustainable development. Jeffry (Jeffery, 2009) proposed a model that builds a proactive two way processes between the organization and its stakeholders, which he terms to be a ‘meaningful’ stakeholder engagement processes. In this processes the communications, opinions and proposals flow in both directions essentially not linear but in an iterative manner helping the organizations to change its behavior and decisions as a result of engagement. By such unified engagement, organizational
stakeholders develop mutual respect, in place of one-off consultations thus improving organizational ability to perform meaningful stakeholder engagement. Csrquest (Csrquest.net, 2012), a leading source of corporate responsibility and sustainability knowledge, proposed a logical and well-structured stakeholder engagement process model as shown in figure 6 below.

![Stakeholder engagement process model](image)

Figure 6 Stakeholder engagement process model (Csrquest.net, 2012)

It depicts the iterative process of gaining feedback for stakeholder engagement, starting with identifying and defining key stakeholders, mapping their relations and objectives in relation to their responsibility and sustainability performance, define their transparency policies and then integrate, supervise and monitor them according to their roles and tasks for existing and new projects.

Apart from theoretical knowledge, it would be interesting to see how organizations implement stakeholder engagement to manifest their perspectives to create value for business concurrently satisfying the expectations of stakeholders in improving their sustainable goals. Snam rete gas (SnamReteGas 2010 Sustainability Report, 2010), a European company launched a project in their
2010 annual report, a processes of ‘stakeholder mapping’, with a goal of identifying the categories of parties whose opinions, decisions, attitudes and actions may actually help or hinder the achievement of specific goals of the company. Figure 7 below shows the diverse stakeholders as identified by the company and the way they built their stakeholder engagement model.

![Stakeholder Engagement Model](image)

Figure 7 Snam Rete Gas Stakeholder Engagement Model (SnamReteGas 2010 Sustainability Report, 2010)

The annual report of the company states that, the purpose of this activity was to identify all the stakeholders involved in their various departments and break them down into various categories by relevance. Analysis and studies were conducted on the basis of the results of the stakeholder perceptions, which helped the company initiate more specific ways of getting the stakeholders involved and achieve their sustainability goals (SnamReteGas 2010 Sustainability Report, 2010).
7.4.3 Current Literature on Stakeholder Perspectives

Several literature on stakeholder analysis in view of sustainability in projects were reviewed, (Perrini & Tencati, 2006) (Reed, 2008) (Mathur, et al., 2008), (Eskerod & Huemann, 2011) (Eskerod & Huemann, 2013), (Labelle & Leyrie, 2013). These sources focused more on the engagement of stakeholder in value creation or better management of the resources. But very few literature was available focusing on influence of the stakeholders in creating more benefit in terms of sustainability as (AlWaer, et al., 2012) and (Goedknegt, 2013). In the research done by Eskerod and Huemann (Eskerod & Huemann, 2013), their findings suggest that issues surrounding stakeholder management are treated superficially in project management standards, meaning, a complete paradigm shift of values would be needed when viewing stakeholder management in context of sustainable development. The author further adds, current project stakeholder practices focuses on management-of-stakeholder approach which is basically making the stakeholder comply with project needs, instead of having management-for-stakeholder approach.

In addition to various stakeholder arguments listed above, Chinyio and Olomolaiye (Chinyio & Olomolaiye, 2010) state that stakeholders can affect an organization’s functioning, goals, development and even survival, this highlights the importance given to stakeholder in the organizations today. In the view of sustainability, various stakeholder groups are actively participating in sustainable development such as, governments implementing policies to address key sustainability issues (Anon., 2011), investors now asking companies to detail sustainability risks in financial transactions, NGO’s expecting companies to address the environmental impact and last but not the least, employees – current talented employees seek to work with organizations that add value to the society and having a clear vision for their contribution to a sustainable global economy (Anon., 2011). And once inside the organizations, they seek to influence the direction of corporate social responsibility and drive improvements through their specific responsibilities. These perspective of different stakeholders highlights the importance of its influence in sustainable activities of organizations, particularly in projects. In the light of this view, the researcher was
captivated with idea of the research on the stakeholder perspective on the sustainability in projects and project management.

7.5 Contextualizing of the Literature Review:

As it is seen from the in-depth analysis on the literature on concepts of stakeholder management, which evolved more than thirty years before, the concepts of sustainability have only recently been linked to projects and project management (Gareis, et al., 2013) (Silvius & Schipper, 2014). However, the link or the connection between sustainability and projects was already established by the World Commission on Environment and Development in 1987 (Brundtland, 1987), Eid (Eid, 2009) concludes two decades later that the standards for project management “fail to seriously address the sustainability agenda. To this, Gareis et al (Gareis, et al., 2009) contradicts by stating, studies relating to sustainability and project management is still an emerging field. Gareis later in 2013 (Gareis, et al., 2013) concluded that studies relating to integration of sustainability has taken momentum only during past couple of years. To which, Fox ads (Fox, 2013), goals of sustainably integrations in to projects and projects management can be successfully accomplished by fulfilling materialistic aspirations by considering project perspectives i.e. perspective held by the people involved in the project, in short the stakeholders. This is further confirmed by Silvius et al (Silvius, et al., 2014). With this view, the author has been inquisitively curious and interested in researching the main object of the research of perspectives of the stakeholder in integration of sustainability in projects and project management.

7.6 Theoretical framework development

Theoretical framework development would help in combining the concepts and condense the theory that has been explained in literature review. While the literature review guided the author to flesh out the concepts that are important in the research exploration. The expectation of the
researcher to include this chapter is to create knowledge by developing insights on conceivable relations between those ideas and concepts. This framework would then help to do comparative analysis with research findings and how the research findings align with the research literature.

In the literature review, detailed elaboration of concepts and ideas of sustainability and its integration into project management has been identified. A great deal of authors have investigated the issues around sustainability into project management and several thoughts and ideas have been elaborated but one of the notions of sustainability into project management is seen from a recent research conducted by Silvius and Schipper (Silvius & Schipper, 2014), where he proposes, “Sustainability in project management is about integrating economic, environmental and social aspects in the management and delivery of the projects.” Silvius highlights the significance of integrating the 3P’s in the management and delivery of projects in today’s world since as indicated by him, a lot of projects are been implemented with high need for profit and less importance to environmental and social aspects of the 3P’s as discussed in the literature review. Even though the aspects of people and planet are been highlighted in the results of the projects process and outcomes, it could not be denied that they are given less importance (Silvius & Schipper, 2014). This is due to the different emphasis given on current project management practices which focuses on the time, budget, scope and the quality of the project with a high level of significance given to the economical aspect of profit (PMI, 2013). Embracing to new methods that would modify the current project management practices that would include the triple P constraints of sustainability is the need for successful sustainable integration in projects.

Considering this point of view, it would be interesting to see the different perspectives of stakeholders and then analyse their arguments using the Toulmin argumentative analysis method (Toulmin, 2003). Toulmin model consists of six elements for argument analysis namely, Claim, Ground, Warrant, Backing statement, Qualifier and Rebuttal. Claim refers to what the actors arguments wasn’t to justify, grounds defines on what basis, premise, truths, facts and examples to back-up actors reasons, Warrants are assumptions that could be taken for granted, backing statement to add evidence to back-up your warrant, Qualifiers are words like some, many, so etc. and rebuttals are situations where claims cannot be considered true (Toulmin, 2003).
Figure 8 Toulmin Model – Argument analysis diagram (Toulmin, 2003)

The arguments of different actors from the Toulmin model would be then compared using the argument analysis method. The interview conducted would be translated into Toulmin model and then used in comparison analysis of the different stakeholders perspectives. Thereupon, use of perception analysis would be done as described by Enserink et al. (Enserink, 2010). The main focus of such type of argumentative analysis is to analyse the result from a process of exchanging arguments to get better picture of perception of actors involved in the projects and related activities. Below depicts an outline of the strategy.

Figure 9 Perception analysis method (Enserink, 2010)

The participating actors through their conversations and arguments and reasons, attempt to win over the others to convince the others of the estimation of their position (Enserink, 2010). One of the reasons why it is based on that is that it is believed that the quality of the result will increase
when different belief systems are confronted. Additionally, it is believed that, it is believed that through the debate, drivers that caused different opinions between parties will emerge.

After the interviews were conducted, the perspective were analysed by using Toulmin model and which also helped in developing the theoretical framework that would be used to justify the findings in the Discussion part of the paper which would be described later. Below figure depicts the theoretical framework and the manner it is used to analyse the stakeholder’s perspective in relation to sustainability in project management (mainly how the categorise the integration of 3 P’s).

![Theoretical framework developed for Stakeholder perception analysis](image)

Figure 10 Theoretical framework developed for Stakeholder perception analysis
8 Methodology

In the research, the author’s plan of the research design is set through a three phase approach. In the first phase, a theoretical framework would be developed gaining insights on how stakeholders sustainability perspectives influence their project management practices in particular projects (this would help answer the SQ1) and then stakeholder’s perspectives would be mapped in the area of sustainability activities of their project to examine their similarities and dissimilarities using an Toulmin argumentative analysis method (this would help answer the SQ2) and finally, comparative analysis would be done as to how an inventory analysis of the stakeholders perspectives contribute or oppose to their project success (this would help answer SQ3 and finally the main question of the research).

In the first phase of process of development of theory, a systematic literature review methodology of data selection, extraction, analysis and synthesis would be used as suggested by Tranfeild et al (Tranfield, et al., 2003). The author would gather the data by doing a systematic periodic search for articles relating to sustainability and project, using Google Scholar as a search engine, following the recommendation of Bauer & Bakkelbasi (Bauer & Bakkalbasi, 2005), “researchers should consult Google Scholar ..., especially for a relatively recent article, author or subject area”. Although there is a debate in the scientific community on the use of Google Scholar as an academic database (Henderson, 2005), it is also considered to provide “unique options” to the academic community (Falagas, et al., 2008).

The next phase involves the selection of interview respondents working in projects based on several criteria, namely the projects that have sustainability as an active goal. Before the collection of data from interviews, an interview protocol would be developed using the various arguments provided by the literature in the first phase (Sample interview protocol and Interview questions is shown in Appendix 1 and 2). Based on the concepts analysed in literature review, 12 interview respondents would be chosen, who are more closely working in projects related to sustainable development. The 12 respondents would be sent the interview questions via email. Later, based on respondents who seem to be working on projects which are more linked to the research topic would
be selected and interviews would be conducted with four respondents to gather data on their perspectives.

As the interview are conducted and the transcripts made. These would then be used in the third phase which will focus on cross case analysis within which the stakeholder’s perspectives on the difference of opinions and exchange of views would be discussed using the argumentative analysis method (Toulmin method as discussed in chapter 2.6.). Using this altering and debating views of the stakeholder’s perspectives influencing the project lifecycle, sustainability in projects and project management would be discussed followed by recommendation and conclusion.

8.1 Methodology Introduction

As discussed widely across many literatures, sustainable development has become an integrative component of organizations decision making and is integrated in every facet of business with project management being one of the key area of inception (PMI, 2014), so in order to investigate the influence of sustainability in projects and project management from the stakeholders’ perspective, interviews were conducted from respondents working on several projects that have sustainability as one of their goals. Furthermore, from the review of various articles and journals, it is seen that there were very few source of literature available on the sustainability in projects and project management and particularly on the stakeholders’ perspectives.

So, the research methodology that is being used here is argumentative analysis using the Toulmin method. This method is chosen as an alternative method of research using case study as a research tool primarily because of short duration of available for research. Case study are particularly appropriate in an area where the research and theory are early formative stage, in sense in a new or under-developed topic area where the existing theory seems inadequate (Benbasat, et al., 1987). Some features of the process of inducting theory using case studies are the same as in the hypothesis testing approach. At the same time, other features such as within case analysis areas are primarily distinctive and would be considered only for inductive methods in case oriented
process (Benbasat, et al., 1987). This implies that case studies could have been a better approach if the case was an exploratory research involving a number of participants but due to the time constraints and small sample of population size, the research method applied here is using argumentative analysis using Toulmin method.

The author’s initial starting point was to consider articles published in peer-reviewed journals, regardless of their impact factor (Seglen, 1994). But since project management as such is still a relatively young discipline, expanding widely, and potential innovations of the profession in wide areas including sustainability should be considered for social and environmental causes (Silvius & van den Brink, 2014), the concept itself tends to get introduced and discussed on professional level, particularly while conducting a survey, the author decided use argumentative analysis using Toulmin method to as research methodology. In addition to journals, books and book chapters were also considered by the author especially because some of these book considered have received recognition from professional community as being innovative and influential, for example “Green Project Management” (Maltzman & Shirley, 2010). Some limitation on using Google Scholar such as obtaining full publication for analysis (Henderson, 2005), others sources such as databases Science Direct, Business Source Premier, Ebsco-Host and JSTOR would be considered. In the analysis the author further excluded papers that considered sustainability solely to the project deliverable or project result, without any implication for the management or selection of the project.

The subsequent sections bring the methodological consideration for the research. Firstly, the research philosophy would be discussed followed by approach, strategy, choice, sampling and data-collection.

Saunders et al (Saunders, et al., 2009, p. 157) developed a main overview framework to guide the researcher – the “research onion”. It has multiple layers with each layer becoming more detailed from the outside in. It starts with “philosophies” at the outermost layer, progressing through “approaches”, “strategies”, “choices”, and “time horizons”, and with “techniques and procedures” at the centre. The methodology that would be followed is highlighted in circle in different layers of research onion as seen in the Figure below.
8.2 Research Design

8.2.1 Research Philosophy

In the processes of research, building of knowledge is an essential part and there are various views by several authors in the manner of development of this knowledge, but two main views as described by Saunders (Saunders, et al., 2009) are: positivism and interpretivism.

Building of knowledge using the positivism philosophy is characterized by greater emphasis on science and scientific methods and the only sources of knowledge being logical reasoning and
empirical evidence (Griffiths, 2011). It has a sharp distinction between the realms of facts and value and a strong opposition towards religion and traditional beliefs. In broadest terms, positivism relies completely on experience and the goal of knowledge acquisition is strictly from the phenomena that one experiences from existing scientific knowledge (Griffiths, 2011). Researcher following the positivist approach sees science as ways to get the knowledge from observation and is detached about collecting data, emphasising structured methodology for statistical analysis of scientific data (Saunders, et al., 2009). While the positivism perspective tries to just portray the phenomena, interpretivism seeks to discover the points of interest of the individuals to comprehend the truth or maybe a reality working behind them (Griffiths, 2011). Interpretivist approach on the other hand is viewed as the inadequacy of the positivistic approach for social research issues, for example discipline like business and administration are too complex to follow the positivistic definite laws the same way as physical sciences (Ang, 2014). Researchers embracing the interpretivism position to research recognize that rich insights in a complex world cannot be generalized, especially is business and administration research where circumstances are unique and vary upon situations and individuals (Saunders, et al., 2009). Instead of having a concentrated perspective, like in the case of positivistic view of world, where science is seen as a way to get truth, interpretivist approach is more exploratory (Ang, 2014). Also, Ang adds, in interpretivism, knowledge is produced and theory is shaped through developing ideas inducted from interactions of multiple actors, factors and contexts and subsequently observations are manifested from complex relationships between these elements. In addition, interpretivist approach emphasizes on individual differences in the translation of perceptions. In this view, every individual develops their perspective of the world based on their backgrounds, experience, cultures, societies and personal views (Ang, 2014). Since research would build an in-depth understanding of how different perceptions and perspectives of the stakeholders involved in a project having sustainability as one of their main goals deliver better outcomes in terms of environment and the organizations profitability, the philosophy adopted by the researcher is the interpretivism epistemology. The research conducted focuses on collecting data via discussion and observation and interviews, which is in line with the interpretivist paradigm. Another reason for research using the interpretivist approach is its perspective which is based on the view that “people socially and symbolically construct and sustain their own organizational realities” (Gioia & Pitre, 1990). This is in line with the research conducted, which focuses on the perspectives of the stakeholders and
the importance of their perceptions on the integration of sustainable practices in management of projects. The author believes that different stakeholders have different perceptions in the view of their sustainable reporting and hence in that pursuit, author pursues to investigate and interpret the subjective meanings behind the diverse perceptions of the stakeholders, keeping in mind the end goal to gather suggestions and conclusion in the quest for accomplishing the research objectives and ultimately answering the research question.

8.2.2 Research Approach

As described by Saunders (Saunders, et al., 2009, p. 157), there are two approaches for research - the deductive approach and the inductive approach. In comparison to inductive approach which is roughly correlated with positivism, deductive reasoning approach is that it follows systematic logic: one determines a problem and then lists assumptions, finally then proceeds toward a solution or a result. It other words, deductive approach leads to development of theory and hypothesis followed by designing a research strategy to test hypothesis, systematically from more general to more specific, informally also called as “top-down” approach (Trochim, et al., 2015, p. 23). This approach could more simplified as the researcher beginning with a theory of particular interest and then narrowing the theory to build hypothesis to be tested in form of observations that were collected address the hypothesis and ultimately leading to testing of these hypothesis with specific data originating from original theories (Trochim, et al., 2015). On the other hand, inductive approach advances inversely, proceeding from specific observations to broader generalizations and theories, informally also called ‘bottom-up’ approach, where the researcher begins with collecting data from specific observations, evaluate and interpret them, begins to distinguish example and detect patterns and regularities, develops some tentative hypothesis to be investigated ultimately leading to development of some general conclusion and theories (Trochim, et al., 2015).
Additionally, the inductive approach concept (Bendassolli, 2013) depends on creative insight into observed phenomena or experience and would be more applicable to creating new solutions or analysis methods related to stakeholder’s perspectives on sustainable integration in to project management. Also, Gareis (Gareis, et al., 2011) states that, scope of integration of the concepts of sustainability in project management is regarded as an emerging field and is in its beginning phase. The literature being scarce, the current state of research on sustainability in projects and project management is therefore mostly interpretive, making sense and giving meaning to how the concepts of sustainability could be interpreted in the context of projects and its management, rather than prescriptive, suggesting how sustainability should be integrated into projects. This brings the need for the interpretive based research on the manner of integration of sustainability in projects by taking in to consideration the view or the perspectives of the stakeholder involved in the project.

8.2.3 Research Strategy

The research strategy is a generic method of how to go about justifying the research question that takes into account the objective of the research, origin and sources of data as well as the difficulties and constraints that might be experienced in due course of research (Saunders, et al., 2009). It is very important to have a clear research strategy since it enhances the communication via exchange of experiences, facilitates establishment of use of a logical structure by establishing appropriate rules for reasoning, methodologies and procedure of observation and verification (Ang, 2014). There are two clusters of exploration procedure as recognized by Saunders (Saunders, et al., 2009) being quantitative and qualitative research. The previous stresses measurement in the collection of data and its analysis emphasizing quantification while the latter one emphasizes quality in form of words in the collection and analysis of data (Saunders, et al., 2009).

Seidman (Seidman, 2013, p. 39) states that, in comparison to quantitative based research, qualitative research allows for more in-depth examinations of situations, by collecting data and then developing tentative theories as a result of emerging patterns whereas deductive based approach concentrates on the move from theory to data through the confirmation of hypothesis
and propositions. The primary interest of qualitative based research is to achieve understanding of a particular situation, stakeholders as individuals or group of individuals (Bazeley, 2013, p. 3). Bazeley further ads, qualitative methods are primarily inductive and researchers adopting the inductive approach are more likely to work with qualitative data and tend to operate within a non-positivistic philosophical domain or field. Therefore a qualitative approach with an interpretive philosophical stance using inductive reasoning has been adopted for this research.

8.2.4 Sampling –Selecting Respondents

Sampling is a fundamental part of any bit of research because of noteworthy effect it can have on the quality of research findings and results (Merriam, 2014). Sampling provides the researcher with various dimensions and range of methods providing a logical way to reduce the amount of data that the researcher needs to collect by focusing only on the data from a target group rather from all possible cases and elements (Saunders, et al., 2009). The two types of sampling techniques provided by Saunders are: probability sampling and non-probability sampling. The former one requires the researcher to measure statistically the attributes of the population while the later requires the researcher to make statistical summarization of the characteristics of the population.

Since the perspectives of the stakeholders involved directly or indirectly having a stake in the sustainable outcomes would be visualized from various categories or angles, it would be beneficial to dividing the population having wide range of attributes, experiences, qualities, behaviour, circumstances and situations. The objective of the research is to gain perspectives of the stakeholders, which might be similar and sometimes conflicting to gain greater insights in to the phenomenon of sustainability by looking at from various angles of the stakeholder’s views. Concurrently this is in accordance with maximum variation sampling which is a type of purposive non-probability sampling also known as heterogeneous sampling. The researcher devised this sampling technique by following a step of rules as suggested by Saunders (Saunders, et al., 2009, p. 234), depicted below in figure 11.
With the help of Saunders technique of selecting the sample population, the researcher was able directly address the way the respondents would be chosen for his study. First of all the information was not to be collected from complete population, then since it is a qualitative research gaining from the perspective of stakeholders, statistical inferences need not be made from the sample. The research is based on sample size which is quiet small with argumentative analysis not needing exploratory research, purposive sampling was selected with a particular focus on heterogeneous
group was used to capture wide range of perspectives relating to sustainability in project management.

8.2.5 Plan of Completion

Below is the list of steps for plan of completion undertaken by the researcher:

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete literature review and conduct pilot study</td>
<td>26 days</td>
<td>Thu 4/23/15</td>
<td>Thu 5/28/15</td>
</tr>
<tr>
<td>Review of organizations actively involved in sustainability in projects</td>
<td>25 days</td>
<td>Mon 5/4/15</td>
<td>Fri 6/5/15</td>
</tr>
<tr>
<td>Gathering required information on critical stakeholders</td>
<td>11 days</td>
<td>Fri 5/29/15</td>
<td>Fri 6/12/15</td>
</tr>
<tr>
<td>Developing a project charter for interview questionnaire</td>
<td>6 days</td>
<td>Tue 6/9/15</td>
<td>Tue 6/16/15</td>
</tr>
<tr>
<td>Scheduling appointments with selected participants</td>
<td>6 days</td>
<td>Mon 6/15/15</td>
<td>Mon 6/22/15</td>
</tr>
<tr>
<td>Rescheduling of interviews and collecting data</td>
<td>10 days</td>
<td>Fri 7/3/15</td>
<td>Thu 7/16/15</td>
</tr>
<tr>
<td>Reviewing the data collected with help of my mentor</td>
<td>10 days</td>
<td>Mon 7/20/15</td>
<td>Fri 7/31/15</td>
</tr>
<tr>
<td>Analyzing the data collected</td>
<td>4 days</td>
<td>Mon 8/3/15</td>
<td>Thu 8/6/15</td>
</tr>
<tr>
<td>Rough draft of the entire dissertation</td>
<td>4 days</td>
<td>Wed 8/12/15</td>
<td>Sun 8/16/15</td>
</tr>
<tr>
<td>Make necessary amendments to the draft with help of my mentor</td>
<td>3 days</td>
<td>Mon 8/17/15</td>
<td></td>
</tr>
<tr>
<td>Presenting the final draft</td>
<td>1 day</td>
<td>Thu 8/20/15</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Plan of Completion
Fig 2 – Plan of completion is depicted via Gantt chart below showing the timescales

Figure 13 Plan of Completion
3.2.6 Research Ethics

- Would need a consent letter from DBS - The ethical issues would be handled by getting the required documentation on consent from DBS would be acquired with help of DBS staff and trustworthy relationships would be maintained with the client

- Would maintain data privacy regarding the sustainability approaches of organizations
- Will maintain confidentiality regarding environmental damage by organizations if any

9. Data Analysis and Findings

As the research primarily focuses on collection of data by using the stakeholder’s perspectives, interviews would prove the most efficient and competent tool and would present a deeper understanding of the problems and issues at stake (Sharma & Bowen, 2011). This direct and practical method is aligned with the nature of the research.

Conducting interviews not only assisted in validating the literature and the theoretical framework developed in the literature review, as discussed in chapter 7 but also helped in gaining deeper insights in the reasoning behind the varied perspectives of the interview respondents. This was a crucial element of the research since the various arguments presented in the view of the stakeholders perspective would result in a method of argumentative analysis, a practice that requires an in depth approach with the respondents.

The research is be done by conducting semi structured interviews with four stakeholders actively involved in integrating sustainability in to their projects. The questions that were be asked were open-ended questions. These interviews that were executed with people at different positions in the company with different backgrounds were related to implementation of sustainability in projects through the execution of strategies and the influence in the decision making. This reason
for this is the quality of data that were gathered from the elaborative answers of the respondents in a conversational way, providing a deep insight in to the issues and compelling details can be gained (Sharma & Bowen, 2011). This chapter presents the findings of the research which is gathered from the interviews conducted and their transcripts prepared, in an illustrative manner using Toulmin model as discussed in chapter 7.6.

R1 believes that the project is categorized as sustainable (claim) because by the use of renewable energy in the transport sector for example by the use of PPO (pure plant oil) instead of diesel and by the use of electric vehicles, would help the customers to reduce their energy usage and lowers down the energy bill (ground). Moreover by using renewable energy, helps the companies and organizations to build a brand name and be ISO50000 certified in the field of transport, evidently the project relies on these companies to have expertise in their field (ground). ISO50000 provides standards to organizations and companies for all three dimensions of sustainable development: social, environmental and social (iso.org, 2011). This requires that the process of the projects be in line with the 3 P’s. In short, the stakeholders involved should have a balance of social and environmental causes while focusing on the profits. R1 being an energy consultant for past many years argues that, for companies to make profits, the involvement of the customers is of great importance and he says, the business could flourish by ways spreading the word through mouth. Even though, social networks can add some benefits, the best way for the business to grow and make profits is through active involvement of people. As R1 further states, advertising on twitter has not helped him gain more business but people’s involvement has done.

On the environmental side, using the renewable energy in the transport sector (such as use on PPO instead of diesel), will cause reduction in usage of fuels by 10-20% and about 3-5% per year (warrant). Whereas, on the profits side, if customers completely switch (a straight comparison between a diesel engine and an electric engine like electric car, electric fan), would add 50-70% reduction in running costs (warrant). And on the social side, using of electric vehicles, customers would have a better image in society and eventually, the electric vehicles company would have a better brand level (warrant). By maintaining an equilibrium between people, planet and profits through several activities specified prior are the perfect type of projects in terms of sustainability,
so presumably (qualifiers), this project can be categorized to be in line with definition of sustainable development projects as qualified by Silvius (Silvius & Schipper, 2014). Since the project emphasizes on the use of renewable energy in the transport sector, dropping oil prices plays an important role. Reducing oil prices can cause a massive impact on the implementation of the project since customers would tend to not invest more on adopting to new means of transport and end up in using their original means of transport (Rebuttal). Secondly, the growth in the economy would have serious consequences too, meaning the companies wouldn’t care about reducing their costs and reducing their emissions, they would make more from the growing economy and would have must less time thinking about integrating sustainable measures to make profits, no matter how much interested they are and have the time to do it (Rebuttal).

R1 firmly believes that peoples beliefs and contribution to the sustainable activities of the project, can lead to project success or failure. They need to believe that they could make money out of it, balancing the credibility ratios. He further add, one cannot sell energy efficiency, if people don’t see they are making money of the project activities might cause the project to not meet its goal or even the project to get canceled. One of the solutions to that, as stated by R1, is by providing energy performance contract and provide measurement and verification services to the projects that R1 conducts. This provides funding from the government but it is also viewed as risk, especially in the transport sector since the government funding’s doesn’t cover the transport sector and R1 is working on it.
The discussion and arguments from R1 are translated into Toulmin model as shown below:

**Figure 14 Toulmin Model for Respondent 1**

R2 is working on renewable energy area in the solar space. Being the CIO of his company, he is also a subject matter expert in the solar energy space, investment and equity. More or less R2 has similar perspectives in the area of sustainability but more emphasis is given on the planet and social side. R2 believes solar energy is the future of energy consumption, considering the depletion of the natural resources and so he believes energy saving by the use of solar energy is categorized as sustainable project (claim). Considering the view that solar energy, which basically come from endless source, the sun, and its production and consumption, which causes reduction in the CO2 emission, providing better alternatives as compared to the natural resources could be seen as the future of energy consumption (Ground). R2 also states, due to regulations from governments, central bank from the finance point of view has caused the projects to involve many companies...
that are experts in the field (Ground). By using energy from renewable source such as solar, will cause reduction in the use of energy from natural sources and will also reduction the distribution costs of energy from mains stations to consumers since solar energy can be produced right at home or the site of its intended use. Additionally, it also reduces CO2 emissions (warrant). Another important aspect of the use of solar installations is the amount of employment opportunities it has created, particularly in the area which are not commercially developed but provides ample amount of land and sun. This is evident from R2 statement found in interview transcripts for R2 in Appendix 3, “I think there were 300,000 people directly working on the solar projects, also addition to that you have further services as required as accounting and so on engineering that may not work directly but are affiliated with it and that goes up to half a million to million”.

The arguments are in line with definition of sustainable or green projects as stated by Silvius (Silvius & Schipper, 2014). Projects that cater to the needs of people, planet and profits by catering to the needs of social, environmental and social aspects and integrating them into projects (backing statement). Nevertheless R2 argues that, due to low investment returns from the solar area and companies being diverted to investments such as large pension funds, solar projects might face delay or even cancellation due to not providing high rate of returns as others (Rebuttal). Also, in future, the advent of other energy producing technologies such as ‘fusion’ may cause solar projects to run out of competition (Rebuttal).
The discussion and arguments from R2 are translated into Toulmin model as shown below:

Figure 15 Toulmin Model for Respondent 2

R3 specializes in energy management services and has been in engagement with production of renewable energy source through production of bio-mass energy. R3 has a slightly different perspective giving more importance towards the environmental side. So he believes, project is more sustainable project but the emphasis is more towards the planet side (claim). According to him, more energy can be saved and less heavy fuels can be burnt by the use of biomass along with the solar boilers (ground). R3 believes that the benefit of using biomass is not only helps in reducing CO2 emissions but the benefits it serves to the community. Use of biomass facilitates the living of co-operative nature to deliver sustainable solutions to the environment itself. With an example of milk production and distribution, R3 states using of biomass energy by consumers not
only reduces the consumption form natural sources but also helps in reducing CO2 emissions (warrant).

These arguments by R3 are more inclined towards the environmental level and has less importance given towards the social and economic level which is in line with the sustainability definition from Silviu where he states, a project that emphasizes more on the ecological level and gives less importance to social and economic levels are called green projects (backing statement). However, lack of clear direction from the central government may cause less investment inflow in the project and project timeline may be delayed due to changing regulations (rebuttal).

The discussion and arguments from R3 are translated into Toulmin model as shown below:

Figure 16 Toulmin Model for Respondent 3

R4 is project engineer and Leadership in Energy & Environmental Design Accredited Professionals and looks over at building regulations project compliance. R4 states that energy
saving in buildings need meet the sustainability regulation as specified by BR (Building energy ratings) and also needs to meet the Façade standards like massing, orientations. R4 argues that energy saving through green roof projects and rain water harvesting projects in building constructions address the sustainability aspects that make them sustainable projects. In short, energy saving in building constructions is categorized as sustainable project (claim). By the use of green roof, and roof insulations reduces the energy use from natural resources as well as by rain harvesting, preserves the natural energy sources. It also reduces the energy bills of the buildings (houses and companies where it is deployed) (ground).

By using green roofs and roof insulations, will lower the energy used by the buildings from other natural sources along with reducing CO2 emissions (warrant). Having reduction in the energy costs, companies can use the same in their other productions and manufacturing needs (warrant). By standardizing the buildings on the rate of their energy ratings, would involve more local companies, meaning more profit for them (warrant). By maintaining an equilibrium between people, planet and profits through several activities specified prior are the perfect type of projects in terms of sustainability, so presumably (qualifiers), this project can be categorized to be in line with definition of sustainable development projects as qualified by Silvius (Silvius & Schipper, 2014).

Meeting BR project standards would mean satisfying various credits and standards, which would eventually mean use of sophisticated LEED energy modelling tools, software and agencies costs. This would mean the projects costs going above the project budget. Also the scalability of projects may restrict the use of SBEM software that calculates the project compliance in the BR ratings. The more bigly the projects, more is the challenge of using sophisticated software for the project to be successful. So addressing the project costs and innovations in the project may cause the project to get delayed or even fail (rebuttal).
The discussion and arguments from R4 are translated into Toulmin model as shown below:

![Toulmin Model for Respondent 4](Image)

In this chapter, the different perspectives of the stakeholder would be analyzed that would help the researcher review his work and guide him to interpret his results from his findings developed from data analysis discussed in chapter 9. It would also assist the researcher in answering his research questions.
question and a detailed discussion would be presented, using the findings from chapter 9, on how the research has contributed to the area of the research which would eventually lead to generalization of conclusions and recommendation future research, which would be discussed in the following chapter 11, conclusions and recommendations.

R1 justifies his project to be sustainable since using renewable energy sources in transport sector for instance pure plant oil, electric vehicles, reduces the energy used from other natural sources such as diesel eventually reducing CO2 emissions, and lowers the energy bills of the consumers and production costs of companies. As R1 said “Using PPO and electric vehicles, you will typically end up using 10-20% less fuel about 3-5% per year is what you manage. That’s pretty good and then if you switch and do a straight comparison between a diesel engine and an electric engine like electric car, electric fan, it would add a 50-70% reduction in running costs.” This is in line with the perspective of R2, where he justifies, the project is sustainable because, use of solar energy would not only reduce the CO2 emissions from the use of natural sources but will also cause reduction in the energy bills of the companies and individuals using solar energy. Furthermore, it would also reduce the shipping and distributions costs for energy providing companies since solar power can be generated in the area where it is intended to be used. Also, R2 adds, solar power installations in areas which are deprived of commercial developments but with ample amount of sun and land has created enormous employment opportunities. This is seen from R2 statements. “I think there were 300,000 people directly working on the solar projects, also addition to that you have further services as required as accounting and so on engineering that may not work directly but are affiliated with it and that goes up to half a million to million”. Overall R2 wants to address that, solar projects not only has given contribution to the planet side but also the people side from the 3P’s and ultimately, both the projects from R1 and R2 have main focus on profits.

In the view of project management helping creating better outcomes in sustainable projects, R1, through his 20 years of experience in project management, shares a view that, that project management helps to formalize the projects and with the use of one of project management tools, measurement and verification, R1 assures of gaining customer satisfaction and which is why he has his job. Whereas R2 states, project management helps in realizing the goals of the project, what actually needs to be achieved. Using tools such as change management helps to get organized
especially when working on big projects. It is seen from R2 statement, “I think the most difficult part because what it does when it comes to around these big projects is actually change management much of what is from project management because the changes are all the time and it affects everybody so I think the first step and the most important step to proceed on is to get everybody on the same page pull them into interaction.”

While both R1 and R2 identifies stakeholders perspectives play an important role in the success of their sustainable projects, they both have a slightly different view in which they analyses the stakeholders perspectives to achieve their project success. R1 emphasizes more on the money part to attract consumer and in directly help in the environmental cause by stating. “Show the client that by becoming more energy efficient, they make money that reduces their emissions and it reduces their costs”. On the other hand R2 states that it’s very important to gain the stakeholders perspectives at the start itself since it leads to process improvement and build relationships with them eventually helping in projects to move faster.

In addition to the consideration of the stakeholder’s views in the success of the project, R1 and R2 also identifies several risk factors involved (Rebuttal). R1 believes that finance plays an important role in the success of the project and may deter the participation of the critical stakeholders while R2 believes more in catering to the feeling of the stakeholders that may lead to project success. R2 beliefs are also in line with R1 on the finance part, where low investment return may deter the stakeholder’s participation.

To conclude, from the arguments from R1 and R2, they both justify that energy saving by the use of renewable sustainable energy would make the project sustainable since the project results would contribute to the 3P’s. Subsequently, other important factors for project success would depend on catering to stakeholder’s needs, relationships, finance, funding and communication.

R3 has a slightly different perspective than R1 and R2 but here the projects are called sustainable because the more importance towards planet side and less towards social and economic side. Through his arguments, “the biomass energy projection so that was a project that was a project that was identified by one of our clients where we wanted to reduce the CO2 emission from the
“facility.” It seen as the project is sustainable because the project used energy source that is sustainable and the project aims to reduce CO2 emissions. An additional component contributing to planet focused approach is use of solar boilers along with biomass, to save more energy and reduce use of fuels. To make the project aligned to the other 2 P’s, R2 appreciates the view of mandating energy performance improvement target for every organizations.

R3 also identifies the risk factors such as, lack of clear direction from the central government may cause less investment inflow in the project and project timeline may be delayed due to changing regulations. Thus through the arguments of R3, it could be summarized as, some stakeholders show a different perspective on justifying a project as sustainable. Consequently some measure must be taken to make the project achieve its sustainability goals as mandating energy performance improvement target for every organizations, more clear direction form the central government, steady regulations.

R4 states the various standards for a project to be sustainable, the regulations that the project must abide to give sustainable outcomes. R4 believes that by abiding to the standardized ratings, the building can give sustainable results but the process of getting there is not sustainable process. However the results end up in saving energy and less CO2 emission, which make the project more sustainable. Thus it could be said the project is sustainable looking at the end results but the process probably are not entirely sustainable.

R4 do suggest some improvement to achieve success such as the use of innovative technologies in the implementation of the projects. R4 lists out some challenges and risks involved such as matching up the expectation of all the stakeholders involved simultaneously balancing the project budgets and meeting the sustainability standards in parallel with the project cost.

To conclude, R3 and R4 have different perspectives than each other and also from R1 and R2. It could be summarized as R1 and R2 categorizes the project to be sustainable because it contributes to the 3P’s, whereas R3 believes the projects to be sustainable because used energy source that is sustainable and the project aim to reduce the CO2 emission. Lastly, R4 believes the project to be
sustainable looking at the end results of the project but the process probably are not entirely sustainable.

The research aimed at judging or analyzing the perspectives of the stakeholder on the sustainability aspects would contribute on the positive outcomes of project management practices. The implication of findings of the research would help to answer the research sub question, which would eventually lead to answer the research main question.

The interpretation would begin by the justification of research findings in answering the first research sub question:

SQ1: “what are the perspectives of stakeholders on sustainability in projects?”

SQ2: “what are the similarities and dis-similarities between their perceptions?”

To answer the first and second sub-question, as primary research, interviews were conducted with stakeholders involved in sustainable projects in their organizations, also it helped to serve as a mean to validate the theoretical framework developed in the literature review which is described in detail below.

It was found that, for a project to be measured as a sustainable project, all the stakeholders had a background view that it satisfies the basic grounds of sustainable objectives of environmental, social and economic eventually judging the potential project contribution to the 3 P’s. However different stakeholder had different emphasis on the on the concentration on 3P’s (People, planet and profit) on their project goal. R1 did give a general importance towards the other 2 P’s but focused more on the Profit (P), considering the projects, he is involved. According to him the sustainable contributions from his projects in the transport sector, money was of prime importance for the project to be successful but his projects did contribute in smaller terms on the other two P. On the other hand R2 categorized his solar projects to contribute immensely to the social aspects but did all quiet well on the environmental side too. His perspectives on the project success was
more inclined towards the stakeholders mutual binding and building relationships. On these R1 arguments also acknowledge his project success through word of mouth, referrals, which in itself calls for building relationships. R3 believes that his projects account for sustainability due to more importance given to the environmental side which were seen do contribute quiet in terms of R1’s perspective and to an extent to R2’s. His arguments are more inclined to the view that project would be called sustainable with higher priority given on the environmental aspects. This is in conjunction with R1 and R2 beliefs where R3 devises additional measure to contribute more on the environment such a sin addition to biomass, he proposes to facilitate project developments by use of solar boilers. On the contrary, R4 believes that whole process of moving to the sustainability goals of the project is achieved on the outcomes of the project. The process do need to adhere sustainability standards of her projects (BR ratings) but do not identify the process to be sustainable and only the end results can judge it.

From the discussions in the data analysis and findings and from previous section, has helped to validate the theoretical framework developed in literature review. By conducting interviews, the researcher was able to perform actor analysis and gain the stakeholders perspectives and objective related to sustainability in their projects. These actions were then compared using Toulmin model to finally analyze the stakeholder’s perspectives to answer the research SQ1 and SQ2. As seen from the figure below, the processes from the grey area has helped us answer the research SQ1 and SQ2.

Figure 18 Theoretical framework - Stakeholder perception analysis

The findings has let to categorization of the stakeholders views in to four main perspectives.
R1: Project is sustainable because it contributes to profit part of 3 P’s in larger terms but it also have smaller contributions towards planet and profit.

R2: Project is sustainable since it high amount of impact on the social side with average on environmental and economic side.

R3: Project is sustainable because it contributes more the environmental side since the product under consideration has sustainable features.

R4: Project is considered sustainable since the end results show sustainable outcomes but the processes is itself not sustainable.

The progressive advancement of discussion has let the researcher to answer the fourth sub-question.

SQ3: How could an investigation of stakeholder’s perspectives measure sustainability integration in project management practices?

To answering the SQ3, the researcher employed the literature review conducted and the theoretical framework developed. The arguments from theoretical framework developed that was derived from research done by Silvius (Silvius & Schipper, 2014) that sated. “Sustainability in projects and project management is about integrating economic, environmental and social aspects in the management and delivery of projects.”

The argument emphasizes the importance of integrating sustainable activities in management, execution and governance of projects. However the results derived from the findings that led to different perspectives of in relation to sustainability in projects. It as seen from the perspectives that, although the stakeholders categorize their projects as sustainable a high importance was given to the economic aspect as performance indicators and various other version on inclusion of planet and people aspect in execution of projects. R1 feels that money is the only driving factor for the stakeholders to be involved in sustainability activities and through money only can lead to project activities being engaged in social and environmental factors. Whereas R2 and R3 also believes in profits is the ultimate goal of any project execution but their projects have shown immense contribution on social and environmental factors. On the contrary, R4 perspectives state that, even though these performance indicators are being used while execution of projects, it is only measured
from the end results which means the integration of sustainability in project processes in not really seen.

Based on the critical analysis of the stakeholder perceptions providing answers to research SQ1, SQ2 and SQ3, the researcher is now able to answer the research main question.

“What are the perspectives of stakeholders on integrating sustainability in projects and how it could be integrated into project management?”

From the in depth examination and investigation of stakeholders perspectives, the researcher is able to argue that it catering to stakeholders perspectives is very important in project management practices and the manner it is analyzed play an important role on the project success. It is indeed evident from the research, where the author has found increasingly differentiating views of the stakeholders with priorities varying extensively on the integration of people and planet indicators but it would be better to have an aligned perspectives on the management and delivery of the projects for all the stakeholder involved in the process. As one of the respondent R2 states that. “I think the first step and the most important step to proceed on is to get everybody on the same page pull them into interaction.” This can be achieved by emphasizing more on the project communication part, by involving the junior management on the micro-aspects of the project and a having a disciplined way of communicating the senior management so that all the parties involved are on the same page of achieving the sustainability goals of the organization. This would not only help building relationships but also would reduce conflicts arising out of the different stakeholder perspectives and then manage them to get them aligned to have a leveled approach while working on their projects. Additionally, the way the stakeholder balance their views on the performance indicators and frame their projects as sustainable would not only help them to work in a coordinated manner but the resulting project success involving benefits equally to environmental, social and economic factors would help them build a brand image of their organization
11. Conclusions and Recommendations

As seen from the findings through the perspectives of stakeholders, it is evident that projects must implement and stress on the sustainable goals right from the start and during project execution. As also stated by Silvius and Schipper (Silvius & Schipper, 2014), “For an organization to realise its sustainability goals, sustainability principles must be integrated in every step of project management framework, from project selection through risk and communication management.” But this is not easy since the level of uncertainty is more majorly because project success criteria is focused towards the financial aspects of projects. This is seen from the challenges and risk factors that the respondents have stated such as government unclear regulations, lack of funding towards specific sustainable projects, low investment returns, advent of new technology that may hamper the use of a particular sustainable product. Furthermore, Silvius argues that if an organization decides to select projects based on sustainability criteria, then only those projects would be selected that would move towards long term goals. However the researchers from his findings suggest that while simultaneously catering to the projects constraints of cost and budgets, incorporating emotional values into stakeholders by explaining the profits of catering to environmental and social benefits for them and their future generation would be an ideal way for the objective of the research to be met which stresses on stakeholders involvement in creating sustainable outcomes through project management practices.

The researcher is also enlightened by another important way of stimulating sustainability into project management practices which the researcher is illuminated from his finding, particularly from R4, is through sustainable innovations which is more likely to be driven economic opportunities as argued by World Economic Forum (WEF) on their report on simulation of sustainability (WEF & BCG, 2011). The report argues that the solutions for sustainability simulations lies with innovation and endeavour of business pioneers committed to environmental and social enhancements. As seen from the arguments of R4 were she emphasizes on use of more innovative technologies in the building sector such as roof top insulations, rain water harvesting use of energy efficient glass in making of buildings with a capability of even producing energy though solar power, organizations can be compelled with the use of sustainable products and green
their product and project portfolios while maintaining the satisfaction of their shareholders. Another interesting example as seen from R3 is where while implementing project on biomass, the processes could be made more sustainable by use of solar boilers. Whereas in the case of R2, innovative sustainable technologies and their implementation in land where there is less economic activity but ample of land and sun has caused many employment opportunities simultaneously stimulating sustainability in projects. Last but not the least, in the case of R1, with future technologies inventing energy efficient eclectic cars and motors, bio-degradable fuel such as PPO (pure plant oil) would stimulate companies and people to implement sustainable activities as their prime organizational goals.

Another good exercise for integrating sustainability would mandating energy performance improvement targets by every organizations as advised by R3. The active role of governments and regulations play an important role here. It is seen from the research that the stakeholder had big challenges in implementing sustainability due to unclear regulations from governments, lack of funding’s, ever changing policies and reforms. A good approach that can be implemented here is through financial support from government and other institutions in the form of incentives and rewards to companies and individuals based on their sustainable performance indicators. This would not only help companies adopt to sustainable measures in their projects but also help in improving their brand image and be seen as green companies. In addition to this, the companies can also follow this process and award their employees and customers based on their sustainable adoptions. This gradual process would assure the integration on sustainability not only in organizational projects but also would be stimulated in individuals as a whole. On good example of this could be seen from CDP report 2011 (PWC, 2011), where employees were rewarded monetarily through incentives for their sustainable actions of managing climate change issues. The report showed a significant rise in number of respondents providing monetary incentive to their staff for managing climate change issues, from 49% (188) respondents 2010 to a whopping 65% (259) respondents in a year.
From the findings and discussion the research seem to contribute largely to the literature. First and foremost, the research has contributed to already researched area of sustainability in project management, adding new insights to it. The research has then explored a specific area of stakeholders perspectives as one of critical and essential method to investigate the relationship between sustainability process and project management practices, further enriching the existing literature on sustainability and project management. From the literature review it is seen that integration of sustainability in project management is comparative new area and researches conducted up till now were only theoretical based, showing no practical grounds. After critically analysing the literature and eventual development of theoretical framework in parallel to conducting practical interviews, the research was successful to a certain extent fill in the gap between theoretical and practical concepts by analysing and providing the stakeholders perspectives. It could be seen as a good comparative analysis of the real world and what was contemplated by various authors in their researches.
Secondly, the research through the perspectives of stakeholders was able to enhance the method of argumentative analysis by the use of Toulmin model. It provided a good base for analysing the arguments of the stakeholders in view of their perspectives even though it was used as a part of disclosure analysis method previously in the discussion of policy studies. Having proved as a good instrument for analysis, there can be various other methods in better analysing the perspectives of stakeholders which would be more coherent with study of related works on sustainability in projects that could better fit in exploration of the needs of research.

11.1 Recommendation for further research

Due to limited amount of time for the research, respondents were chosen which were from the field of sustainable development and who had quite a many years of project management experience, so the respondents were narrowed down to four of them from the likely 12 best ones. They were into varied fields of sustainable developments such as owner of organization, energy consultant, subject matter expert, innovation energy regulator, investment advisor for companies related to sustainable activities. A more innovative that could be employed to enrich the findings could be by choosing multiple respondents from similar projects which would help the researchers make a comparative analysis of the stakeholders behavior while working on same project. Organizations such as NGO’s, governmental departments and institutions, research and development institutions, environmental enthusiastic communities and last but not the least, local residents who are already using sustainable products and who are not. Having done so, other stakeholders from other similar projects but from a different domain of sustainability could be used to make a comparative analysis with the first bunch of stakeholders. This would not only help gain the perspectives implications of the stakeholders working on similar projects but a comparative analysis with second bunch can give the different approaches implied and their effect on the project outcomes can be measured. In other words, one bunch of stakeholders from one sustainable domain could be compared with another bunch from another sustainable domain.
Another area of improvement that could be implemented is conducting research on projects that are long term oriented and have been completed, this will enrich the findings since the stakeholders would have already gone through complications regarding their perspectives conflicts, different change management processes implied, so that they would have more experience on the project. Additionally, the research would gain more knowledge from the process itself rather than from the project outcomes.

Furthermore, the research could focus on projects that are not related to sustainability. The outcome of the research may result in demonstrations where although these projects do not deploy sustainable activities but they do strictly measure several sustainability indicators.

Finally, the research could be conducted using other methodologies other than Toulmin method to develop a more comprehensive theoretical framework. In conjunction to this a combination of several methodologies could be considered to get deeper understandings of the stakeholder’s perspective since the results may vary in the different methodologies implied. Concurrently, conducting brainstorming sessions and meetings with the stakeholders would help to validate the findings developed from the different methodologies induced.

12 Reflection on learning and skill development.

At the early stage of my course, I was unaware of what MBA would give me with respective to enhancing my knowledge or adding value to my skills and expertise. After completion of nearly ten months of my course, I cannot say I have learnt a lot but for sure have enhanced my skills in different area of my personal development. In broadest terms I can say I have now changed in the way I look at things and tackle at any issues that come across. One of the best things that I learnt during my course is not to just follow the rules and procedures of doing things but come out of the lazy attitude and articulate new and creative methods and build innovative ideas. I learnt this through my assignments conducted where even though having a limited amount of information of different fields (like finance, IM) I articulated different methods though extensive research simultaneously gaining knowledge.
I am very much enthusiastic on new technologies and innovations, particularly in the field of use of sustainable energy. I read several articles and watched videos on the same and also attended a few events, especially, ‘DBS innovation summit 2015’ that gave me massive insights on technologies today and the current adoption of sustainable developments. I was captivated with the idea of immense technological change taken place in the past couple of decades which never took place for centuries before and enormous importance given to the use of green sustainable renewable energy following the environmental concerns which is a main area that I have passion for. I used my library as a primary research tool and read scrutinized recent journals, books on sustainable development and project management and talked about it with my mentor and classmates on the plausibility of the research topic which help me craft my research topic. I used various other online tools as google search and particularly google scholar which gave huge data bank and also helped in developing my search techniques. While is due course I was diverted by extensive amount of data that was not relevant to my topic and I even had made serious modification to my topic and I concentrated the most on the topic that interested me the most and which met the constraints of time and the nature of the information that best suited my research objective and question. At start I was even confused as to what exactly suits my research and this even gave me cold shivers. I even used to dream about my research topic and my thoughts went aggressively viral, thinking about more ideas and ways to proceed through my research. I recalled the way I did my previous assignments but it did not help much, however, lectures from professors, presentation, and classroom case study analysis helped me. I improved in my communication skills and my behavior increasing became patient. I became more self-confident and through project management tools, I improved in self-management skills by use of conscious approach towards not only my project but in life also.

Firstly I applied a general planned search strategy of reading thorough various articles, journals related to my research topic, than filter them to the most appropriate ones that helped me critically analyze the discussion on my research topic. In the process of my research, one of the main challenge that I found was getting the complete article of my research interests, where I sometimes
found only the indexes and abstracts. In these cases, I went about reviewing the bibliography of these articles and places where my area of interest have been cited. Google scholar provided me immense help in such cases by helping me gain access to similar articles of my interests, it helped me find relevant books that were not in library by providing me book chapters, gain more references by guiding to variety of articles where other authors have cited their research. It also helped to gain access to full reviews of articles which was not provided by organizational websites as Science Direct, Business Source Premier, Ebsco-Host and JSTOR and HBR. In this process, I discovered various newspaper articles from other researchers similar to my field of study that helped me do a comparative analysis by looking at their views. Another tool I used in gaining practical knowledge on my research was from LinkedIn and Facebook. LinkedIn helped me connect with personnel of my similar interests and gain useful information while Facebook helped me get them connected and discus elaborately due LinkedIn constraints of messaging and Inmail, even after being a premium customer of LinkedIn. This was a serious problem I encountered in making contacts but by parallel use of other social networks, I managed to tackle them. With this experience I eventually developed a new learning style, called as social or interpersonal learning style, where, as Kolb (Kolb, 2007) describes as a style you prefer to learn from other people. I would surely contact people with similar interests and gain useful information at early stages if I would be provided the opportunity again to conduct a research. I improved extensively on my research and writing skills after working on my assignments and project management literature and especially while researching on my dissertation on the way of approaching and managing time simultaneously setting goals and working progressively to achieve the intended goal. These skills were a serious lack me before and it has not only made organized on my academic activities but also on social grounds too.

I maintained notes from my lectures and I measured my skills improvement level by using Honey and Mumford’s learning style (Honey & Mumford, 1986), which was taught in one of my lectures.
During my early months, I achieved a score of 16 for Reflector which was my highest and 13 for Activist, which was my second highest. According to Honey and Mumford (Honey & Mumford, 1986), Reflector are people who learn by observing and Activists learn by doing. Even though, people learn all their lives, but guided approach provided to me by my course and working on my research, helped me identify my learning preferences, style and eventually my attitude and behavior. This proved to be true when I did a re-test recently and I got a highest score for Activists.

In the initial phases, I assumed that my primary and secondary data that would be collected would be from interviews and library and to some extent online resources. But as I proceeded through my research I found increasingly new forms of data through company mission statements, their annual reports, for example in my financial analysis I came to know about company reporting standards as to be primarily profit focused but during my research I came to know a new emerging type of reporting standards called as sustainable reporting. Another example is the information I got from online contacts (LinkedIn and Facebook) such as environmentalist and professional working in non-profit organizations spotlighting sustainability, which I never imagined could be a
good feedback on generating findings for my research. Although there was a vast amount of data available on sustainable developments, only those articles were considered that focused on the perspectives of stakeholders involved that added significant contributions to sustainable success. A major learning outcome of my research was that project management techniques are increasingly being undertaken by various organizations and at various levels where sustainability is not an exception and gaining increasing importance. However it is also not concentrated in the area of project implementation that created a need to study resources outside the project management discipline.

The literature on my main research theme was quiet less, so constantly kept searching on strings that would be contributing to my research and made a list of the most relevant and important ones while not ignoring the ones that were of little significance. After extracting the relevant information from vast literature on the main theme of my research, I then explored other researchers that contradicted the views proposed by authors that supported my research. A very new and impressive finding that I was marveled was the integration of sustainable activities in the annual reports by companies. I was also surprised by many innovative ideas that led to generation of sustainable energy such as future electricity could be produced through movement of humans. There are various other ongoing research and projects on the creation of energy through natural ways and the current literature provided quiet less amount of information of managing these projects through effective monitoring of stakeholders views and due to this it was concentrated mostly on the current research that focused on effective stakeholder engagement in organizations, then compared these methods with articles that focused on sustainability in project management to critically analyze the procedures where stakeholder engagement lead to the success or failure of the projects. The outcomes were a bit disappointing since even though sustainability had been given importance but profit and money were given a higher importance than the environment and the only effective way to for sustainability to reach the heart of the stakeholders was by changing the way they see the world, in short, stakeholders perspectives were of utmost importance if sustainability was to be implemented through project management or any other way.
Past few months of extensive research has taught me use of effective planning and control and adopting strategy of looking into detail. I would not say I am completely skilled in this knowledge area but have improved to a certain extent. I see myself consulting my fellow classmates which led to an integrated and creative learning experience. I was really surprised at the content and happiness I got after knowledge sharing. I not only gave knowledge but in the process gain even further. I do make better calculated decision now, but I need to be more determined and keep on learning from my past and make reflective decisions. For example, I am striving to pursue PMP certification from past couple of years but have not succeeded in making an active start. But now I have designed a plan with a timescale of less than six months and would start working on it as soon as completion if my dissertation
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APPENDIXS

Appendix 1 – Pre-Interview Email and Confidentiality Information

Dear Mr/Mrs, My name is Ashish Zambre, studying MBA in Project Management from Dublin Business School. It is pleasure to work with you and would like to thank you for your participation in the research and for your valuable time.

Research Objective – To investigate Stakeholders (your) perspective on sustainability in projects and project management.

The goal of the interview is to consider the stakeholders or the actors involved in project on sustainability and to simultaneously study the effects on the actor’s perspectives on sustainability measures and analyse them throughout the management of the project. For this purpose, interview would be conducted for not more than 30 minutes.

While working on my dissertation I came across your projects on Energy in Ireland. I would like to meet with you in person or via Skype to gain deeper insights on the ways you provide to become more energy efficient and your perspectives on sustainability practices. I can provide you consent letter for conducting interview from my college.

The content of this interview would remain confidential. It will not be disclosed to anyone without your permission and the information will be anonymously stored, so it cannot be traced anyone, even the reader of the thesis. After the research everything (recordings, notes, etc.) will be erased. Additionally, my supervisor will only have access to the anonymous information.

I sincerely hope the outcomes of my research would gain some deeper insights into improvements of project management practices in improving sustainable outcomes of a project of the organizations that I would be interviewing.
I really appreciate your help and time provided by you in making of my dissertation and awaiting your positive reply. I can be contacted on my email - 10163728@mydbs.ie or ashishzambre@gmail.com or cell - +353894480986

Thank You.
Regards,
Ashish Zambre

Appendix 2: Interview Questions (subject to be modified as per the research needs)

The interview would have simple questions as shown below:

1) what is your name?
2) What is your organizations name?
3) What department do you work and what is your role in it?
4) Can you please elaborate more on your project in which you specialize to build renewable energy?
5) What are the social and environmental benefits of your project and how does your involvement helping creating better outcomes?
6) How would you describe your role and contributions on active participation of sustainable activities?
7) Do you have project management expertise and if yes, how many years?
8) Out of the many range of services you provide, can you please brief me on your role in deploying ‘energy project management’?
9) Can you list any challenges you face on the project in the area of sustainability? (challenges from governmental institutions, organizations, environmentalist, client and the customers, people)
10) Are you assisted by or monitored by anyone in your project work? If, yes is it helping you meet your goals.
11) Who are the other stakeholder involved in the project along with you? Do you see any difficulties in implementing the project due to having a different sustainable perspective? (for example: different people in a team may have different methods on implementing sustainability, or externally funding organization may have a profit perspective while project manager may be inclined towards environmental benefits)

12) How do you propose to balance between these conflicting perspectives?

13) Can you list out more realistic measures as compared to the ones implemented to help your organization be more sustainable?

14) If provided an opportunity of decision making from a CEO level, what are the areas that you would change and how would it be more beneficial to your project and company as a whole?

15) Do you see yourself happy with the sustainable outcomes of your organization or do you believe that your competitors are better off than you?

16) If provided an opportunity, can you give a short description on how you would felicitate your team members to have a common focus and views on implementing successful sustainable outcomes?

Sincerely,
Ashish Zambre
Skype ID: ashishzambre
Email: 10163728@mydbs.ie
Ph. no: 0894480986
Appendix 3 – Interview Transcripts

Respondent 1 (R1):

I: Good evening Sir
R: Hi, How are you
I: It is really my pleasure to interview you as you already know, I am doing MBA in Project Management from Dublin Business School and I would not take much of your time and let’s get started with the interview.

+++Disturbance on Skype call++++++ R asked to disconnect my camera on Skype as he said it was taking up a lot of his bandwidth
I: So you are working in AEMS as an energy advisor.
R yep
I: can you let me know, what is your department and what is your role in it?
R: We are basically energy advice company, energy management service company, so that is what we do, energy advice, alright and we do that for the transport sector
I: The transport sector, as in like in Ireland or like outside Ireland also?
R: for most of the last 10 years in Ireland but we do work in the UK
I: Sir can please can you please elaborate more on the projects where you specialize to build the renewable energy on your case the transport sector.
R: Rite, 7 years ago, 2006-2007 we have done PPO (pure plant oil - Plant Oil is derived directly from naturally grown products and can only be used in modified diesel engines)
I: can you just let me know what is PPO, exactly what it does? Hello...hello....hello.....hello...

******** Line was breaking****
R: It’s breaking up..... It’s quicker for you .... Ashish I will ring you up. This is the Skype line is just crap.
I: ok alright.

***********Call continued on phone******
I: Revises what was been said on the Skype call. You working in AEMS as an energy advisor. Your name is Conor Molloy and as you said you are working in the transport department. And 7 years ago you are working in PPO projects. Can you just elaborate more exactly, what is PPO?
R: Sure, I will break it down for you. What we do is transport energy management. So we just do consultancy services for companies that wants to save energy. That what we do., first and foremost. We
work in transport sector. Ok and we umm we are known in that area. That's the first thing. That's what the company is. You are asking me about renewable projects. So under renewables, we worked on pure plant oil back in 2007-2008 and today we work on electric vehicles and compressed natural gas. So they are renewables in transport.

I: the electric vehicles is a very innovative topic and it's a very nice initiative and I do also believe that future technologies and vehicles mostly running on electricity or something like that. Can you let me know what are the social and the environmental benefits of your projects and how does your involvement help in getting better outcomes out of it.

R: Ok, well the environmental benefits is obviously the, if you use less energy, emit less CO2 emissions, alright, in terms of the company, if they use less energy, they reduce their costs and they make more profits. Socially, people involvement in the acceptance does matter to business.

I: So as I understand, using the renewable energy, fossil fuels consumption decreases, pollution rate decreases, emission of CO2 is decreased and I suppose that's your focus of you consultancy services.

R, yes you are correct but the goal is to use less energy, not necessary to switch. So people want to save money and use less energy, so as a result of that they end up switching to electric vehicles.

I: Ok, and would you thing it would be a cost benefit or cost effective to the people or other stakeholders

R: the, umm. I got to give you the simple examples for energy management if you push the brand name would be ISO50000 in to transport. You will typically end up using 10-20% less fuel about 3-5% per year is what you manage. That's pretty good and then if you switch and do a straight comparison between a diesel engine and an electric engine like electric car, electric fan, it would add a 50-70% reduction in running costs.

I: that's great, that's really an awesome thing. So as I understand you are in to consultancy services for renewable energy management. Am I correct?

R: we are very much helping the end user, we don't get involved in. nobody in Ireland makes cars. They are all brought in from outside. So there is no design element. We have to take whatever is on offer.

I Ok, so you are directly involved with the customers.

R: yeah, we work with business, we work with company.

I: Ok and what would be your role or contribution, for making the stakeholders that is the customers actively participate in this initiative.

R: we provide advice, training and on project management side measurement and verification services.

I: that’s great, so as you said like project management side, if you let me ask you. Like how many years of project management expertise have you got.

R: I have about 20 years.

I: in that case, how would you say the implementation of project management improve of help you push the customers in using renewable energy and the stakeholders use the renewable energy.
R: I suppose it wouldn’t be particularly helpful in itself. It wouldn’t be identified separately normally but it helps to formalize the process. The last one I gave you that is the measurement and verification, that would help the customer be assured that what they have been sold or what they have bought is actually delivering saving.

I: on a scale of one to 10 how would you rate the use of project management tools and techniques in the implementation of the business.

R: Umm, well in business, it’s sort of 9-10, while in customers would be 0, they are useless, I mean that’s why I have a job.

I: Can you list any challenges that you faced on your projects.

R: yeah, the first one at the moment would be the reducing price of oil, oil price dropping and its having a massive impact. The second one would be the growth in the economy means that companies use to have time reducing their costs and reducing their emissions and they don’t have that time anymore, they are too busy and not interested or no matter how interested they are they done have the time to do it.

I: any other challenges from government, environmentalist or organizations?

R: No, in terms of company car fleet that doesn’t exist in the republic of Ireland, it would exists very strongly in the UK, but it really has a very low profile here in Ireland.

I: are there any other stakeholders involved with you like for example your team, project management team.

R: yeah, we use a team of associates and we also have a team of driver trainers and in terms of external stakeholders we have the governments and regulations.

I do you see these different stakeholders having a differing views on the implementation part of the project for example the junior management and senior management having conflicting views because of which there is a hindrance on the project.

R: Good question, normally we deal project manager like our opposite number one in the company and by the time we get to it that’s all been agreed doesn’t know to be a dispute but certainly that probably would have been quite a bit of argument before we turned up.

I: the reason I asked you this question was like for example the finance companies look for the benefit of profit and then the customers who want a cost effective and not concerned about the energy and consumption, however they get but they cost effective and then there are the environmentalist who are looking in to the environmental side. So probably you might have to co-operate with all these stakeholders and get their views aligned.

R: I will give you the priority. Number one is making money, right, no question, so that the financial. Number two, a long long wages would be the umm would be the regulation and number three would be the environmentalist.

I: so you agree that their opinions vary according to the different stakeholders that are involved. So how do you propose to balance between these conflicting perspectives?
R: in one word money. The business we are in, no other arguments works. So we are able to show the client that by becoming more energy efficient, they make money that reduces their emissions and it reduces their costs and how they make money. They don’t care about the planet and they care about making money. They are business so only game in to be making profits.

I: would you be terming this in case of the customers or the organizations or both of them.

R: the organizations are our customers, so both of them yeah.

I: Ok, alright because like there is different change that is going in the organizations today, like the companies were using the annual reports to show their profits but now they are using different kind of reporting like a sustainability report.

R: oh yeah yeah that the sustainability CSR thing, we feed in to it, our results appear there like, if you look at our annual reports, you will see a project in there called the woods flow project and that’s a good example. It saved hundreds of thousands of liters of fuel many hundreds of thousands of kilo grams of fuel too, so it’s a big project. And if you look ta SEAI – sustainable energy authority of Ireland and look for the culture case study, just key it into google and it will give all the numbers and all the details behind it and you will see on it.

I: Can you list some more realistic measures compared to the ones implemented before to help you grow your business in terms of sustainability. I will give you an example of Tesco, I just read a recent article. The way implemented sustainable energy was LED lighting in Tesco, so the company who provided Tesco with LED lightings did not charge them in the start, instead what they did is they gave the LED lights for free and that was for three years and whatever energy savings they has for the first year, for example they are using other bulbs they are having bills for 1000 euros in the first year and they save 500 euros using the LED ones.

R: yeah yeah, it’s called an energy performance contract, we do, we provide the, we have done in the past and will give you just one example of it. In January we provide the measurement and verification service to those projects that’s what we do. So there are um number of people who specialize on there and there are government providing funding’s but they generally do not fund transport so we are working on that.

I: so how much successful you thing in terms of the financial stakeholders or the end customer or the company itself. How much success would you think contributed due to their views match?

R: yeah, if you see in the views of Ireland because they are very very slow, they are about three to four years behind where they should be, very slow, alright, we participate in the markets where actually trying to get projects going in the markets, it’s very slow.

I: in that scenario, if you would be given an opportunity, like from governmental organization, like directly the prime minister giving you an opportunity to make Ireland more greener in terms of the energy consumptions umm so what areas of change would you think that you would like to make to make your project more beneficial and the company as a whole.

R: we have regulations back up umm what we probably need is customers that is the stakeholder’s to believe that they can make money out if this, so we need credibility radios. Its people’s beliefs in making
money. As someone said you cannot sell energy efficiency people just don’t believe that they are making money of it, that’s the trouble.

I: in that scenario they needs to be like, all the customers and organizations to have like in one words, stakeholders have a single perspective of the receptors of the project. So like that scenario, would you suggest having conferences? How would you spread the word? What would be the best way you thing to spread the word to the customer.

R: it’s almost, I would say word of mouth, referral.

I: any use of social technology something like newspapers.

R: No, you will find me on Twitter and all the rest but nobody gives a damn

I: so if one customer use and says it to other guy.

R: that’s right or more likely someone would look at it and say that’s a good idea and they will bump into me I go off and ask one of my customers, does it work and they will come back to me.

I: one of the innovative technology I had seen was the use of the electric bicycles, some company initiated this, the use of electric bicycles but I am not so sure like how much of a success in Ireland.

R: if you key electric bicycles in Xerox into google you will get a very good case study from a number of years ago and the Xerox photocopier engineers they gave them bicycles in Tokyo to get around the traffic and they were back to the engineers a year later said what do you think about the bicycles and they were all delighted they thought it was the best thing ever and the company was a little bit surprised because the engineers get rained on all of the rest of it the engineers when they asked why do you think they were so good. They said it improves our sex lives. And the reason for that is because they are fitter.

Ok so there you go. Not one you could use in Ireland.

I: Do you feel any fierce competition from your competitors.

R: No, we work in a competitive market but we each are specialized, so we co-operate rather than compete.

I: So, this is not a place where there should be competition.

R: No no there is very competitive market in Ireland. It works functioning competitive market but you ask was do I feel the pressure, no I don’t feel the pressure because we know what we do and umm at the moment anyway we have had tough time when it had been very very good and sometime depressed. So we see the up and the down cycle and the moment we would say it’s a positive that there is more demand than there is capacity to serve at the moment.

I: but there must be any soft corner for the environment. Like we are working for a good cause

R: yeah but unfortunately they don’t buy the environment at all or the environment is seen as a cost. If we come in and we say we want to save your money, then they will talk to us. So Ireland certainly the environment rate at all umm it’s purely money and energy that’s all they care about.

I: it’s like same in back in India where I come from.
R: ha ha you have us, show me the money, that’s all they want. Ha-ha. 12 years ago I started off doing 14001 and it was a deadlock. So I started doing energy management and fuel management and that’s now become 50001. So I wrote the, with the technique called energy audit, identified as the energy savings and I wrote the energy audit standards for Europe, so you can look that up if you want. I will give you the number it’s EN16247-4

I: I think I happen to go across this, there is something 115 days for the audit remaining.

R: yeah, that’s right you will find it that as well I am training the auditors in the UK

I: I will surely go through it. It will be quiet informative for me

I: in all that was my questionnaire. My conclusions is there is some portions where the money is involved some where the energy is involved but maximum it come like the perspectives they all go for money.

Thank you.

Respondent 2

I – Hello!

R – Good Morning Ashish, this is Per Stahl

I – O Per Stahl. Hi! Good morning Sir. How are you?

R – I am very well thank you. How are you?

I – I am also doing good. Thank you very much for your time for my interview for my dissertation. Without taking much of your time, can we proceed with the interview?

R – Ya ya absolutely. I am sorry I should have called you earlier but I had phone trouble so my reminders dint come up.

I – Ya I do understand as you are quite busy actually. So you work as a chief investment officer of solar 21, is it correct?

R – Ya that’s correct. I am a CIO here and I also senior investment advisor to a company called green room investments.

I – O wow that’s great. So how would describe your role in your department?
R – Umm….I have an overreaching responsibilities like acquisition of ahh umm let me tell you first umm what we do is we acquire and operate renewable energy assets predominantly in solar energy space in Europe at the moment with a particular focus in Italy. And solar 21 is being operating for about 5 years and in response to increase amount of institutional investors which requires more regulation from central bank point from finance point of view. We launched green room a couple of weeks ago which is collaboration between Obest and breed sort of service providers and the managers that collaborate to bring more transparent and structural approach to what we do for the investors. So currently we are managing around 150million with forward we are hoping. Our goal umm… is to respond and allocate these in the Italy for 1 billion.

I – O that’s great

R – So aaa that’s we do in the business. My job as CIO is to work with the recruitment. I built the accession management team. Umm….I am the engineering borderline. So, optimization and management are all our current assets. I am also responsible for the optimization and portfolio in terms of financing structure and umm….I am a subject matter expert in renewable space and real investment and private equity. So, I handle the enquiries form from all personal investors and investment bank similarly. And I also sometimes do guest lecturing in some universities such as Trinity.

I – O was that’s really wide area of space you are working on. It’s really nice you are working in complete Europe and Ireland and especially in Italy and project seems to be quite large. 1 billion is really very large, o wow. That’s really really nice. Can you please elaborate about renewable projects and renewable energy? What exactly is renewable projects and renewable energy like solar energy you are specializing?

R – Yes, we trying to keep it simple by best degree ….such an environment. We have narrow down our investment scopes to operational renewable energy assets solar farms all up and running. Then we receipt of a feeding tariff, central tariff to allow effective investments and promote further growths in the space by individual countries to meet their Puerto protocol commitment. So, aa…we are focusing on small to mid-size segments to avoid the umm once you have the balance to cost and acquisition because there is a too many legal similar attached to each acquisition but you too didn’t want to go big either because we would be competing against likes of large pension funds
with say 100 billion on the managements they need to do ticket sizes of 100 million approx. aaa so we try to stay away from them because they don’t require the same returns as we do.

I: O Ok that’s really nice. What are the social and the environmental benefits like reduction of co2 in your projects and how is your involvement helping in creating better outcomes.

R: is this related just to co2 emissions.

I: no no I am just giving an example like co2

R: ohh sort of environmental and social responsibility. Well if there has to be obvious one that would be renewable energy as an energy source umm we see that umm I think there is a lot of people sharing our view with respect that renewable energy is the future for how we gonna work until someone invents called fusion and then we are screwed ha ha but rather we are well off you know but I think that one was an obvious one but what we do also see when we look at the Italian markets for example why we chosen this one is a very transparent system which eem currently anyone had an interest in this can access the tariff and the incentive feeds which is rendered in access of 500,000 individual installations through Italy now coming back to that in the social impact in this is enormous eem its created a lot of employments, they are scattered, they are not just joint sites, scalability is not just to obtain, such a market that’s just so divisive and separated and what we find in regions, certain regions, particularly if you look at south east of Italy is a dry area, it’s not very prosperous commercially eem thanks to the eem the amount of land there and the radiation from the sun you see that eem this region has seen a regeneration in terms of income and work opportunities as a result of the solar industry utilizing the fact that they have a very good setup for this ample land the people who are available to work in this space eem so that’s all around it eem so the overflow of referral services associated to this factor has been underestimated eem I think there was eem I can’t really remember the exact figure but I think there were 300,000 people directly working on eem the solar projects in Italy, in addition to that there is eem its quiet lot of people eem also addition to that you have further services as required as accounting and so on engineering eem that may not work directly but are affiliated with it and that goes up to half a million to million so what we looking at it is eem its grass roots eem enablement of employment and benefits to the society as a whole but also eem it’s also allows regions which have been deprived previously to utilize the fact that the sun is shining and there is an ample amount of land that can be used for this purpose.
I: there are fairly good causes on the social and environmental benefits so may I ask you umm you must obviously be having project management experience, so may I ask you how many years would that be.

R: ha ha, I wouldn’t say like I have any emm like I have a charted degree from the time I was studying emm I would say I do have some years on it but I believe more on emm I learn by doing emm so I have been doing project, I am an entrepreneur for the last couple of years. I have been with solar21 for past two and a half to three years, previously to that I have been within commercialization of trading and investment portfolio, so off course there was project management nature to it but I am not nearly structured as I should be. I have been working on individual projects for about 6 years, like the last one which I managed was launch of green room investments which is a very costly project so then a lot of money, legal fees, structure and relationships for that, that’s probably that I managed from the past 2 years.

I: So your experience is quiet large into the project management area so emm any techniques that you can share that you must have used in your projects.

R: I am just thinking, could you give me a few examples like.

I: like facilitating the co-workers or like conducting brainstorming meetings like any basic tools which you must have employed.

R: ya well absolutely, I think project management is such as said not to go, it needs to be cratered to find for what needs to be achieved emm I think the most difficult part because what it does when it comes to around these big projects is actually change management much of what is from project management because the changes are all the time and it affects everybody so I think the first step and the most important step to proceed on is to get everybody on the same page pull them into interaction.

I: So like you saying gathering all the perspectives to work as a team towards the same goal.

R: yeah, I think there is also there is a tendency to update senior management on regular basis like get them involved in the micro aspects and the micro-management of the projects and that’s not something that’s very desirable and probable because they don’t know the broader picture as the manager does emm so I think having a very disciplined way of communicating the senior
management emm not to raise issues as soon as they happen and not to pat oneself over the back as something good happens so just have a very leveled approach to working on the projects. It is very essential.

I: so in that scenario would you consider like involving the junior management into the decision making of the projects.

R: well I think what I would like to say is I would be the one sort of linked to the senior management team in terms of the project and the team than would work with me ahh I think umm u cannot have umm you can’t call colleagues colleague unless you give then other than decision makers and perhaps and proactive and give them responsibility unless you give them the opportunity to make decisions ahhm because you cannot have some else responsibility without me to make decisions, simple it may sound stupid but very few people actually do allow people to take care of it but don’t give them the scope or authority to actually execute on it. So it trust and belief in your people is very essential.

I: Yes, it does make sense. So can list any challenges on the projects in the areas of sustainability like challenges from the governments, institutions, organizations, environmentalist or the customers

R: oh ha ha how much time do you have ha ha ? No emm just challenges I think as a matter of fact the change management is extremely difficult part to handle you have to really get everybody lining up to continuously realign them as people get exited working on projects and you have to keep them on track ehh in addition to that there is always going to be setbacks emm examples of this emm in the middle of reshaping of this emm the guarantee of the tariff that we are receiving for our assets as I mentioned earlier, incentive was cut 8% across the board and also reduced leverage that had a significant impact on us but also impacted on investor confidence so this is something that we had to address very aggressively.

I: Ok, just a few more questions, I wouldn’t be taking more of your time. As my dissertation is focused on checking if the perspectives of the stakeholders if it making any difference to the project success or the failure so I would like to ask you did you face any difficulties in your project implementation due the differing perspectives of the stakeholder involved in your project in the area of sustainable development like any experience you can share.
R: absolutely, I think emm once you do a project like this and you involve people who are expert in their field emm I think it’s very important to listen to them emm there is no need to reinvent the wheel emm just be humble emm rather than just setting out a step by step plan how everything shall go down, I sit up and go and the path will never be straight, don’t ever assume it be straight emm just connect well with them emm I think one of the cornerstone is to build very very good relationship with them so you can speak openly freely without fear and especially with so they can share the previous failure and with sue confidence that you can understand their failure and then don’t judge on them but rather take from it and use it to your advantage not to have it been repeated on you so I also feel one of the most difficult part is finding stakeholders which are committed towards the common goal so you really have to engage emm this is not about buying services this is about creating relationships so if it is based on a relationship then the project will move faster emm so you might take somebody who may not be the best name in the business and emm I am not talking about some bad one but emm looking at the example for accounting you have the big four perhaps is not in the best interest to use the big four for everything in accounting we choose someone who is more aligned with us because we need some of them for more standardized auditing etc. one issue you actually fine someone who going to be standing side by side, shoulder to shoulder, you don’t want to be one of a thousand and try to find a mid-sized company that has resources and the commitments to align themselves with you and work along the projects so they actually work as problem solver for you and not with you.

I: So if you be provided with an opportunity to make a decision of doing a project which you already done in the past in a better, so how would you go about doing it for example if previously you had investors who had the goal of profits on the money side and on the other hand you have people using the solar energy who wants a cost effective solar power and also giving the best output so if you had an opportunity to facilitate both of them for a future project, so how would you use your skills to make them more successful.

R: I think it goes down to gain how you start, you start as you want to finish and if they start is itself unclear then you should take time off to really analyze where you want to go and take the time it requires to think about things because even if the start of the project is delayed by four weeks the subsequent results is you probably going to save five months so proper planning without being overconfident about times, nail down times you have to be very fluid emm and also mange
expectations and make sure everybody knows what’s expected of them and that we hope for and how we wish to proceed with this so we set the ground rules but is still believe in a very fluid and dynamic organization to solve problems fluidly rather than being strict and so think them from being a mid-sized company which we are you have to be much flexible there is not much routine etc. and reporting lines it’s just getting the job done.

I: Speaking of the midsized company as you said you are, do you think there is huge competition from your competitors and does their perspective matter to the goals and objective of your company and is it affecting the profit or social, environmental causes.

R: Absolutely, absolutely. We have very strong competition with the outside world, we are Irish company with Irish investors although we invest in Italy. We now with the launch of green room we now moving in to the global space and the competition is fierce. I think the key there is how to find our niche, differentiates ourselves and also stick into what we believe in and trust in where we going, not stick your head out there, there is lot of wind and a lot of noise and it’s very important to stay true to your core values and not just become opportunistic or unfocused in terms of where you need to put your efforts in.

I: So as you say, the huge completion effect on the way you do business and also the beliefs of the company along with their values and perspectives of their competitors typically stakeholder make a huge difference on the project success. It was really nice talking to you Per, it was really informative session for me.

R: that’s great and if you have any further questions don’t hesitate to drop me a email. Thank you.

Respondent 3

I: Hello

R: Good afternoon, it is Richard Morrison here.

I: Hi Richard, it’s nice to talk to you umm I am Ashish as I told you from Dublin Business School and I wanted to interview on the sustainable activities so rather than taking much of your time can we go ahead with the interview?
R: yeah no problem

I: So I have your name Richard Morrison and you work as a energy management professional at Optien.

R: that’s right yeah

I: yeah, so what department do you work in?

R: I am the owner of the company.

I: Owner of the company, alright. So what exactly would be your role in the sustainable activities of your company?

R: umm I manage and direct activities and I also do consultancy and advisory services

I: Alright, so is your organization actively participating in sustainable activities.

R: yes, it’s our day job.

I: and do you have any project management expertise.

R: yes, we project manage the implementation of management systems and implementation of some projects as well.

I: and may I know like for how many years?

R: umm about 14 years.

I: 14 years, that’s nice. Umm so how do you, how would you engage your project management activities like in the scale of low, intermediate or high?

R: how do I rate my activities?

I: yeah like the project management activities how you would rate them like in a scale of low to high or intermediate.

R: I I like sorry I don’t understand the actual question.

I: Ok no problems. So can you just give me a bit more elaboration on the like I see you are engaged in bio-mass energy production.

R: the biomass energy projection so that was a project that was a project that was identified by one of our clients where we wanted to reduce the CO2 emission from the facility.

I: umm that’s that’s nice so can you please give me some more details on that, it would be helpful for my dissertation.

R: Yeah, so the, its ahh, the organization ummm they were off to natural gas grid so they were working on heavy or they were burning heavy fuel and the opportunity to change to biomass presented itself because it is as much as I want to reduce the CO2 emissions, it doesn’t work and its financially enviable but because the difference in costs between biomass and the heavy fuel have made this project viable.
I: ok so, I do understand that it would obviously reduce the CO2 emission and help into the social and environmental benefits umm so what according to you would be the benefits for the environment and the social causes by this.

R: umm the benefits for the environment. The benefit for the environment umm reduce CO2 emissions umm its coming from a sustainable source umm the benefits to the community, it’s a co-operative that’s umm implemented this project and their ethos is sustainable development in the community. The biomass facilitates living the cooperative nature. So it’s not a PLC to deliver process it to deliver sustainable solutions to the community itself, so they buy milk from the farmers umm they sell it on the open market, they sell it as powder elsewhere and return the money to the community so this a means of having an alternative revenue stream for farmers that have marginal land.

I: ok that’s very nice, that’s very helpful for the farmers, I do understand, so could list any challenges that you faced umm while working on this project.

R: how long do you have. Ha ha ha.

I: I am so sorry, just two more questions, yeah.

R: No no, I mean how long do you have as there is lots of them umm the biggest barrier is the legislative and lack of ahh support from the government agencies in assisting the implementation of the project itself and the lack of clear sustainable policies from central government.

I: ok. Umm would you have any other stakeholders that you are working with and can you rate their contribution level in achieving this sustainable umm outcomes.

R: yeah the boiler umm manufacturer of the boiler became not proactive to the desired solutions so the boiler manufacturer got engaged with the project to understand the needs of his customer and implemented energy efficient solutions to make sure the get from a sustainable source but that there was also umm energy in-efficient technology from the boiler as well.

I: umm Ok so you must had great challenges on the activities umm can you list some areas where you think this project could have been done in a more sustainable way.

R: umm I suppose the biggest challenge is that we wanted the biomass CHP facility but because of the lack of clear direction from central government on umm the REFIT four which is coming or which may come next year following public consultation has not umm we can’t see past REFIT 3, so we couldn’t make an investment an additional 7 million euro to make us a biomass CHP facility which would have provided green energy for the plant.

I: umm that’s lovely are the any other projects where you have I mean your organization have been implementing sustainable developments like ahh like in the area of ahh solar energy or any other energy productions.

R: the majority of the other projects we do ahh are more around reducing the energy that’s being used rather than converting to a sustainable source.

I: Ok. Ahh and just the last question so ahh if you would be given an opportunity by the government without any restrictions so what would your mist high priority for launching a project which would be the best beneficial for the environment and the social causes.
R: to mandate the energy performance improvement targets for every organization.

I: Alright, it was really nice talking to you Richard and it was really helpful ahh for my dissertation. I really appreciate all your help for giving me the time to interview you.

R: No problem at all.

I: thank you so much Richard.

Respondent 4

I: Hi, this is Ashish here from Dublin Business School, I am doing Masters in Project Management and with me here is Mona, she is from ARUP and she is a LEED Specialist (Leadership in Energy & Environmental Design) in the energy sector of ARUP. Hello Mona, how are you?

R: Good, how are you?

I: Am also doing good, so not taking much of time, lets gets started with the interview ahh so what department are you working in the company.

R: uumm our department is called Dublin Buildings so I have studied building services technology on the mechanical side.

I: so what exactly is your role relating to the LEED energy systems?

R: Umm so I am basically a general project engineer but I specialize in LEED, I just became a LEED AP (Accredited Professionals), aahm at the beginning of the year, I also specialized in energy modelling by using IES (Integrated Environmental Solutions), and there software program and I also look a lot at building regulations project compliance.

I: That’s great aahmm can you please elaborate more on the projects that you specialize to build renewable energy in the renewable sector, in the energy sector.

R: the projects that I am working on ahhm I am basically involved in every project and because every project has to comply with regulations, I would be involved in the start of the project where we are looking at Façade properties umm blazing area Massing ("Massing" is deciding on the overall shape and size of the building), orientation etc. in correlation with the architect and to decide what parameter we need and how it’s going to be built.

I: so what are the social and the environmental benefits of your project and how your involvement does helps it create better outcomes?

R: I think there eem different aspects for project compliance, we would be eem looking at eem renewable energy eem limiting the energy consumption then we are also looking at BR (Building Energy) ratings and so if the client wants to go further then just compliance then maybe wants to go to an A3 ratings eem so that would push the renewable energy and the façade performances etc. further down
and for LEED project, there’s a triple bottom line for LEED projects, so you are looking at social, environmental and financial aspect of projects mostly be involved in the environmental parts.

I: so the 3 P’s like people, planet and profit.

R: exactly yeah, that’s just another way to say it emm I would be mainly looking at the energy efficiency foe example do LEED energy modelling.

I: Ok, that’s sounds great. Can you give an example of your role in the past for active participation in energy projects, can you share some past experience where you achieved a goal relating to an energy driven project.

R: eem I think there would be several examples but one I have just worked on recently eem I think its confidential so I can’t tell you the project name eem but for that project we were looking at the project compliance and also the client wanted to achieve a BER A3 rating for an office building and we were talking to the façade engineer, the architect who wants to eem make it look good. We are looking at the QS, who wants to drive the costs and we become saying the parameters of eem we are stating, ok this is what you need to do to achieve it and we are kind of playing around with the with eem all the different parts came together, it’s not our decision it’s like a core operational part.

I: it’s like a team work kind of

R: team work exercise, exactly and the client has the main decision.

I: and would you guys see everybody’s perspectives and views into consideration like in to the decision making process or would you rather judge it like the senior management having the greater priority on the decision making and the junior management was not taken in to consideration relating to that.

R: uumm I think if you look at the senior management they would basically overview the whole project and then the junior management would do all the work in rounds so it’s mostly team work and depends on who goes to the meetings but that’s more general the senior management would make decisions.

I: so the decision making was mostly driven by the senior management but the whole project was driven by team work where everybody’s views were also considered to a certain extent.

R: Exactly yeah.

I: Ok, so do you have any project management expertise like use of any tools and techniques like facilitating. Obviously you worked in lot of projects so there must be some rules where your team must be following

R: Oh yeah, so for especially for IS modelling which is kind of my area, we have developed eem certain spreadsheets that would basically attract the development of the project and also we have developed a set of QA spreadsheets so eem basically that the projects is controlled by a software program and the inputs and outputs are checked.

I: So like an agile project management where you use software to implement projects. Aaah that’s sounds great and would you give an experience wherein you used it in the energy sector like you made some documentations or something like that for development of energy like the cost savings.
R: We would generally use IS to analyze the results, we wouldn’t only rely on the pdf outputs they give but are really like the background calculations where we would look into for more details.

I: Can you list out any challenges you faced in the project area for sustainability of energy projects.

R: eemm, yes, if you look at LEED energy modelling, that’s a very complicated and intensive process so that whole energy modelling is eem a challenge in itself and then also for the different need credits finding the right energy between the credits so we would for example be responsible for the rain water harvesting credit but then there is also the green roof credits so where you have the green roof you can’t harvest rainwater here, it’s not a good practice so kind of have to discuss and find a solution in between where you get the most amount of points so that’s kind of always very tricky eem tricky part and then we always have the BR rating where the client says oh we want this but when we go down and analyze it eemm sometimes it says it’s too expensive, the project costs cant afford this or what else can we do eem and then we also have issues with the software itself, not IS, the SBEM software which calculates the project compliance in the BR rating because we are having projects at the moment that are very big, talking about 100 to 95 thousand square meters and the protocols of the program which is to develop by sustainable authority in Ireland, its just not able to stimulate such big buildings so we haven’t found a solution for that yet.

I: just an object question, so you must be having other stakeholder involved in your project along with you like project manager, project coordinator or the project sponsorer, the customer’s people, did you find any difficulties, any issue on the views of them being different and causing hindrances to the project on the energy perspective.

R: eemm so there’s always he different stakeholders, so yeah, the client and the QS would basically look at money, the architect wants the building to look good and the Façade foe example wants t make the façade work whereas we want to make sure that they are project compliance, so there are always different opinions.

I: so as I understand like the finance institutions want to see the profit side, whereas the engineers they see more on the energy perspective side and you in coordination with them balance out both of the causes. So personally do see this different opinions make any difference to the project outcomes.

R: eem, I would say definitely yes, for example the costs is always a big issue, so once the project costs are too high we have to look for a different solutions.

I: Solutions yeah so as to balance out the conflicting perspectives of the different stakeholders. So just last two questions, if given an opportunity, any realistic measures compared to one that were implemented before would you think that there is more better way so that the project becomes more sustainable and energy efficient.

R: yes, I think more time, more time to think about more innovative solutions, that would definitely be the main part but you have, on the one inside you have the fee problem, you don’t have to work with any of your fee and because of the budget yeah and like it’s getting better but because of the downturn of the economy the fees were quiet bad and now its picking up so we have more time to look at the design in more detail and have more innovative solutions.
I: that’s great, just the last question. If given an opportunity to work as a project head wherein like every decision is on your side but there are different team perspectives like your project manager has different perspectives whereas the client has a different perspective, so how would you plan to get them to work together as a team.

R: I would say early engagement is very important eem especially because on the architectural side lot of main decisions are made in an early just design stage where sometimes we are not involved, you are looking at orientation of the building or Massing which has a large impact on sustainability in energy efficiency so early engagement is possible and then just trying to get everyone sitting down and gathering all their views together and basically you just pointing out all the different benefits and outcomes.

I: So you do think the views of stakeholder’s does matter to the successful outcomes of the project success and their level of involvement in the project.

R: yeah definitely.

I: Definitely, Thank you so much Mona, it was really nice having an interview with you and would be really helpful for my dissertation. Thank you so much.
APPENDIX 4 – Signed Consent Form from Interviewees

Respondent 1

INFORMED CONSENT FORM

Dissertation Title: ‘Stakeholder’s Perspectives on Integrating Sustainability in Project Management’

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

Participant Name
Conor Molloy
Participant’s signature

Conor Molloy

Student Name (Printed) Student’s signature
Ashish Zambre

Date: ______________
INFORMED CONSENT FORM

Dissertation Title: ‘Stakeholder’s Perspectives on Integrating Sustainability in Project Management’

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

Participant Name

Per Stahl

Participant’s signature

Student Name (Printed)                      Student’s signature

Ashish Zambre

Date: _______________
INFORMED CONSENT FORM

Dissertation Title: ‘Stakeholder’s Perspectives on Integrating Sustainability in Project Management’

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

Participant Name
Mona Holtkoetter

Participant’s signature

Student Name (Printed)
Ashish Zamble

Student’s signature

Date: 17.08.15