

## **LEADERSHIP IN CONSTRUCTION ORGANIZATIONS AND THE PROMOTION OF SUSTAINABLE PRACTICES**

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### **Abstract**

*The construction industry is a very important sector in achieving society's sustainable development goals; however the change towards sustainability is a process that presents a leadership challenge. Construction organizations need leadership that provide the collective vision, strategy and direction towards the common goal of a sustainable future. The aim of this paper is to critically examine the role, drivers and factors affecting leadership in the effective implementation of sustainable practices in construction organizations. A review of relevant literature and preliminary qualitative results from an in-depth interview with eight (8) leaders in United Kingdom construction consultant organizations, including sustainability directors, managers and consultants is presented. The analysis of the collected qualitative data revealed that, the leadership role in promoting sustainability in construction organizations include the development of strategies and the formulation of policies. A major driver for construction organizations to pursue sustainability is to win more business, while increased capital cost for sustainability is still a major challenge to many organizations. This study establishes the basis for further investigation in an on-going doctoral level research on the role of leadership in promoting sustainable construction practices.*

**Keywords:** Construction organization, leadership, leadership style, sustainable practice

## **INTRODUCTION**

Leadership is vital in the construction industry and a key success factor in the drive towards sustainability (Ofori and Toor, 2008). Construction organizations need leadership that provide the collective vision, strategy and direction towards the common goal of a sustainable future. Leaders should embed sustainability in their organizational activities and make sustainable development part of their overall business strategy. It is important that such leaders have both the ability as well as the sustainability knowledge to effectively guide their organizations strategically towards sustainability.

The role of leadership in improving the performance and innovation in the construction industry has been receiving increasing attention in recent times (Bonssink, 2007). However, less attention has been given to the capability of organizational leadership in promoting construction organizations towards the delivery of sustainable construction projects. There is extensive literature on the subject of sustainability and leadership as separate entities; however, little has been written about the link between leadership and sustainability in construction management research. The issue of sustainability is growing ever more importantly and construction has perhaps the greatest impact on it than any other sector. The

construction industry provides benefits to the society as well as causing negative impacts; this makes it a key sector in the fight for sustainable development (Sev, 2009).

The construction industry is a very important sector in achieving society's sustainable development goals; however the change towards sustainability is a process that presents a leadership challenge. Both Egan (1998) and Latham (1994) called on leaders to lead the quest for change in the construction industry. Leaders have an important role in guiding construction organizations toward sustainable practices and it is believed that such leaders require unique leadership styles. Leadership style is all about how people interact with those they seek to lead (Groetsch and Davis, 2006). However, Toor and Ofori (2008) believe that leadership is about authenticity and not style. The construction industry therefore needs authentic leaders (moral and ethical leaders) who can take advantage of the opportunities that sustainability brings, to secure a better future for the construction industry. It is suspected that the ability of organisations, irrespective of their level of maturity, to pursue the sustainable agenda is influenced by the commitment and conviction of their leadership towards sustainability.

This paper critically examines the role of leadership and the promotion of sustainable construction practices in construction organizations in United Kingdom (UK). The first part of the paper reviews literature on sustainable development and construction, leadership and leadership styles, drivers and challenges facing leaders in the effective implementation of sustainable construction practices. The final part of the paper concludes with the findings from preliminary interviews conducted with sustainability leaders in UK construction organizations. The interviews explored their role and identified factors affecting effective implementation of sustainable practices.

## **LITERATURE REVIEW**

### **Sustainable Development and Construction**

Sustainable development that balances social, environmental and economic objectives is now firmly on the agenda for the UK construction industry (Raynsford, 2000). Sustainable development balances environmental resource protection, social progress and economic growth and stability now and for the future. It focuses on improving the quality of life for all without increasing the use of natural resources further than the environment's ability to supply them for the foreseeable future. Sustainable development has been defined in many ways; Parkin (2000) pointed out that there are well over 200 rumoured definitions of sustainable development in circulation, however, the most widely accepted definition is:

*“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”*- From ‘Our common future’ (The Brundtland Report, 1987)

However, Brandon and Lombardi (2011) in their book “Evaluating sustainable development in the built environment” define sustainable development as:

*“A process that aims to provide a physical, social and psychological environment in which the behaviour of human beings is harmoniously adjusted to address the integration with, and dependency on nature in order to improve, and not to impact adversely, on present or future generation”*.

Sustainable development means delivering built environment that sustains and improves the quality of life for human beings; removes the environmental and social damage from the past. Sustainable development also improves the sustainability of the wider environment, ecosystems and development of individuals and society's quality of life (Bennett and Crudginton, 2003). When setting out the UK's government role in sustainable construction, Raynsford (2000), the then UK Minister for Housing, Planning and Construction described sustainable construction as the set of processes through which a profitable and competitive industry delivers built assets (buildings, structures, supporting infrastructure and their immediate surroundings) that enhance quality of life, is flexible for future user changes, supports desirable natural and social environments to take full advantage of the efficient use of resources. Sustainable development is now understood as being a combination of three dimensions or 'Pillars' including economic, environmental and social dimensions; popularly referred to as the 'Triple bottom line' in business circles (Lehtonen, 2004; Hall and Purchase, 2006).

Sustainable development involves minimising the negative impacts of our activities to improve the environment and enhance a better quality of life for present and future generations. It is all about balancing economic growth and progress while protecting natural resources and promoting social equality (Leiper *et al.*, 2003). The environmental dimension of sustainability is about reducing ecological impacts today in order to preserve the environment for future generations while the economic dimension involves providing for positive economic growth. Finally, the social dimension involves responsibility of corporations to conduct business ethically (Jones *et al.*, 2010). However, Beheiry *et al.* (2006) believe that sustainability efforts in construction projects are biased towards the environment in comparison to the social and the economical dimensions.

The quest for sustainability has put enormous pressure on the construction industry from the government and the general public to improve on its currently unsustainable pattern of project delivery (Adetunji *et al.*, 2003). There is now a wide recognition that the construction industry has a vital contribution to make towards sustainable development. However, Leiper *et al.*, (2003) comment that, the construction industry is also slow in adopting sustainable approaches in its construction project practices. The construction industry has a significant social responsibility to minimise the damage its projects do to the social environment. Sev (2009) also add that both existing built environment and the process of adding to it have several environmental, social and economical impacts. The UK government in 2000 introduced a construction-specific strategy, "Building a Better Quality of Life" which highlighted key themes for action by the construction industry, namely;

- Design for minimum waste,
- Lean construction and minimise waste,
- Preserve and enhance biodiversity,
- Do not pollute,
- Conserve water resources,
- Respect people and local environment,
- Monitor and report (Department of the Environment, Transport and the Region(DETR), 2000)

Sustainable construction is the application of sustainable development principles in the construction industry. Parkin (2000), describes sustainable construction as a construction process that incorporates the basic themes of sustainable development. Sustainable construction aims at reducing the environmental impact of a building over its entire lifespan, providing safety and comfort to its occupants and at the same time enhancing its economic

viability (Addis and Talbot, 2001). Sustainable construction is conceptualized as having three broad dimensions; social equity, environmental protection, and economic growth as a reflection of those issues in relation to sustainable development. Social sustainability deals with legal, moral and ethical obligations of construction organizations to their stakeholders. Environmental sustainability on the other hand addresses the impact of construction activities on the environment by minimising waste, using natural resources and energy efficiently. Economic sustainability, however involves improved project delivery resulting in high productivity to maintain a high and stable level of economic growth (Parkin *et al.*, 2003).

Sustainability at the organizational level refers to meeting social and environmental needs in addition to the firm's profitability (Porter, 2008). Sustainability makes good business sense because it is of increasing importance to the efficient, effective and responsible operation of business. Some of the primary drivers towards the adoption of more sustainable business practices in construction organizations in UK is government policy or legislation, reputation and competitive advantage (Bennett and Crudgington, 2003; Woodall *et al.*, 2004; Holton *et al.*, 2008). In a qualitative study by Williams and Dair (2007) involving five (5) case studies of completed developments in England, they identified a number of barriers to sustainable construction practices, including; lack of consideration of sustainability measures by stakeholders, sustainability not being required by clients, real and perceived costs and inadequate expertise and powers. To add to the above Boston Consulting group( BCG) and MIT Sloan Management Review carried a mixed method research involving interview with fifty(50) leaders in sustainability and thousand five hundred and sixty (1,560)survey response from business leaders. This work identified the root cause of difficulties facing organizations pursuing sustainability as being a lack of the right information upon which to base decision, companies struggle to define business case for sustainability and flawed execution of sustainability by companies who deliver sustainable projects (Berns *et al.*, 2009).

## **Leadership**

Leadership is believed to be an important factor in achieving business success in any organization. Despite the extensive research carried out on leadership, Giritli and Oraz (2004), in their survey of leadership styles of construction professionals in Turkey, argued that, leadership is one of the least-understood concepts in business. Jing and Avery (2008) added that, despite the prevalent appreciation of the importance and value of leadership, the concept of leadership still lacks lucidity and agreement in leadership literature. In Odusami *et al.* (2003) quantitative research of sixty (60) questionnaire surveys to determine the relationship between project leadership and construction project performance, it was pointed out that not much work has been done on leadership in the construction industry.

Leadership has a very significant influence on organizational activities including sustainability yet leadership has not been a focus of research in the field of sustainability. The study and the understanding of leadership and its relationship to sustainability is still in its early stages (Egri and Herman, 2000; Quinn and Dalton, 2009). Little or no research has been done linking leadership and sustainability in the construction industry in particular. Even though, the field of leadership is well researched, Chan and Cooper (2007) conducted research through in-depth interviews with fifteen (15) leaders of the UK construction industry revealed that, the understanding of construction leadership is to some extent primitive, compared with the rather mature developments of mainstream leadership theories. The interest and the significance of organizational leadership is increasing rapidly as a result of the need for organisations to innovate continuously to meet the current changing business environment.

Despite the wealth of knowledge built around the concept of leadership, there is no single definition of leadership; however, a view of leadership according to Doh (2002) is that it is an executive position in an organization and a process of influence. Leadership is concerned with the ability to influence the behaviour of others to deal with the desires of the leader (Fellows *et al.*, 2003). Ferdig (2007) describe leaders as those who inspire a shared vision, build consensus, provide direction, and foster changes in beliefs and actions among followers needed to achieve the goals of an organization. Northouse (2010) however define leadership as:

*“A process whereby an individual influences a group of individuals to achieve a common goal”*

Leaders are essential at all levels (Munshi *et al.*, 2005) and can emerge at different levels of an organisation (Newton, 2009). Ferdig (2007) add that leadership is extended to any one who seeks sustainable change regardless of the role or position, and such leaders can connect with others using different assumptions about how people work together to create meaningful change. From the definition of leadership above, anyone in an organisation could potentially be a leader at some point in time if they are involved in a process of influence that involves encouraging sustainable practices (Taylor, 2008). The construction industry in general and the UK construction industry in particular, is in an era of a difficult socio-economic, cultural, political, and business environment. There is an urgent need to promote a positive culture in the construction industry and these require leaders with positive values and good levels of moral and ethical behaviour to change the conservative paradigm of management in the industry Toor and Ofori, (2008). Leadership theories identified by Munshi *et al.* (2005) include traits and styles; contingency; transformational/transactional; distributed and structuralist leadership theories.

### **Leadership Styles**

Leaders have an important role in guiding construction organizations toward sustainable practices and it is believed that such leaders require unique leadership styles. Leadership style is all about how people interact with those they seek to lead (Groetsch and Davis, 2006). However, Toor and Ofori (2006) describe leadership style as a combined outcome of the leader’s self-related cognitive information, personality traits, the primary motives, and thoughts on operating situational variables. Style is an important part of leadership but no single leadership style is best for all situations. There has not been any evidence to show that one particular leadership style is the best (Vecchio, 2002; Giritli and Oraz, 2004). There are different types of leadership styles, each proving effective depending on the given circumstances, attitude, beliefs, preferences and values of the people involved.

Many styles of leadership have been proposed for organizational leaders including; transactional, transformational, charismatic, democratic, servant, autocratic, consultative, laissez faire, joint decision making, authoritative, participative, tyrant, task oriented, relationship oriented, production-oriented, employee-oriented, delegating, authority-compliance, impoverished management, team management (Toor and Ofori, 2006). According to Bossink (2007), charismatic, instrumental, strategic, and interactive leadership styles influence an organization’s innovativeness towards sustainability. The charismatic leadership style communicates vision, energizes others, and accelerates innovation processes such as sustainability. An instrumental leadership style structures and controls the sustainability improvement processes, while a strategic leadership style uses hierarchical power to innovate.

Finally, it is suspected that the interactive leadership style empowers employees to innovate sustainably and to become sustainable leaders themselves (Bossink, 2007). Transactional leadership helps organizations achieve their current objectives more efficiently while Visionary leaders (transformational, charismatic) create a strategic vision of some future to achieve high levels of cohesion, commitment, trust, motivation, and hence performance in the new organizational environments (Zhu *et al.*, 2005). Avery (2004) describe visionary leadership as leaders who employ a collaborative style for making decisions, share problems with their followers and seek consensus before the leaders make the final decision.

### **Leadership for Sustainable Construction**

Sustainability requires organizational leadership to take bold steps to move beyond efficiency, compliance or just being green, to a higher level of performance. Sustainability is now viewed by organizations as being part of a strategy for long-term business survival and success (McCann and Holt, 2010). Leadership is vital in the construction industry and a key success factor in the drive towards sustainability. Leaders should embed sustainability in their organizational activities and make sustainable development part of their overall business strategy (Ofori and Toor, 2008). Parkin (2010) emphasises the link between leadership and sustainable practices when she asserts,

*“Leadership is a vital ingredient for achieving sustainability. Without it sustainability will never make it in government, business or anywhere”* (Parkin, 2010).

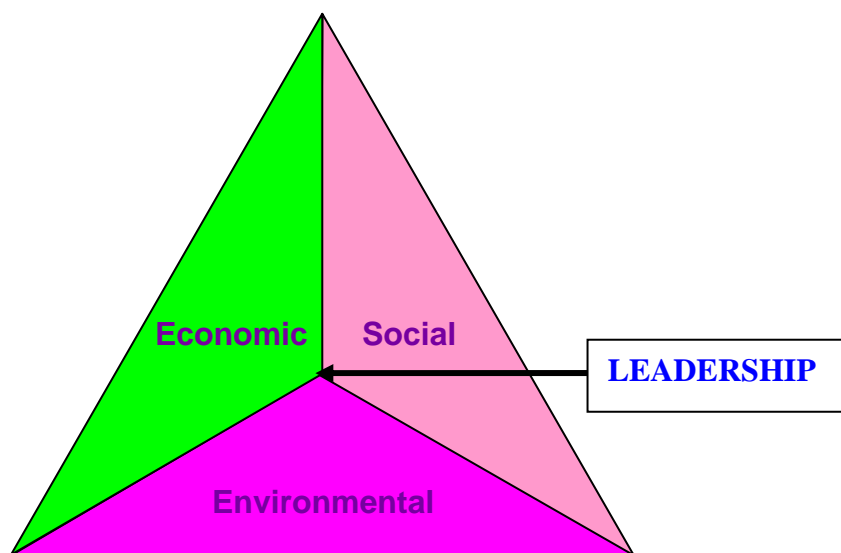
Organizations are now required to fundamentally change the way they operate from focussing on the short-term maximization of shareholders value to now pay attention to the economic, social and environmental effects of their operations (Quinn and Baltes, 2007) The construction industry is therefore one of the key sectors required to lead the drive due to the significant negative impacts construction activities can cause. Both Egan (1998) and Latham (1994) called on industry leaders to lead the quest for change in the construction industry. It is believed that any effective change process requires committed leadership. Leaders have a significant role to play in the construction industry as the industry undertakes its critical role in the efforts to attain sustainable development (Ofori and Toor, 2008). It is suspected that the ability of organisations, irrespective of their level of maturity, to pursue the sustainable agenda is influenced by the commitment and conviction of their leadership approach towards sustainability. Leaders should communicate the importance of sustainability and establish a culture of integrating sustainability into day-to-day management decisions (Avery, 2005).

A qualitative study by Quinn and Dalton (2009) using structured interviews, sampled leaders from organizations that formally adopted sustainability practices and found that sustainability requires the integration of social, economic and environmental issues fully into the vision, values and operations of all organizations. This requires leaders to reform redesign and restructure their organizations to incorporate sustainability values into the fabric of the organization to minimize their negative impacts. In contrast, Ofori and Toor (2008) believe that leadership is the key factor of success in the drive towards sustainability. They argue that, the solution lies in leadership that is self-aware, committed and able to earn the support, and direct the actions, of all stakeholders towards the pursuit of a common project related goal of sustainability. This was the result from a study involving interviews with 32 prominent leaders in the Singapore construction industry.

A study by Szekely and Knirsch (2005) **identified** the best available methods and criteria that companies have been using to measure their sustainable performance as a result of implementing sustainable development initiatives. This work examined the way twenty major

German companies measured and reported their sustainability performance. They identified leadership as the most critical success factor that an organization needs to promote and achieve sustainability. Leaders have the opportunity to use the influence to help shift their organisations towards sustainability. This study acknowledges that it was important that such leaders have both leadership abilities as well as sustainability knowledge, to guide their organization effectively (Quinn and Dalton, 2009). In a survey to assess students' personal commitment to sustainability, sustainability knowledge, and interest in the topic of sustainability, it was found by Middlebrooks, *et al.* (2009) that as organizations and governments continue to underline a shift towards sustainable values and vision, then effective sustainability leadership will become increasingly important. Therefore the next generation of leaders must learn how to integrate their conceptualization of sustainability with the ability to facilitate others in pursuit of that vision.

However, Doppelt (2003) asserted that, organizations are not fully embracing sustainability because most organizational leaders do not fully understand the issues and do not know how to develop strategies required for the adoption of more sustainable practices. Even though Redekop (2007) comment that, the characteristics of a sustainability leader have not been systematically researched, Middlebrooks, *et al.* (2009) have identified the characteristics of sustainability leadership as; the ability to *see* organizational culture through the informed lens of the triple bottom line of sustainability, knowledge and understanding of the different balances and interconnections between bottom lines in the pursuit of sustainable ends, a desire to make a positive difference in the long-term, the ability to influence others in a socially just manner, and the ability to manage behavioural and systems change. Success with sustainability requires clear leadership at the organisational level, to identify, understand and manage efficiently ground-breaking solutions which address the critical social, environmental, and economic challenges faced by the world today as illustrated in figure 1 below.



**Fig.1** Leadership at the centre of Sustainability

When implementing a business strategy that commercially incorporates sustainability, leaders must be able to understand the motivation of different stakeholders, and engage and partner with managers to weave sustainability into the fabric of the organizations. Leaders must also possess the ability to understand and overcome the challenges or barriers to adopting

sustainability (Lueneburger and Goleman, 2010). Sustainability leaders should not just give directions but should also develop and implement actions in collaboration with others, adapting to unforeseen changes in the environment overtime through modification as when needed (Ferdig, 2007). Sustainability leaders must display result delivery and commercial orientation competence as well as the ability to translate a vision of sustainability into a comprehensive programme of targeted initiatives (Lueneburger and Goleman, 2010).

## RESEARCH METHODOLOGY

The primarily aim of this research is to critically examine the factors affecting the effective implementation of sustainable construction practices in UK construction organizations. It also investigates whether there is a difference in the leadership styles of sustainability leaders in construction. The research process commenced with a critical review of the literature, followed by a series of semi-structured interviews with sustainability leaders in construction organizations. A semi-structured interview involves the implementation of a number of predetermined questions. Interviewees are asked open-ended questions in a systematic and consistent order (Berg, 2001; Fellow and Liu, 2003). The interviewer prepares some questions or a frame for the interview and is also free to probe when necessary. Burns (2000) adds that, semi-structured interview allow greater flexibility than the closed-ended type and permit a more valid response from the participant's perception of reality.

To examine how leaders in UK construction organizations are promoting sustainable construction practices, in-depth semi- structured interviews were carried out with eight (8) sustainability leaders from construction consulting organizations in UK. Formal letters were sent to these leaders as an invitation to participate in the study. These were then followed with telephone calls and a total of 8 leaders agreed to take part and the profile of the interviewees is presented in Table 1 below. The interviews were conducted in a slightly loose manner lasting 30-40 minutes. It was also important to contact leaders from construction organizations currently pursuing sustainable construction practices. Despite the above, the data collected and the analysis presented here still yields some interesting preliminary findings related to the exploration of factors affecting the implementation of sustainable practices in construction organizations.

<b>Interviewee</b>	<b>Job Title</b>	<b>Type of Construction organization</b>
A	Sustainable Construction Manager	Consultant organization
B	Head of Sustainability	Consultant organization
C	Senior Sustainability Consultant	Consultant organization
D	Corporate Sustainability Manger	Consultant organization
E	Principal Sustainability Engineer	Consultant organization
F	Associate Head of sustainability	Consultant organization
G	Associate: Sustainability Manager	Consultant organization
H	Sustainability Consultant	Consultant organization

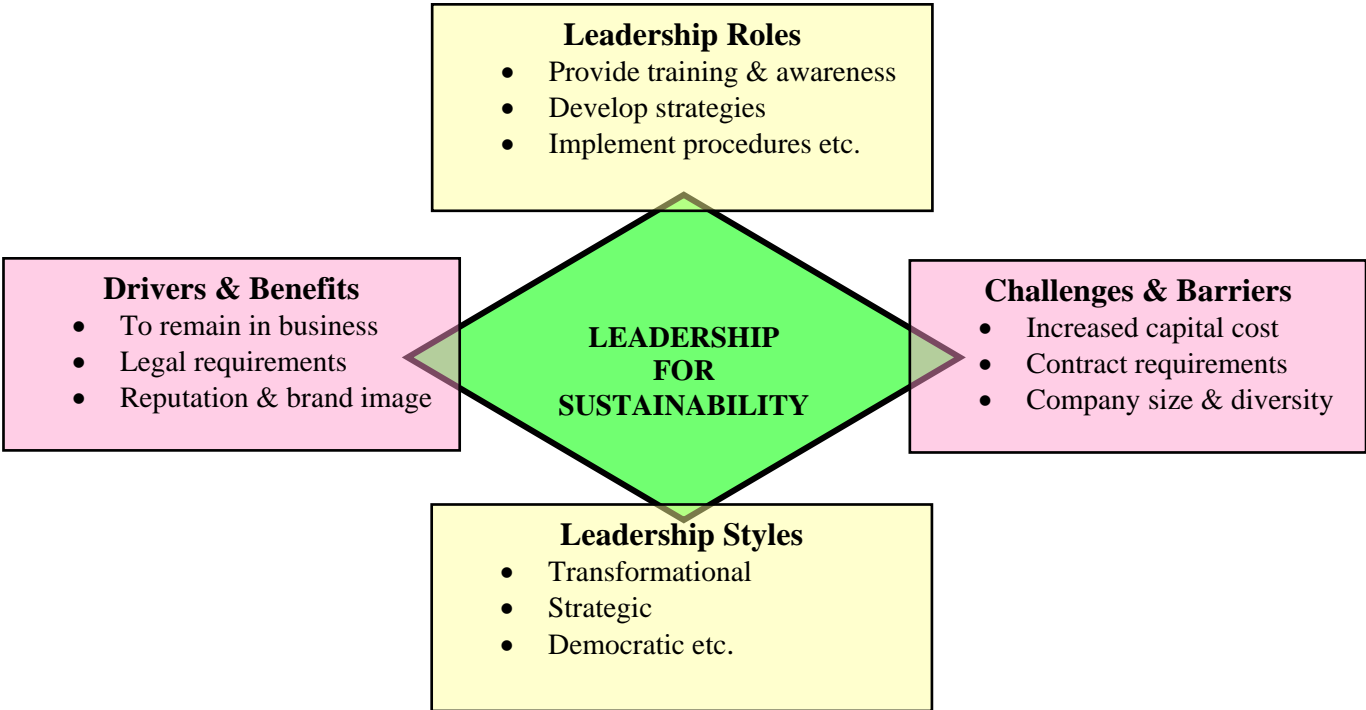
*Table 1: Profile of Eight UK Sustainability Leaders Interviewed*



Naoum, (2002) indicates that this approach is best used when the research problem to be investigated is at its preliminary stage. Questions asked during the interviews addressed issues such as: what drives construction organizations to pursue sustainable practices; the role of leader in promoting sustainable construction practices; factors affecting leaders in the effective implementation of sustainable practices in construction and leadership style of sustainability leaders.

**FINDINGS AND DISCUSSIONS**

This section presents a discussion of the findings extracted from the analysis of the interviews. With most of the companies interviewed, the focus on sustainability started with a clear desire to introduce sustainability on the part of the leadership. Figure 2 provides a framework of the summary of each of the above issues considered in turn,



*Fig.2 Framework for analysis and discussion of findings*

**Drivers**

Sustainability leaders were asked about what drives their organizations to pursue sustainable practices and the results were very interesting. Some of the drivers include: company reputation or brand image; win more contracts to remain in business; position in the market place or competitive advantage; legislation or legal requirement; clients demand, improve economic performance; as a core value in corporate social responsibility. For example interviewee ‘D’ responded by saying:

*“There are a plethora of business sustainability drivers that generate sustainable practices for us as a business and indeed for our clients, including: legislation and legal requirements, cost efficiencies, energy prices, water costs, waste issues, higher building profile, proximity to clients/competitors, proximity to public transport, social issues, ethics, stakeholder influence,*

*retention of key staff, competitiveness, green agenda, polluter pays, floods, environmental revenue, taxation, resource depletion, higher quality environment etc. These drivers are underpinned by a moral obligation to act with integrity and do the right thing”.*

Furthermore, many of the interviewees pointed out that, having a green reputation will help their organisations to win more business in periods of economic recession, interviewee ‘B’ noted:

*“What drives this company to pursue sustainability is for corporate identity or brand to remain in business especially in this current economic climate”*

### **Role**

It was found that sustainability takes place in an organization better when there is an active leader within the company to champion the sustainability approach. Sustainability leaders have a role in helping to promote sustainable construction through: training staff on sustainability; produce guidance notes and policies; ensure that sustainability is embedded in the business; sustainability monitoring and appraisal etc. Interviewee ‘F’ highlighted that:

*“I am the main author of our sustainability guide and responsible for the integration of our strategy internally within the company and the strategy promotion externally. I also sit on our group sustainability committee which drives the strategy throughout the company”*

Several of the interviewees pointed out that the training of employees on sustainable issues was also a part of their roles. For instance interviewee ‘E’ said:

*“I serve as catalyst in raising awareness on sustainability by training staff on sustainable construction practices”.*

### **Challenges**

Sustainability leaders face many challenges in attempting to persuade their organisations to adopt sustainable construction practices. When leaders were asked about factors affecting them in the effective implementation of sustainable construction practices in their organization the following issues were raised, namely, one major challenge to organizational leaders is the lack of full understanding of what sustainability truly means to their company due to key fundamental information gaps. Following the analysis of the collected qualitative data, the following factors were identified as other challenges; lack of client awareness; lack of business case understanding; lack of client demand; large company size and diversity. In her view interviewee ‘D’ reflected that:

*“Whilst sustainability involves achieving a balance of the social, economic and environmental factors, the current financial climate can influence perception that the economic considerations negate the social and environmental ones. The size and diversity of our company also proves a challenge in ensuring communications reach all stakeholders”.*

Furthermore, interviewee ‘C’ added that:

*Managing competing and conflicting targets with other departments of the company to the understanding of a common sustainability goal is always difficult”.*

Senior management of company boards have other high priorities and sustainability is at the bottom of most company boards' priority list. A sustainability consultant; Interviewee 'H' explained that:

*“Top management or company board lack the awareness and knowledge to make decision on sustainability”*

### **Style**

A significant part of the study was to identify leadership style of sustainability leaders. Leadership style was found to be an important part of leadership but no single leadership style was found to be best for all situations. Style of leadership was identified among the eight leaders interviewed as being; strategic, democratic, charismatic, transformational/ visionary and instrumental. Strategic leadership style was the most commonly identified style among the sustainability leaders. Most leaders described themselves as strategic and influential in the development of sustainability strategies. As interviewee 'A' observed:

*“I am in a strategic role, active in the development of our sustainability strategy. I continue to influence the direction of the company in relation to sustainability and to help drive the ethos within the company through various mediums including engagement with stakeholders”*

## **CONCLUSIONS**

Sustainability is quickly becoming an essential market force ignited through customer, shareholder and stakeholder demands. Currently a business purely driven by profit without consideration for its environmental impact and no recognition of the social value of products and services will not prosper in a sustainable future. Construction organizations have critical roles to play in the efforts to attain sustainable development. Leadership is a vital factor for achieving sustainability. The role of the leader in guiding construction organizations toward sustainable practices is complex and vast, and it has been alleged that it requires an exceptional array of leadership skills, competencies and ethical commitment for it to be successful.

The desire of construction organizations to pursue sustainability is driven by a number of factors including: company reputation or brand image; the need to win more contracts to remain in business; positioning in the market place or competitive advantage; legislation or legal requirement; and the improvement of economic performance. However, there are number of factors affecting the effective implementation of sustainable construction practices such as: lack of the right information upon which to base decisions; companies struggle to define the business case for sustainability; a lack of consideration of sustainability measures by stakeholders; not required by clients; real and perceived costs. Leadership style is also an important part of leadership. It was found that a strategic leadership style is the most commonly identified style among the sustainability leaders involved in the study. Most sustainability leaders interviewed described themselves as strategic and influential in the development of sustainability strategies.

However, there were some differences in the opinion of leaders interviewed and that of reviewed literature. Sustainable leaders interviewed have a passion and fully understand the business case for sustainable construction, contrary to what was asserted in the literature. However the interviewees and the literature reviewed agreed that the importance of clients in

the pursuit of sustainability. The interviewees confirmed that the importance of client demand was a driver or a barrier to sustainable construction since the industry is client driven. The pursuit of sustainable construction practices is both a challenge and an opportunity. It is therefore important that organizational leaders turn such challenges into opportunities. Sustainable leaders have a role in helping to promote sustainable construction by training staff on sustainability; producing guidance notes and policies; ensuring that sustainability is embedded in the business, as well as the assessment and monitoring of sustainable practices. This therefore establishes the need to further investigate the role of leadership in promoting sustainable construction in the on-going PhD research study.

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