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SUSTAINABILITY THROUGH GREEN PROCUREMENT: INTERPLAY BETWEEN LEADERSHIP AND INSTITUTIONAL PRESSURES

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Abstract

Green Procurement is an emerging theme in the construction industry across the globe. However, construction firms often find it difficult to integrate sustainability performance indicators in construction projects especially in procurement. Literature shows that the construction industry has frequently encountered the disapproval of the regulatory authorities for neglecting or evading environmental regulations and it is particularly criticized for ignoring sustainability concerns in the procurement process. Therefore, in response to mounting institutional pressures, green procurement is emerging as a key strategic option for improving overall sustainability in construction industry. However, there is still much to be done as the research studies on green procurement identified that this strategy is not showing constant outcomes across the organizations owing to the organizational factors which impede or support in translating the green procurement strategy into practice at the organizational level. Therefore, through extensive review of the relevant literature, this study employs the theoretical lens of institutional theory in conjunction with transformational leadership to explore their role in enabling green procurement in construction firms. A hypothetical framework is thus proposed to analyse the role of transformational leadership in channelizing the institutional pressures for a pragmatic implementation of green procurement while effectively managing the inevitable change process at organizational level.

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Keywords: Sustainability, project management, green procurement, transformational leadership.

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1. Introduction

The theme of environmentalism is gaining popularity in the modern era of development owing to detrimental environmental pollution and global warming. The gradual deterioration of the global environment and its wider devastating effects have been highlighted in literature since early 70s (Appolloni, Sun, Jia, & Li, 2014) where the contextualised as well as generic research reports incessantly predicts that the rapidly increasing world population and its corresponding multiplier effect on the world economy is disastrous for the existing capacity of the natural resources of our planet. There are urgent calls for exigent remedial action from all stakeholders to put a stoppage on extravagant use of natural resources which will help in resource conservation and minimize the negative environmental impact (Govindan, Seuring, Zhu, & Azevedo, 2016). In response, governments and as well as non-governmental actors across the globe are doing efforts to introduce environmental friendly practices and products aimed at conserving natural resources and promoting a sustainable environment.

Data reveals that the current usage of earth's annual bio capacity has escalated as compared to the past and business world need to take concrete steps towards sustainability of their operations (Peenstra & Silvius, 2017). Thus sustainability is one of the most pressing challenges of our time and it has turned out to be an issue of major concern for all organizations operating in the contemporary business world, particularly for construction industry which consumes non-renewable resources considerably in its operations which significantly affects the environment (Wong et al., 2013). Energy consumption level of the modern day construction activities is quite high especially during the manufacturing and transportation of building materials due to which greenhouse gases emanate in bulk. Therefore, if managed sustainably, construction industry can help to realize the goal of a low-carbon human society (Wong, San Chan, & Wadu, 2016).

2. Problem Statement

Sustainability concerns are influencing the way contemporary organizations operate and owing to the sensitive nature of the issue, firms are coming up with proactive plans to adopt green innovations in their everyday operations. Moreover, developing a *green image* also entice firms to actively adopt environmental management in order to comply with the environmental trend which is deemed to earn them a competitive advantage over the competitors (Chen, Chang, & Lin, 2014). Sustainable procurement or green procurement is considered an emerging theme in the construction industry across the globe as a response to the aforementioned environmental challenges and to improve the overall sustainability of the industry. The green procurement practice is being advocated by researchers as well as industry practitioners as a way-out for the pressing environmental issues (Grandia, 2016). However, construction firms often find it difficult to integrate sustainability performance indicators in construction projects especially in procurement. Literature shows that the construction industry has frequently encountered the disapproval of the regulatory authorities for neglecting or evading environmental regulation and it is particularly criticized for ignoring sustainability concerns in the procurement process (Wong et al., 2016) . Therefore, in response to mounting institutional pressures, green procurement is emerging as a key strategic option for improving overall sustainability in construction industry. However, there is still much to be done as the research studies

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on green procurement identified that this strategy is not showing constant outcomes across the organizations owing to the certain organizational factors which impede or support in translating the green procurement strategy into practice at the organizational level (Grandia, 2016). Therefore, through extensive review of the relevant literature, this study is aimed at using the theoretical lens of institutional theory in conjunction with transformational leadership to explore their role in facilitating the implementation of green procurement in construction industry firms. This study attempts to examine the role of transformational leadership in channelizing the institutional pressures for implementing green procurement practice while effectively managing the inevitable change process at organizational level. Moreover, this paper aims to highlight transformational leadership as a key organizational factor that plays an important role in facilitating the green procurement implementation, in response to the various institutional pressures in the construction industry. This will ultimately help practitioners in adopting green procurement effectively while minimising the adverse environmental effects in the construction industry operations. The conceptual model, along with the organizational-factor perspective discussed, and the subsequent recommendations offered by this study, extends the theoretical development for green procurement practices in the construction firms.

3. Research Questions

Q: 1.What is the role of transformational leadership in channelizing the institutional pressures for implementing green procurement at organizational level?

Q: 2. Does transformational leadership, as a key organizational factor, plays an important role in facilitating the green procurement implementation?

4. Purpose of the Study

The basic purpose of this study is to further the current understanding of the role of organizational factors in implementing green procurement in construction firms while properly comprehending the institutional pressures regarding environmental sustainability. The conceptual model presented in this study will be a step forward towards pragmatic implementation of green procurement and it can help corporations raise their green performance.

5. Research Methods

This paper uses the review of secondary sources as methodology which includes published literature such as research articles, organizational reports and books and draws further on the already published research work.

6. Findings

Sustainable project management has been discussed and defined by researchers in various ways, attempting to cover multiple aspects in a particular context as well as for generic use. Reflecting on the review of literature, this study adopted the comprehensive definition of sustainable project management

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by Slivius & Schipper (2014), who defined this phenomenon as " the planning, monitoring and controlling of project delivery and support processes, with consideration of the environmental, economic and social aspects of the life-cycle of the project's resources, processes, deliverables and effects, aimed at realising benefits for stakeholders, and performed in a transparent, fair and ethical way that includes proactive stakeholder participation.*"* (p. 79). The authors used the well-known triple bottom line approach Elkington, (1998) as a basis to cover the various dimensions of sustainability which broadly includes environmental, economic and social aspects. Furthermore, this definition also aligns various unaddressed dimensions of the project life cycle, resources used, deliverables as well as the stakeholder engagement dimension

6.1. Green Procurement

Green procurement has been described in different terminologies by different authors such as environmental procurement, sustainable procurement and green purchasing (Appolloni et al., 2014). According to Green Council, (as cited in Wong et al., 2016) "the green procurement is the purchase of products or services which minimize or provide positive environmental impacts through the factoring of environmental concerns into major purchasing strategies, policies and directives" (p. 860). Moreover, some other authors considered green procurement as a combined set of procurement policies , practices, and relationships emerged in response to apprehensions related to the natural environment (Shen, Zhang, & Long, 2017).

Over the last two decades, green procurement has gained much attention from the practitioners as well as researchers and is being viewed as a pragmatic strategy to deal with the environmental concerns in product production and consumption (Peenstra & Silvius, 2017). Previous research shows that the process of green procurement actually establishes a framework for effective integration of environmental considerations into the procurement of products and services (Günther & Scheibe, 2006). Similarly organizations should be able to evaluate the complete costs and environmental impact of a project throughout the development stages, that includes acquisition of raw materials, transportation and storage, material handling, consumption and finally the disposal (Salam, 2008). In construction projects, green procurement covers almost all these stages along with the contractor selection process and integrating the environmental requirements in the contract document (Lam, Chan, Poon, Chau, & Chun, 2010). Similarly, environmental considerations must be taken into account during the evaluation and assessment of core tender documents and this criteria must be given substantial weightage in the procurement process. This process can ultimately assist clients in finding construction products with minimum energy utilization, reduced waste production, and lesser carbon footprints, thus reducing harm to the environment (Annunziata, Testa, Iraldo, & Frey, 2016). Corporations gain corporate benefits along with the environmental benefits by adopting the practice of green procurement as it can help to spread a positive public image of the corporate which can ultimately create more business opportunities with international and local investors working with a *green vision* (Chen et al., 2014). Using environmental friendly products will encourage clean technology and fuels to improve energy and resource conservation by improving efficiency and reducing waste during construction projects. Moreover, it will also minimise the environmental-related costs to be incurred during the process (Govindan et al., 2016).

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However, when it comes to implementing green procurement, the response of the corporations vary owing to the influence of certain external and internal factors. These contextualised factors may affect the decisions of corporations regarding their engagement in sustainable procurement. Researchers have argued that implementation of green procurement practices are not always driven by efficiency. Instead, firms more often adopt sustainable practices in order to comply with the regulatory pressure and to secure social legitimacy (Smith & Terman, 2016). Therefore, it makes a sound case to find out whether implementation of green procurement practices in organizations can be explained by institutional theory and to explore how these institutional pressures facilitate the diffusion of such practices.

6.2. Institutional Theory

The renowned institutional theory has wider practical implications across different academic disciplines as it provides a theoretical lens which can assist researchers in examining and ascertaining influences that support persistence and legality of organizational practices in a particular context. This theory in fact helps to recognise the external pressures for organizations which reduces diversity and promotes isomorphism. (Grob & Benn, 2014). Research shows that government environmental regulations and policies drive firms towards adopting green practices, provided that the regulations are in place and effectively enforced. Moreover, when modelling the external forces, researchers working in the field of green procurement tends to draw more from institutional theory (Bohari, Skitmore, Xia, & Teo, 2017).

The underlying theme of institutional theory is that the internal processes and decision making processes of an organization are deeply influenced by the external pressures or forces. These pressures emerge from the socio-economic context and political scenario and compel the organization to seek legitimacy for its practices in the sight of other stakeholders (Jennings & Zandbergen, 1995). DiMaggio & Powell (1983, 149) asserts that organisations do so in order to secure and sustain their legitimacy and thus survival which ultimately results into isomorphism, which is defined as "the constraining process that forces one unit of a population to resemble other units that face the same environmental pressures" *(*DiMaggio & Powell, 1983). The core three constructs of isomorphism include:

a) Coercive isomorphism, arises from pressures exerted by those in influential positions i.e. government regulations, political influence.
b) Mimetic isomorphism, occurs when an enterprise tries to mimic the successful practices of competitors operating in the same industry, thus seeking legitimacy by copying good actions of others.
c) Normative isomorphism, is a type of social influence leading towards conformity. It is basically the influence of other people or social groups that leads organizations towards conformity in order to be liked and accepted by them.

Institutional theory can therefore be used to link a firm's green activities with its external scenario where the social values, technological developments and government regulations affect a firm's decisions regarding *going-green*. Similarly, research also shows that normative pressures can assertively drive organizations to be more environmentally cautious, and recommends that more research is needed to

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explore the relationship between institutional theory and green practices, in order to better comprehend new social rules and organizational responses to environmental issues (Ball & Craig, 2010).

In conclusion, institutional pressures create expectations which organizations fulfil by determining the legitimate actions demanded by these pressures (Grob & Benn, 2014). Moreover, once the institutional logics become dominant, they affect the decision making process within the organizations. The dominant institutional logics compel/persuade the organizational leaders to keep the focus on the most pertinent issues and solutions in relation to the dominant logic (Thornton, 2004). Therefore, it becomes a task of prime importance for the executives to understand the significant institutional pressures within their organizational context and to translate these pressures in to meaningful compliance so as to secure legitimacy.

6.3. Transformational leadership

Complying meaningfully with the external pressures regarding green procurement and translating them into practice more often demands significant changes in organizational vision, especially in terms of promoting green procurement as a strategic function of the enterprise (Chen et al., 2014). Transformational leadership is a leadership approach that induces change in individuals as well as in organizational systems. Transformational leadership behaviour inspires and motivate followers to create valuable and positive change in the followers which ultimately contributes positively to organizational success. From the broader organizational perspective, transformational leadership is given the substantial credit for enhancing the motivation, morale and performance of subordinates through a variety of mechanisms (Dong, Bartol, Zhang, & Li, 2017). This implies that connecting the follower's personal goals and sense of identity to the collective vision and mission; motivating individuals as a role model and inspiring them to take greater ownership for their work while comprehending the strengths and weaknesses of followers. In brief, transformational leaders are recognised for providing an inspirational vision that motivates their followers to accomplish the organizational goals in an effective manner (Tepper et al., 2017). Moreover, transformational leaders are given the credit for stirring creative thinking among the subordinates within their organizations which actually lays a foundation for *innovation* in the competitive markets and, therefore, it can be argued that leadership plays a decisive role for promoting product/process innovation in the contemporary organizations (Chen et al., 2014) .

Researchers are now directly linking an organization's green performance with the transformational leadership and term it as *green transformational leadership*. Chen et al (2014, 6605) defines it as *"behaviour of leaders who motivate followers to achieve environmental goals and inspire followers to perform beyond expected levels of environmental performance"*. Similarly, other research studies assert that transformational leaders provide vision and set operational framework for green performance within the organizations (Peenstra & Silvius, 2017) and they can inspire the followers to develop a collective thinking pattern and broaden their working perspective by linking it with the society and environment (Dong et al., 2017). Therefore, it can be abstracted that transformational leadership style could play a significant role in introducing green procurement practices in organizations by providing a broader vision and inspiring the followers to include environmental concerns in their actions.

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There is surprisingly little research on organizational factors which can play a critical role in making organizational practices more sustainable (Grob & Benn, 2014). More specifically, our current knowledge level is quite low concerning the role of visionary leadership in introducing sustainable practices in organizations. Literature is incessantly elucidating the fact that a typical efficiency-seeking managerial behaviour and mind-set is unable to comprehend the linkage between sustainable practices and competitive advantage of a firm. Therefore, in order to adopt sustainable corporate practices, such as green procurement, organizations need to nurture leaders with a broader vision who could balance the environmental performance with corporate benefits (Roman, 2017).

6.4. Conceptual Framework

The contemporary construction firms are subject to various institutional pressures regarding sustainability and managers of these firms are struggling to comply with these pressures while maintaining the desired competitiveness. However, understanding the most relevant institutional pressures and responding accordingly by translating them into meaningful organizational action, is a big challenge for them (Wong et al., 2016). Organizations generally treat procurement function as an ordinary one and it is typically perceived as‘ back-end’ function which is rarely considered of any strategic importance (Roman, 2013). Likewise, the green procurement has not been established yet as a function of strategic importance for the organizations as well as a *concept of action* (Roman, 2017). The basic assumption behind all this is the perception that sustainable procurement practices are resource intensive and costly. Moreover, the tangible benefits of sustainable procurement are often not visible which discourage managers, with a typical efficiency seeking approach, to pledge organizational resources to the actions that are not guaranteed to generate concrete benefits. This study argues that the transformational leadership of an organization is able to duly comprehend the institutional pressures in a specific context and subsequently translate them into affirmative action by providing a long-term vision and triggering the required change process, thus complying to regulations while gaining competitive advantage for the organization in the long run (Figure 01).

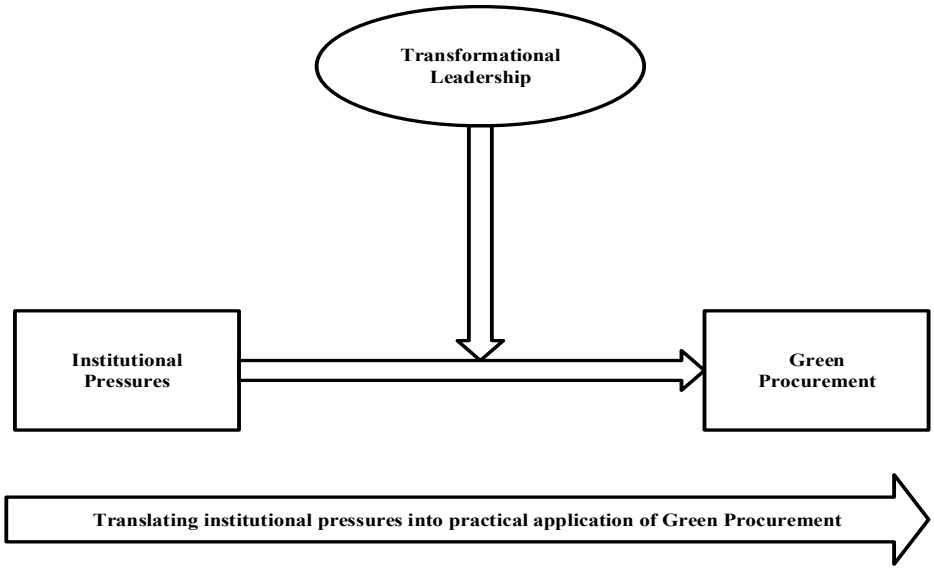

Figure 01. Conceptual framework for implantation of green procurement

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The environmental vision and commitment of transformational leaders can significantly influence the traditional working patterns and encourage employees to think beyond the short-term goals. Besides, such leaders help to build the capacity of subordinates regarding the emerging themes like environmental management which are beneficial for the individuals as well as the organization. This ultimately engulfs the traditional working culture and a new organization emerges where it becomes easier to pursue the sustainable practices like green procurement and other related concepts. Thus, when a leader with a *green vision* explicitly articulates a sound understanding of the corporate and environmental benefits of green procurement, the probability increases that the organization will practically adopt the green procurement approach in its operations (Wong et al., 2016).

7. Conclusion

Construction industry significantly affects the environment as it consumes considerable quantity of non-renewable resources and materials. Therefore, enabling the widespread adoption of green procurement in construction industry is a topic of great interest as well as of major concern for the practitioners and scholars. While the institutional pressures regarding green procurement in construction industry are mounting, firms are at a nascent stage of comprehending the long term benefits of green procurement. Furthermore, there exists ambiguity regarding the organizational factors that facilitate the formal and successful implementation of green procurement practice in construction industry projects. This research study, through an extensive review of the literature, takes transformational leadership as the most critical organizational factor that facilitates the successful implementation of green procurement practices in construction firms. The study further argues that it is the transformational leadership of a firm that acts like a catalyst and translates the unavoidable institutional pressures in a way that these apparently negative forces turn out to be a source of competitive advantage for the firm in the competitive markets. It further asserts that the principal virtue of green procurement in construction is that it increases both the environmental and the corporate performance of construction firms. This study recommends that construction firms must conduct a due diligence process in order to properly comprehend the institutional pressures regarding environmental sustainability and the executive management should device a comprehensive action plan that will enable the firms to model and translate the pressures into competitive advantage. The conceptual model presented in this study will be a step forward towards pragmatic implementation of green procurement and it can help corporations raise their green performance.

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