From Pressure to Progress: Driving Circular Economy in Emerging Economies through Institutional Forces, Green Integration, and Leadership Styles

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Abstract

This study investigates the key drivers of circular economy (CE) adoption in emerging economies. Drawing on survey data from 287 manufacturing firms in Ghana, the findings revealed that green supply chain integration (GSCI)—not institutional pressures alone—is critical for CE implementation. GSCI also serves as a mediating mechanism through which transformational leadership—not transactional leadership—drives successful CE adoption. Transformational leadership (not transactional) further enhances CE success. For managers, findings suggest: (1) prioritise GSCI partnerships to operationalise CE, (2) cultivate transformational leaders to align stakeholders with sustainability goals, and (3) institutional pressures should be leveraged as complementary, rather than primary, drivers**.** For theory, the study examines the impact of institutional pressures, GSCI and leadership styles in accelerating CE transitions in EEs.

Keywords: circular economy, green supply chain integration, isomorphism, transformational and transactional leadership.

Introduction

The circular economy (CE) is transforming business models from linear ('take-make-dispose') systems to waste-minimizing, resource-efficient processes (Patwa et al., 2021). By adopting cradle-to-cradle principles, CE reduces pollution, optimizes material use, and promotes recycling (EMF, 2020; Patwa et al., 2021). Research highlights CE's dual role in addressing environmental challenges (e.g., pollution, climate change) and social issues like unemployment (Geissdoerfer et al., 2017), while driving innovation in product design and technology. Artificial intelligence further enables CE implementation through waste tracking and data-driven decision-making (Jabbour et al., 2019).

Given CE's benefits for firms, society, and the global economy, governments and businesses are increasingly investing in circular transitions (Castro-Lopez et al., 2023). CE drives economic growth through job creation, new business opportunities, and cost reduction while mitigating environmental harm. Although widely adopted in developed economies, CE implementation remains limited in emerging economies due to challenges like low economic growth, high populations, carbon emissions, industrial waste, and resource overuse (Patwa et al., 2021). Current CE research primarily reflects developed economy contexts, underscoring the need for studies focused on adoption drivers specific to emerging economies.

The limited adoption of circular economy (CE) practices in emerging economies (EEs) highlights the urgent need for research focused on business model transformation (Gedam et al., 2021). Key enablers include institutional pressures, leadership styles, and supply chain collaboration (Patwa et al., 2021; Castro-Lopez et al., 2023; Soni et al., 2023). While normative, coercive, and mimetic institutional pressures offer relatively 'soft' mechanisms for promoting circular economy adoption—yet remain under-researched in emerging economies—green supply chain integration (GSCI) has emerged as a more critical driver, particularly through joint training programs with partners from developed economies (Gedam et al., 2021; Osei et al., 2023). We argue institutional pressures may initiate CE adoption, but GSCI remains essential for swift implementation in EE manufacturing firms.

Research has revealed the influence of leadership styles on innovation, strategy implementation and organisational change (Chowdhury et al., 2022; Soni et al., 2023). Soni Moktadir et al. (2018) highlighted that firms with appropriate leadership styles are susceptible to the implementation of CE practices. Good leadership styles, especially flexible leadership, could inspire positive behaviour of employees and instigate their commitment towards CE. The research dwells on the concepts of transformational-transactional leadership to examine how these styles can be harnessed to fuel CE adoption in EEs. Wanasika et al. (2011) highlighted that the national culture of several EEs, especially those in Sub-Saharan Africa, influences the leadership styles, which in turn affect their adoption of new organisational practices. As a result, there is a need to further investigate the leadership styles of firms in emerging economies to understand how they can be adapted to support circular economy (CE) adoption. However, empirical research in this area remains limited. Against these backdrops, this research seeks to provide answers to the following questions:

RQ1: Do institutional pressures influence CE implementation in emerging economies?

RQ2: Does GSCI mediate the relationship between institutional pressures and CE practices implementation?

RQ3: Do transformational-transactional leadership style moderate CE adoption?

To answer these questions, this study analyses the CE implementation of manufacturing firms in Ghana, an EE in Sub-Saharan Africa, by assessing the influence of normative, mimetic, and coercive pressures on the adoption of CE practices; reveals the mediation role of GSCI on the relationship between institutional pressures and CE practice adoption and finally, the moderating role of leadership styles in the adoption of CE practice.

Literature Review and Hypotheses Development

Circular Economy and its implementation in emerging Economies

Though other concepts such as green economy and green growth strategies have tipped to lead to sustainable development, CE has become the most prominent concept (Ellen MacArthur Foundation, 2020). In this research, we adopt the comprehensive definition provided by Geissdorfer et al. (2017, p. 759), who defined CE as "the balanced and systematic integration of intra and intergenerational economic, social and environmental performance". From the above definitions, the integration of CE practices can be viewed as a business model for the dual goal of achieving a sustainable economy and ensuring the well-being of society (Patwa et al., 2021). CE practices incorporate activities that enhance the environment, economy, and the health and well-being of society.

CE extends beyond the traditional linear economy/supply chain management practices to include the broader 3R principles (reduce, reuse, and recycle). The "reduction" constitutes manufacturing firms adopting eco-efficient means of production and consumption to reduce environmental impact and make economic improvements (Geisendorf and Pietrulla, 2018). As part of implementing CE practices, manufacturing firms are required to redesign, sell environmentally friendly products, and adopt business models which encourage remanufacturing and recycling to reduce or eliminate waste from the production process and their supply chains (Reuse). Effective implementation of the reuse strategy involves reducing transportation and developing environmentally friendly packaging. The third 'R', which is recycling, examines the reprocessing of waste materials into useful products or materials or substances (Geisendorf and Pietrulla, 2018).

Governmental support, stakeholder pressures, AI and technology, and big data have been identified as factors propelling the implementation of CE practices, especially in developed economies. Existing research on CE and factors influencing its implementation has largely focused on developed economies with less evidence of its implementation in EEs. The strong focus on CE implementation in developed economies can be attributed to their supportive infrastructure and enabling ecosystems. In contrast, emerging economies—despite being more vulnerable to climate change—struggle to fully embrace CE due to differences in cultural and institutional contexts, and the absence of circular models tailored to their specific realities (Gedam et al., 2021; Patwa et al., 2021). This is quite alarming due to the urgency for the world to shift towards the adoption of CE practices. The barriers to implementation include, *inter alia*, social, economic, institutional, infrastructural, technological, organisational, financial, lack of government regulations and policies (Gedam et al., 2021). Farooque et al. (2019) claim that lack of support, knowledge, supply chain collaboration, and awareness constitute the most conspicuous barriers that need intense consideration and addressing in these EEs; therefore, studies into the factors which can enable the swift implementation of the CE practices are needed. Several factors, including institutional pressures, innovation, supply chain integration, and decision-making tools, have been considered critical to the implementation of CE practices, and more consideration of how these factors could enable firms in EEs could be highly relevant for existing literature.

The rapid population growth in Ghana and other Sub-Saharan African countries has intensified reliance on natural resources and exacerbated waste management challenges, particularly with non-biodegradable plastics. With about 10% of waste properly recycled and the government spending heavily on landfill maintenance, improper waste disposal costs Ghana approximately $290 million annually. Manufacturing sectors contribute

significantly to plastic pollution, creating environmental, social, and economic crises. While some firms are adopting circular economy (CE) practices like recycling waste into useful materials, further research is needed to explore enabling factors—such as isomorphic pressures, green supply chain integration (GSCI), and leadership styles—to accelerate CE implementation in Ghana's manufacturing sector.

Institutional Pressures

According to Castro-Lopez (2023), most of the current dynamisms occurring in organisations are because of the pressures exerted by external factors. Contemporary firms are maintaining a competitive edge and meeting the demands of customers due to external factors. The adoption of practices emanating from external pressures is best explained by the institutional theory. The institutional theory highlights the external and social factors which could affect organisational activities, performance, and actions (DiMaggio and Powell, 1983). Every organisation is determined to seek approval from the environment, hence, adopt practices influenced by the environment including stakeholders. According to DiMaggio and Powell (1983), the main thrust of the theory hinges on the pressures or factors which lead firms to adopt certain business practices, widely known as isomorphism. Recent literature has confirmed the importance of external pressures in the adoption of sustainable and even CE practices (Arranz et al., 2022). DiMaggio and Powell (1983) identified three main types of pressures accounting for the isomorphism: (1) coercive pressures, (2) normative pressures and (3) mimetic pressures. Coercive pressures refer to formal or informal demands imposed by institutions or organizations, including legal regulations and control mechanisms such as environmental policies enforced by public authorities.

These pressures have been shown to influence the adoption of environmental and circular economy (CE) practices (DiMaggio & Powell, 1983; Arranz et al., 2022; Castro-Lopez et al., 2023). They may also stem from stakeholders such as customers, suppliers, or NGOs who compel firms to comply with sustainability standards. Normative pressures arise from shared norms, values, and systems embedded within professional or organizational networks (DiMaggio & Powell, 1983; Scott, 2005). These networks promote accepted practices through professional associations, industry standards, and formal education, encouraging conformity among members. Mimetic pressures reflect firms' tendencies to imitate successful peers, especially under conditions of uncertainty. Companies are likely to adopt CE practices modelled by industry leaders perceived as successful in operational and environmental performance (Dubey et al., 2016). Given these dynamics, this study argues that firms in emerging economies—despite facing institutional voids—can leverage coercive, normative, and mimetic pressures as pathways for successfully adopting circular economy practices.

Green Supply Chain Integration

Supply chain integration (SCI) enables access to critical capabilities and resources for enhanced performance (Wang & Feng, 2022). Green supply chain integration (GSCI) extends this by strategically integrating environmental concerns across organizational processes. Facing sustainability implementation challenges, manufacturers leverage GSCI for joint eco-initiatives (Osei et al., 2023), enabling sustainable chain design, environmental impact measurement, eco-friendly packaging, and lifecycle assessments. GSCI thus serves as a vital conduit for sustainable performance, with shared sustainability visions being crucial for green innovation (Osei et al., 2023), which can transcend to include CE practices. Many firms in EEs can collaborate with business partners in

developed economies that are already implementing circular economy (CE) practices. Through GSCI, these firms can establish strong partnerships, enabling joint training and development programs that facilitate the gradual adoption of CE practices. This study argues that GSCI can serve as a critical conduit for implementing CE practices in EEs, provided it is firmly established.

Leadership Styles

In the current era of sustainability, researchers are encouraging several firms to adopt sustainability-supportive leadership styles. Effective and sustainability-supportive leaders promote ethical behaviours in the organisation and the supply chain and can shift employees' behaviour towards adopting sustainable practices (Wang and Feng, 2023). Adopting supportive leadership styles can promote ethical behaviour, responsible business practices, innovation (Chayadi et al., 2022) and effective implementation of sustainable practices. Though a plethora of research has identified several leadership styles, this study focuses on both transformational and transactional leadership styles (Burns, 1978). Transformational leaders influence followers by consistently motivating them to participate and cooperate through intellectual education, individualised consideration, and inspiration (Kahai et al. 2003). According to Kahai et al. (2003), the traits of such leaders increase creativity among employees to assist in the achievement of organisational performance. Since creativity among employees and supply chain partners is relevant to the implementation of sustainability practices (Osei et al., 2023).

Transactional leader influences members' behaviour through motivation by clarifying and specifying goals and providing feedback based on the input of followers (Kahai et al., 2003). Unlike transformational leaders, transactional leaders establish expectations which motivate followers to accomplish desired output. Given this, such leaders/supervisors can use extrinsic factors to influence employees to adopt sustainable practices and encourage them to develop creative ideas in implementing CE practices. Building on this evidence, we contend that firms facing challenges in implementing Circular Economy (CE) practices - particularly in Emerging Economies (EEs) - can leverage the distinct advantages offered by these leadership styles.

Development of Hypothesis

Institutional Pressures and Circular Economy Implementation

Studies such as Arranz et al. (2022) have shown that government policies can play a compelling role in steering firms toward sustainable practices. In developing economies like Ghana and South Africa, circular economy (CE) initiatives are gradually taking shape through policies such as renewable energy acts, waste reduction strategies, and climate action plans (Ali et al., 2021). In Ghana, efforts to promote CE are reflected in environmental and climate-related frameworks, including forest conservation programs and commitments to international agreements such as the Paris Accord. These policy instruments have begun to influence green adoption within manufacturing supply chains. However, effective implementation remains uneven, often hindered by economic constraints that divert governmental focus and resources away from environmental priorities. This study argues that coercive institutional pressures remain crucial for facilitating circular economy (CE) adoption in developing economies.

Normative pressure is associated with norms or rules established by customers, suppliers, and trade associations. These associations enact rules or norms for the implementation of CE practices. Firms can acquire the needed resources, knowledge, skills, and experience for the implementation of CE practices through collaboration with industry or firms in the associations (Arranz et al., 2022). Firms in developing economies can adopt green practices by leveraging shared knowledge, technology, and support from industry networks. As climate concerns reshape consumer expectations (Castro-Lopez et al., 2023), firms implement CE practices through supplier collaborations and industrial associations that provide critical managerial competencies.

Arranz et al. (2022) highlighted the possibility of companies copying the behaviour of rivals or competitors when faced with uncertainties. Due to the growing environmental knowledge among customers, the products of firms could gain public acceptance when they mimic the environmentally friendly features of others. Globalisation has enabled firms in developing economies to emulate and implement the CE practices of their competitors in developed economies. Based on this, we hypothesise that:

H1a: Coercive pressure has a positive impact on the implementation of CE practices.

H1b: Normative pressure has a positive impact on the implementation of CE practices

H3c: Mimetic pressure has a positive effect of the implementation of CE practices.

The Mediating Role of Green Supply Chain Integration

The implementation of GSCM practices is effective when there is collaboration inter-and-intra organisational activities (Osei et al., 2023). According to Wang and Feng (2023), GSCM can be effectively implemented within a firm and across their supply chain when is a strong collaboration of inter-organisational environmental management practices, lifecycle assessment, green product, and process design. CE can be effectively implemented in firms which encourage both cross-functional integration and collaboration with suppliers and customers for green supply chain purposes. Thus, regardless of the effectiveness of the isomorphic pressures, GSCI is still needed to enhance the implementation of CE practices in emerging economies. Based on this, we hypothesised that, with manufacturing firms in emerging economies:

H2: GSCI mediates the relationship between isomorphic factors and CE implementation.

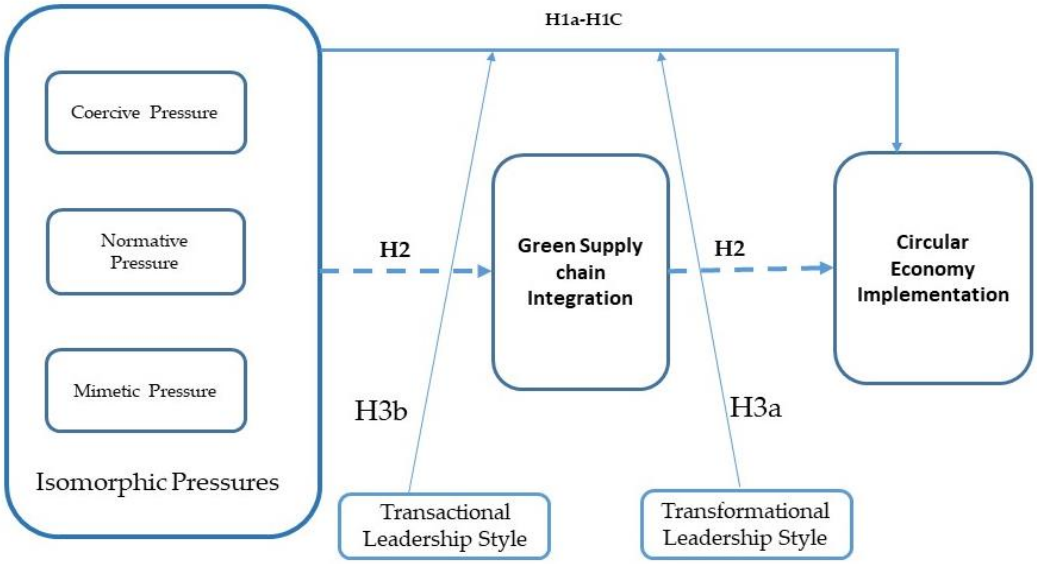
The Moderating Role of Leadership Styles

The shift to Circular Economy (CE) requires systemic supply chain transformation, engaging all stakeholders. Transformational leadership is crucial for CE success, driving environmental vision, innovation, and training (Elkhwesky et al., 2022), particularly in overcoming EE implementation challenges. While transactional leadership uses rewards/punishments for goal achievement, we argue this style alone is insufficient for CE adoption. Thus, we hypothesize that:

H3a: CE implementation is likely to be effective and higher in firms with transformational leadership styles than those without.

H3b: Firms with transactional leadership style are likely to struggle in the implementation of CE practices and transactional leadership has a negative moderating relationship with the implementation of CE practices.

Figure 1.0. Conceptual Framework



Methodology

This research utilises the quantitative approach, and the quantitative data were collected through a survey utilising a questionnaire both via Qualtrics and in-person questionnaire administration. This dual approach was necessary due to challenges many respondents faced in accessing the online survey via Qualtrics. We developed a questionnaire after an extensive review of the literature to obtain comprehensive measuring items for each of the variables. Each of the measuring items for the variables of the study was developed and measured on a 7-point Likert-type scale. The respondents were asked to indicate the extent to which they agree with the measuring item (1- "Weak Disagreement"; 7- "Strong Agreement").

The study analyzed small, medium, and large manufacturing firms across Ghana's 22 subsectors, focusing primarily on Greater Accra for accessibility. From 1,200 registered firms, 450 were contacted electronically via Qualtrics, and after the survey, only 287 valid responses from the 344 were obtained, representing a 64% response rate. An independent t-test revealed no significant differences in responses across firm sizes (small/medium/large) for all constructs.

Analysis and Results

The hypothesized relationships were examined using the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. No issue of normality was discovered as all correlations among the constructs revealed significant associations. With the

measurement model, all α and composite reliability values ranged from 0.817~0.90, indicating a high level of reliability of the measuring items. The AVE and factor loadings all exceeded the threshold of .50, indicating no issue with convergent validity. The discriminant validity was examined using the Heterotrait-Monotrait (HTMT) Ratio of correlations, and all HTMT values were below 0.85, suggesting the presence of sufficient discriminant validity. Regarding the structural model (see Fig. 2), Normative, coercive, and mimetic pressures did have a positive relationship but no significant effect on the CE implementation (see Fig. 2).

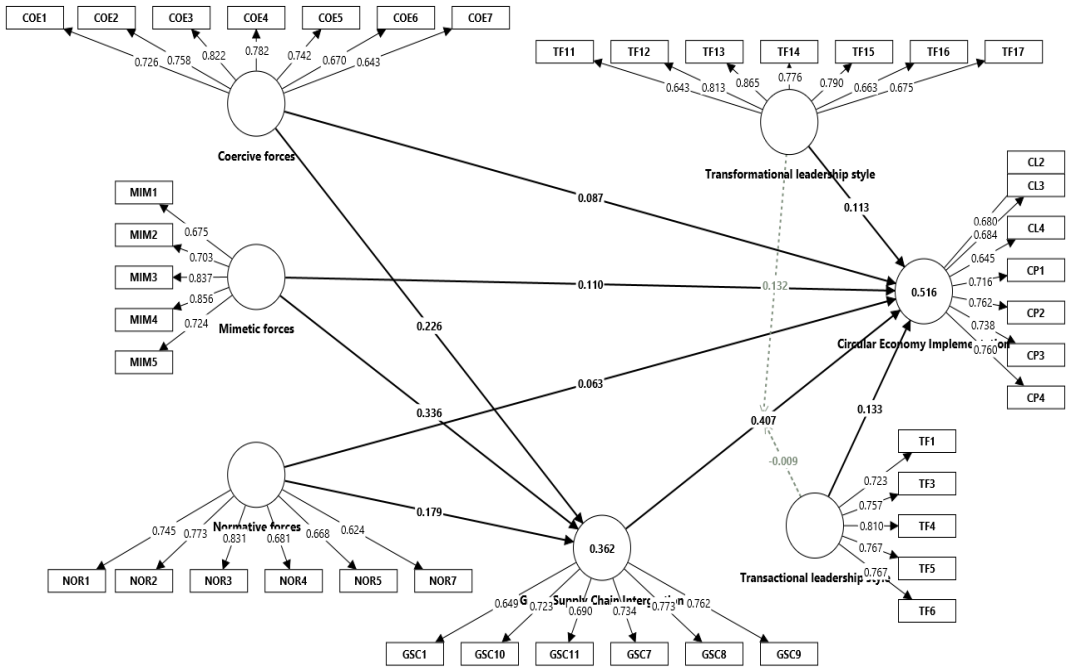


Figure 2: Measurement and Structural

All the institutional pressures were found to positively influence GSCI, and the relationships were all statistically supported, thereby confirming H2a-H2C. The relationship between GSCI and CEI is the strongest and most significant (B=0.407, p=0.000)**.** GSCI was found to mediate the relationship between all the institutional pressures and CE implementation, thereby confirming H4a-H4c. Transactional leadership style was found not to moderate the implementation of CE practices, with a result (β=-.009, p-value> 0.05), confirming H3a. However, transformational leadership was found to moderate the implementation of CE practices, with results (β=.132, p-value < 0.10), confirming H3b.

Discussion

While normative, coercive, and mimetic pressures demonstrated positive relationships with CE practices, their direct effects were statistically non-significant. This nuanced finding aligns with institutional theory (DiMaggio & Powell, 1983), which suggests that isomorphic pressures often create adoption intentions but require mediating mechanisms for actual implementation. The finding that all institutional pressures positively influence GSCI aligns with existing literature emphasizing the role of external drivers in

sustainability adoption. The strong, statistically significant relationship between GSCI and CE implementation supports the theoretical proposition that GSCI acts as a critical conduit for CE practices, consistent with Han and Huo's (2020) argument that collaborative environmental integration enables systemic CE transitions. The mediation results further validate studies by DiMaggio and Powell (1983), which posit that institutional pressures often operate through intermediate mechanisms like GSCI rather than directly impacting CE outcomes.

The non-significant moderating effect of transactional leadership contrasts with the findings of Graves et al. (2013), who also questioned its limited effectiveness in sustainability-oriented contexts. In contrast, the positive moderating role of transformational leadership supports the findings of Elkhwesky et al. (2022), emphasizing its ability to align stakeholder values with circular economy (CE) objectives through vision articulation, inspiration, and employee empowerment. This contrast reinforces the theoretical distinction between leadership styles in CE adoption and suggests that transformational leadership is more effective in navigating the complex, systemic changes required for CE implementation (Jabbour et al., 2019).

Relevance and Contribution

The findings of this research make significant contributions to the literature on isomorphic pressures, GSCI and CE implementation, especially in EEs. First, this study reveals that isomorphic pressures have a low level of influence on the CE implementation in EEs. Furthermore, the study introduces a new intuition by revealing the critical role of GSCI in the implementation of CE practices and the mediation role of GSCI in the relationship between isomorphic pressures and CE implementation. The study further demystifies the influence of leadership styles in the implementation of strategies such as CE. Practically, supply chain managers are encouraged to focus on adopting isomorphic forces, especially the mimetic elements, strengthen their GSCI with supply chain partners and encourage transformational leadership styles in their organisational settings to support the adoption and implementation of CE practices.

References

Arranz, C. F., Sena, V., & Kwong, C. (2022), "Institutional pressures as drivers of circular economy in firms: A machine learning approach", *Journal of Cleaner Production*, Vol. 355 No. 2022, p. 131738.

Burns, J. M. (1978), *Leadership*, Harper & Row, New York.

Cahyadi, A., Marwa, T., Hágen, I., Siraj, M. N., Santati, P., Poór, J., & Szabó, K. (2022), "Leadership styles, high-involvement human resource management practices, and individual employee performance in small and medium enterprises in the digital era", *Economies*, Vol. 10, No. 7, p. 162.

Castro-Lopez, A., Iglesias, V., & Santos-Vijande, M. L. (2023), "Organizational capabilities and institutional pressures in the adoption of circular economy", *Journal of Business Research*, Vol. 161, No. 2023, pp. 113823.

Chowdhury, S., Dey, P. K., Rodríguez-Espíndola, O., Parkes, G., Tuyet, N. T. A., Long, D. D., & Ha, T. P. (2022), "Impact of organisational factors on the circular economy practices and sustainable performance of small and medium-sized enterprises in Vietnam", *Journal of Business Research*, Vol. 147, pp. 362-378.

DiMaggio, P. J., & Powell, W. W. (1983), "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields", *American sociological review*, Vol. 48, No. 2, pp. 147-160.

Dubey, R., Gunasekaran, A., Childe, S. J., Wamba, S. F., & Papadopoulos, T. (2016), "The impact of big data on world-class sustainable manufacturing", *The International Journal of Advanced Manufacturing Technology*, Vol. 84, pp. 631-645.

Elkhwesky, Z., Salem, I. E., Ramkissoon, H., & Castañeda-García, J. A. (2022), "A systematic and critical review of leadership styles in contemporary hospitality: a roadmap and a call for future research", *International Journal of Contemporary Hospitality Management*, Vol. 34 No. 5, pp. 1925-1958.

EMF (2020). What is the circular economy? [online] Available at: https://www.ellenmacarthurfoundation.org/circular-economy/what-is-the-circular-economy [Accessed 4 May 2025].

Farooque, M., Zhang, A., Thürer, M., Qu, T., & Huisingh, D. (2019), "Circular supply chain management: A definition and structured literature review", *Journal of cleaner production*, Vol. 228, pp. 882-900.

Franco, M. A. (2017), "Circular economy at the micro level: A dynamic view of incumbents' struggles and challenges in the textile industry", *Journal of Cleaner Production*, Vol. 168, No. 2017, pp. 833-845.

Gedam, V. V., Raut, R. D., de Sousa Jabbour, A. B. L., Tanksale, A. N., & Narkhede, B. E. (2021), "Circular economy practices in a developing economy: Barriers to be defeated", *Journal of Cleaner Production*, Vol. 311, No. 2021, pp. 127670.

Geisendorf, S., & Pietrulla, F. (2018), "The circular economy and circular economic concepts—a literature analysis and redefinition", *Thunderbird International Business Review*, 60(5), pp. 771-782.

Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017), "The Circular Economy–A new sustainability paradigm?", *Journal of Cleaner Production*, Vol. 143, No. 2017, pp. 757-768.

Graves, L. M., Sarkis, J., & Zhu, Q. (2013), "How transformational leadership and employee motivation combine to predict employee proenvironmental behaviors in China", *Journal of environmental psychology*, Vol. 35, pp. 81-91.

Han, Z., & Huo, B. (2020), "The impact of green supply chain integration on sustainable performance", *Industrial Management & Data Systems*, Vol.120 No. 4, pp. 657-674.

Jabbour, C. J. C., de Sousa Jabbour, A. B. L., Sarkis, J., & Godinho Filho, M. (2019), "Unlocking the circular economy through new business models based on large-scale data: an integrative framework and research agenda", *Technological Forecasting and Social Change*, Vol. 144, pp. 546-552.

Kahai, S. S., Sosik, J. J., & Avolio, B. J. (2003), "Effects of leadership style, anonymity, and rewards on creativity-relevant processes and outcomes in an electronic meeting system context", *The Leadership Quarterly*, Vol. 14 No. (4-5), pp. 499-524.

Moktadir, M. A., Rahman, T., Rahman, M. H., Ali, S. M., & Paul, S. K. (2018), "Drivers to sustainable manufacturing practices and circular economy: A perspective of leather industries in Bangladesh", *Journal of cleaner production*, Vol. 174, pp. 1366-1380.

Osei, M. B., Papadopoulos, T., Acquaye, A., & Stamati, T. (2023), "Improving sustainable supply chain performance through organisational culture: A competing values framework approach", *Journal of Purchasing and Supply Management*, Vol. 29, No. 2, pp. 100821.

Patwa, N., Sivarajah, U., Seetharaman, A., Sarkar, S., Maiti, K., & Hingorani, K. (2021), "Towards a circular economy: An emerging economies context", *Journal of Business Research*, Vol. 122, pp. 725-735.

Sakah, M., du Can, S. D. L. R., Diawuo, F. A., Sedzro, M. D., & Kuhn, C. (2019), "A study of appliance ownership and electricity consumption determinants in urban Ghanaian households", *Sustainable Cities and Society*, Vol. 44, pp. 559-581.

Scott, W. R. (2005). Institutional theory: Contributing to a theoretical research program. *Great minds in management: The process of theory development*, Vol. 37, No. 2, pp. 460-484.

Soni, V., Gnekpe, C., Roux, M., Anand, R., Yaroson, E. V., & Banwet, D. K. (2023), "Adaptive distributed leadership and circular economy adoption by emerging SMEs", *Journal of Business Research*, Vol. 156, pp. 113488.

Wanasika, I., Howell, J. P., Littrell, R., & Dorfman, P. (2011), "Managerial leadership and culture in Sub-Saharan Africa", *Journal of World Business*, Vol. 46, No. 2, pp. 234-241.

Wang, J., & Feng, T. (2023), "Supply chain ethical leadership and green supply chain integration: a moderated mediation analysis", *International Journal of Logistics Research and Applications*, Vol. 26 No. 9, pp. 1145-1171.