

REVIEW

Stakeholder trust and metaverse corporate social responsibility communication: a strategic analysis of Nigerian consumer goods firms

La confianza de las partes interesadas y la comunicación de la responsabilidad social corporativa en el metaverso: un análisis estratégico de las empresas de bienes de consumo de Nigeria

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ABSTRACT

The study examine stakeholder trust and Metaverse CSR communication: a strategic analysis of nigerian consumer goods firms. Metaverse is agreed to be insistent and communicating virtual environment that offers firms a novel platform to disclose their corporate social responsibility (CSR) initiatives in such a way that is transparent, engaging, and emotionally resonant. The theoretical reinforcement of this study is drawn from stakeholder theory and signaling theory. The study acknowledged that the rise of immersive technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR) has transformed how firms communicate their CSR initiatives to their stakeholders. Thus, digital transparency in Nigeria CG sector has become a strategic imperative, motivated by investor expectations, regulatory improvements, and consumer demand for ethical responsibility. The study concluded that Immersive CSR communication in the Metaverse has significantly influence stakeholder trust and firm level performance of Nigerian CG firms as indicated in the study. Through the integration of stakeholder theory and signaling theory, the study demonstrated that transparency, interactivity, and ethical engagement through the digital platforms has foster deeper relationships between customers, investors, and regulators. The study also accentuate that immersive technologies did not only improve brand authenticity and accountability but also serve as strategic outfits for market variation.

Keywords: Stakeholder Trust; Metaverse; Corporate Social Responsibility; Communication; Consumer Goods Firms.

RESUMEN

El estudio examina la confianza de las partes interesadas y la comunicación de la RSC en el metaverso: un análisis estratégico de las empresas de bienes de consumo nigerianas. Se considera que el metaverso es un entorno virtual persistente y comunicativo que ofrece a las empresas una plataforma novedosa para divulgar sus iniciativas de responsabilidad social corporativa (RSC) de una manera transparente, atractiva y emocionalmente resonante. El refuerzo teórico de este estudio se basa en la teoría de las partes interesadas y la teoría de la señalización. El estudio reconoció que el auge de las tecnologías inmersivas, como la realidad virtual (RV), la realidad aumentada (RA) y la realidad mixta (RM), ha transformado la forma en que las

empresas comunican sus iniciativas de RSC a sus partes interesadas. Por lo tanto, la transparencia digital en el sector de los bienes de consumo de Nigeria se ha convertido en un imperativo estratégico, motivado por las expectativas de los inversores, las mejoras normativas y la demanda de responsabilidad ética por parte de los consumidores. El estudio concluyó que la comunicación inmersiva de la RSC en el metaverso ha influido significativamente en la confianza de las partes interesadas y en el rendimiento a nivel empresarial de las empresas nigerianas de GC, tal y como se indica en el estudio. Mediante la integración de la teoría de los grupos de interés y la teoría de la señalización, el estudio demostró que la transparencia, la interactividad y el compromiso ético a través de las plataformas digitales han fomentado relaciones más profundas entre los clientes, los inversores y los reguladores. El estudio también destaca que las tecnologías inmersivas no solo mejoraron la autenticidad y la responsabilidad de la marca, sino que también sirvieron como herramientas estratégicas para la variación del mercado.

Palabras clave: Confianza de las Partes Interesadas; Metaverso; Responsabilidad Social Corporativa; Comunicación; Empresas de Bienes de Consumo.

INTRODUCTION

Considering the present evolving landscape of corporate communication, as necessitated the integration of immersive technologies such as the Metaverse to redefine how firms engage with stakeholders. The Metaverse, is agreed to be a insistent and communicating virtual environment that offers firms a novel platform to disclose their corporate social responsibility (CSR) initiatives in such a way that is transparent, engaging, and emotionally resonant.⁽¹⁾ For Consumer Goods (CG) firms in Nigeria, where consumer trust and regulatory scrutiny are intensifying, leveraging the Metaverse for CSR communication presents both strategic opportunities and ethical challenges.

Stakeholder trust is a critical intangible asset that influences firm reputation, consumer loyalty, and investor confidence.⁽²⁾ The CG sector in Nigeria has trust deficits that have historically stemmed from opaque reporting, unpredictable CSR practices, and limited stakeholder engagement.⁽³⁾ As firms seek to rebuild trustworthiness, immersive CSR disclosures, such as virtual sustainability tours, interactive dashboards, and avatar-led community engagement, can serve as strategic signals of accountability and ethical commitment.^(4,5)

The theoretical reinforcement of this study is drawn from stakeholder theory and signaling theory. Going forward, the stakeholder theory posits that firms must report the interests of all parties affected by their operations, including customers, investors, regulators, and communities.⁽²⁾ While the signaling theory gave an insight into the significance of trustworthy communication in reducing information asymmetry and improving stakeholder awareness.⁽⁴⁾ Thus, immersive CSR disclosures in the Metaverse align with both frameworks by offering transparent, interactive, and verifiable exemplifications of corporate values and social impact.

It was seen in a study that emphasised the ethical use of data and immersive realism in CSR communication as a crucial factor of stakeholder trust and firm performance.⁽¹⁾ Furthermore, the Nigerian Exchange Group's sustainability disclosure guidelines and the Financial Reporting Council's roadmap for IFRS S1 and S2 adoption underscore the regulatory thrust near digital transparency.^(6; 7)

This paper, therefore, aims to examine how immersive CSR disclosures within the Metaverse influence stakeholder trust among Nigerian CG firms. The study also examines the relationship between digital transparency and firm-level performance outcomes, including financial metrics, brand equity, and regulatory compliance. This is done theoretically; the study result will provide strategic understandings for firms seeking to enhance stakeholder engagement and competitive advantage through ethical and immersive CSR communication.

DEVELOPMENT

The stakeholder theory and signaling theory are seen as theories to will provide more insight to the study; hence, the researchers choose to anchor the studies on the two interconnected theories, both of which provide a robust lens for analyzing how immersive CSR disclosures in the Metaverse influence stakeholder trust and firm performance.

Stakeholder theory was propounded by Freeman in 1984. The theory posits that firms must deliberate the benefits of all parties affected by their operations, not just their shareholders, but they should include all stakeholders. Thus, stakeholders include the firms' employees, customers, regulators, investors, and communities.⁽⁸⁾ In a scholarship it was stated that firms will only succeed when they build ethical trust, transparency, and demonstrate mutual constructive relationships with stakeholders. In the Nigerian CG context, where consumer trust is often delicate due to unpredictable CSR practices, immersive technologies offer a fresh way to rebuild trustworthiness and deepen realistic engagement with stakeholders.⁽³⁾

The second theory which is signaling theory, was propounded by Spence in 1973. The theory clarifies how

individuals transfer credible information to reduce information asymmetry between themselves and external audiences. In the Metaverse, immersive CSR disclosures, such as virtual sustainability tours or interactive dashboards, act as tactical signals of realism, ethical commitment, and transparency. These signals are predominantly real when they are exorbitant to imitate and easily visible.⁽⁹⁾ Thus, Nigerian CG firms that invest in immersive CSR platforms send strong signals to stakeholders about their long-term values and governance standards.⁽¹⁾

Consequently, a lot of researchers have supported the integration of these theories in digital environments. ⁽¹⁾ Argued that ethical data use in the Metaverse is essential to building stakeholder trust in a firm. Their study places interest how immersive CSR disclosures can enhance transparency, thereby promoting inclusivity, and fostering regulatory compliance. Furthermore, the Nigerian Exchange Group's Sustainability Disclosure Guidelines⁽⁶⁾ and the Financial Reporting Council's roadmap for IFRS S1 and S2 adoption⁽⁷⁾ provide institutional backing for immersive CSR practices, thereby reinforcing their legitimacy and strategic value.

In all, the stakeholder theory and signaling theory suggest a complete framework in the understanding of how immersive CSR communication in the Metaverse will be able to transform stakeholder relationships and motivation of firm-level performance in the Nigeria CG sector.

Immersive CSR Communication in the Metaverse

The rise of immersive technologies such as virtual reality (VR), augmented reality (AR), and mixed reality (MR) has transformed how firms communicate their CSR initiatives to their stakeholders. It has been acknowledged to the new digital technology is fast gaining ground in Nigeria, hence the embracement of Metaverse by Nigerian firms is no surprise. The Metaverse has offered a dynamic platform for Nigerian CG firms to present their CSR efforts in ways that are interactive, transparent, and emotionally engaging, contrasting the traditional CSR reports. Therefore, the immersive experiences of the CSR in the Metaverse allow stakeholders to virtually explore sustainability projects, attend digital community events, and to interact with corporate values in real time.

This shift in the new other technology aligns with the ethical use of data and immersive realism advocated in the present digital era,⁽¹⁾ which emphasises that immersive CSR will foster stakeholder trust and enhances regulatory compliance amongst firms for proper stakeholders' engagement.⁽⁹⁾ It was argue that, the immersive disclosures serve as credible signals, thereby reducing information asymmetry and reinforcing firm authenticity. As Nigerian CG firms embrace immersive CSR communication, they are positioning themselves as ethical leaders in a digitally evolving marketplace.

1. Impact on Customer Trust: Immersive CSR communication in the Metaverse significantly enhances customer trust by offering transparent, interactive, and emotionally engaging experiences. Nigerian CG firms that utilize VR and AR to showcase their CSR initiatives, such as sustainability efforts or community outreach, create profound emotional relationships with consumers. Again⁽³⁾ CSR transparency is found to have positive impact on product confidence, principally once consumers perceive genuineness in the digital storytelling. For instance, virtual tours of recycling plants or interactive simulations of charitable programs allow customers to witness corporate values in action. This immersive method reduces scepticism and fosters loyalty, mostly in markets like Nigeria, where brand trust is often fragile due to inconsistent CSR practices. Also⁽¹⁰⁾ enunciated that stakeholder responsiveness improves when CSR communication is participatory and multidimensional, aligning with consumer expectations for ethical engagement.

2. Impact on Investor Confidence: the communication of CSR initiatives easily shapes investor confidence on the ability firms through the immersive platforms. Considering the Nigeria CG sector where ethical governance and financial transparency are critical, the Metaverse based CSR disclosures will therefore offer a strategic advantage to both firms and stakeholders. The Metaverse platform allows investors to interact in real-time, attend virtual stakeholder meetings, and explore CSR projects through simulations. According to⁽¹¹⁾, CSR initiatives, especially those focused on product standardisation and environmental sustainability, they positively correlate with investor trust and loyalty. Also,⁽¹⁰⁾ stressed that immersive CSR communication builds legitimacy and reduces information asymmetry, which are important factors in investment decisions. With the integration of immersive technologies, firms can signal long-term commitment to ethical practices, thereby attracting socially responsible investors and improving valuation metrics.

3. Impact on Regulatory Trust: Trust is built when firms prove to be transparent, regulatory compliant with rules and laws, and ethical control qualities to show that immersive CSR communication in the Metaverse can strengthen the firms. Nigerian regulators, such as the Financial Reporting Council and the Nigerian Exchange Group, increasingly advocate for digital sustainability disclosures associated with global standards like IFRS S1 and S2. Thus, immersive platforms like the Metaverse allow CG firms to present CSR data in interactive formats, including virtual compliance walkthroughs and real-time

reporting simulations.⁽¹²⁾ Acknowledged that legal frameworks such as CAMA 2020 and the Climate Change Act 2021 mandate CSR disclosures and environmental accountability, making immersive communication a strategic tool for regulatory association. Furthermore,⁽¹³⁾ argues that the Triple Bottom Line approach that is, profit, people, and planet, requires firms to engage regulators through transparent and participatory CSR practices. Through the adoption of immersive technologies, firms will not only meet legal obligations but will also foster trust and collaboration with oversight bodies.

Digital Transparency and Firm-Level Performance

Digital transparency can be attributed to clarity, accessibility, and interactivity of the firm's corporate disclosures, particularly those connected to CSR, governance, and sustainability. Digital transparency in Nigeria CG sector has become a strategic imperative, motivated by investor expectations, regulatory improvements, and consumer demand for ethical responsibility. The incorporation of immersive technologies and real-time reporting platforms allows firms to reduce information asymmetry, thereby building trust with stakeholder that has eventually improve firms' operational outcomes. In recent time, several studies have shown that firms with robust digital transparency practices outperform their counterparts in financial metrics, brand equity, and stakeholder engagement.^(14,15) Thus exploring how digital transparency affects financial performance and operational efficiency of Nigerian CG firms that will shape the future of firms in Nigeria.

Going forward, Digital transparency is acknowledged as a driver that will enhance financial performance of firms through improved investors' confidence that will further reduce capital costs that will enable better resource allocation. Firms that disclose CSR and governance data through interactive platforms, such as virtual reports, and immersive storytelling tend signal accountability and long-term value creation.⁽¹⁴⁾ It was found that there is a positive correlation between financial transparency and Tobin's Q among Nigerian firms, suggesting that transparent disclosures attract higher market valuations. In a similar research conducted⁽¹⁵⁾ the study demonstrated that digital transformation initiatives, including immersive CSR communication, led to improved Return on Assets (ROA) and investor inflows in Nigeria's manufacturing sector. CG firms like Nestlé Nigeria and Unilever Nigeria have adopted digital sustainability reporting aligned with IFRS S1 and S2, reinforcing their credibility and financial resilience in the market. The signaling theory, asserts that firm's reputation is improved upon it their trustworthy disclosures is lower than their uncertainty. This implies that the firm should be consistent with the practice of proper CSR disclosure.⁽⁴⁾ For CG firms in Nigeria, where infrastructure deficiencies, consumer demand swings, and market instability present ongoing difficulties, operational efficiency is therefore a crucial performance indicator. the resonate that the firm should minimizing waste and maximizing the use of resources, with the direction to show the firm's capacity to provide goods and services in a timely, cost-effective, and high-quality manner.⁽¹⁶⁾ Operational agility is crucial in the Nigerian CG setting because businesses must manage intricate supplier chains, brief product life cycles, and seasonal demand fluctuations.⁽¹⁷⁾

Again, it is seen that technological innovation plays a pivotal role in enhancing efficiency.⁽¹⁸⁾ Emphasises that intelligent supply chains, powered by IoT, AI, and Big Data, streamline workflows, reduce waste, and improve decision-making. Similarly,⁽¹⁹⁾ highlights that Internet-Based Technological Innovations (IBTI) improve customer engagement and firm capabilities, although adoption remains uneven across the sector. Blockchain technology, as proposed by⁽²⁰⁾, further boosts traceability and transparency, reducing counterfeit risks and improving supply chain visibility.

Strategic operations management practices such as ERP systems, lean inventory, and just-in-time scheduling have also proven effective in reducing lead times and boosting agility.⁽²¹⁾ Additionally, firm resilience should also show readiness of the immersive technology adaptability and innovation. This resilient has in the Metaverse platform goes to show the firm significant influence in the operational efficiency, especially during disruptions.^(22,23) Likewise, firms that invest massively in digital infrastructure and resilient supply chains are better equipped to absorb shocks and maintain continuity, thereby sustaining competitive advantage in Nigeria's dynamic CG landscape.

Strategic Implications

Firm in the CG sector need to remain modest in a digitally embryonic and communally conscious marketplace, thus, Nigerian CG firms must adopt onward rational strategies that integrate immersive technologies, which align with stakeholder, employee well-being and global standards, of CSR frameworks. Thus, investing in immersive CSR platforms or technologies such as VR, AR, and the Metaverse offers CG firms' new avenues for CSR engagement. CSR initiatives through these platforms allow stakeholders to experience sustainability campaigns or community development projects, in an interactive and emotionally resonant ways.⁽¹⁾ Accentuate that immersive CSR disclosures will enhance trust amongst stakeholder therefore culminating transparency, particularly when ethical data practices are prioritised by the firm.⁽⁹⁾ Further, argue that immersive platforms serve as credible signals under Signaling Theory, reducing information asymmetry and reinforcing corporate

authenticity. CG firms should make good use of the Metaverse to improve their firm performance and build stakeholders and investors trust.

Consequently, stakeholder trust is built when CSR disclosures reflect genuine engagement and responsiveness.⁽²⁴⁾ Argue that quality stakeholder engagement translates stakeholder needs into organisational goals, thereby enhancing legitimacy and competitive advantage.⁽²⁵⁾ Found that Nigerian stakeholders prioritised economic, legal, and ethical dimensions of CSR over philanthropic gestures, suggesting that firms must tailor disclosures to reflect these expectations. Transparent CSR communication, especially when supported by immersive platforms, can bridge the gap between corporate intent and stakeholder perception. Thus, to meet international investor and regulatory expectations, Nigerian CG firms must align their CSR strategies with global sustainability frameworks such as the Global Reporting Initiative (GRI), IFRS S1 and S2, and the UN Sustainable Development Goals (SDGs). Once more,⁽²⁶⁾ stressed how the eco-friendly sourcing and waste reduction are examples of sustainable business strategies which has improve the firms in the CG sectors operational efficiency and their competitive advantage over firms that has not adopted the immersive technology. while a case was made by⁽²⁷⁾ that public-private partnerships and regulatory incentives are crucial for hastening the implementation of sustainable supply chain practices in Nigeria's CG industry.

It is also essential to integrate psychological well-being into CSR Strategies, which will increase employees' well-being, recognised as a core component of CSR. It was argued by⁽⁵⁾ that integrating clinical psychology and mental health support into CSR frameworks will further enhance the firm resilience and consequently build stakeholder trust.⁽²⁸⁾ Found that human resource manager practices should be focused on wellness programs, with some level of flexible work arrangements, and mental health initiatives that will significantly improve employee satisfaction and productivity at their workplace. In Nigeria, where workplace stress and burnout are rising, CSR strategies that prioritize psychological well-being can foster loyalty and long-term performance.

Integrate Psychological Well-Being into CSR Strategies

CG firms in Nigerian are starting to appreciate the strategic standing of including psychological well-being into their CSR frameworks as the ground of CSR continues to evolve with the global society. Recent studies have continued to stressed the significance of mental health and emotional resilience in attaining long-term stakeholder trust and firm performance, even though environmental and financial sustainability have historically dominated CSR agendas. Psychological well-being is defined by factors such as stress management, emotional support systems, and workplace mental health initiatives, play a pivotal role in employee retention, customer loyalty, and organisational ethics.⁽⁵⁾ Uwhejevwe-Togbolo et al further stated that integrating clinical psychology into CSR not only enhances firm resilience but fosters a sense of moral obligation that extends beyond profit-making. The study indicates that firms that are implementing the CSR strategy on mental health awareness programs and trauma-informed policies are reported improved that have outperform their peers which indicates stakeholder satisfaction.⁽²⁸⁾ Support this, noting that employee wellness programs, flexible work arrangements, and mental health interventions are directly correlated with higher levels of job satisfaction and organisational commitment. Additionally, these initiatives help workers to lessen worker stress and absenteeism, both of which have been demonstrated to increase overall workers' productivity in service-oriented industries like CG.

Also, this strategy is in line with the Triple Bottom Line's "profit, planet, people" dimension that views human sustainability as vital to the firms' responsibility and ethics.⁽¹³⁾ Once CSR policies actively engage with staff well-being, through initiatives such as emotional resilience training, psychological counselling, and burnout prevention, they contribute to a healthier organisational culture and a more loyal workforce.

In a marketplace as competitive and socially nuanced as Nigeria's, CSR strategies that address psychological health signal empathy, responsibility, and modernity. Essentially most young workers and consumers, are increasingly seeing mental health and ethical labour practices as essential brand loyalty that will benefit the firm greatly to bridging generational expectations. Thus, CG firms has seen themselves as comprehensive stakeholders in community development and national advancement, in addition to being responsible employers, by emphasizing mental health within CSR.

CONCLUSION

Immersive CSR communication in the Metaverse has significantly influence stakeholder trust and firm level performance of Nigerian CG firms as indicated in the study. Through the integration of stakeholder theory and signaling theory, the study demonstrated that transparency, interactivity, and ethical engagement through the digital platforms has foster deeper relationships between customers, investors, and regulators. The study also accentuate that immersive technologies did not only improve brand authenticity and accountability but also serve as strategic outfits for market variation.

The findings of the study therefore accentuate the significance of aligning CSR disclosures with evolving stakeholder expectations and global sustainability frameworks such as IFRS S1, S2 and the GRI Standards. Furthermore, incorporating psychological well-being into CSR strategy contributes to employee loyalty and

operational resilience, two vital elements in Nigeria's competitive and dynamic CG sector.

Furthermore, the study also indicates that CG firms that invest in digital infrastructure and immersive CSR platforms position themselves as industry leaders in ethical innovation and stakeholder responsiveness. As Nigerian CG firms continue to adapt to global technological trends, immersive CSR communication will play a serious role in improving long-term competitiveness, financial sustainability, and social impact amongst CG firms.

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