REVIEW

Corporate social responsibility and the metaverse in the digital era: implications for firm performance

La responsabilidad social corporativa y el metaverso en la era digital: implicaciones para el rendimiento empresarial

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ABSTRACT

The metaverse can be generally described as a coherent, persistent and interrelated virtual ecosystem, integrating and combining virtual reality (VR), augmented reality (AR), blockchain, and artificial intelligence (AI) technologies to facilitate real-time social and economic connections. Thus, the implementation of the CSR in the metaverse is a sustainable business strategy perspective that is transformational. Companies can use immersive technologies to provide CSR experiences in new formats- virtual volunteering, tokenized philanthropy, simulations of sustainability with a digital twin, or community hubs around the world. The study acknowledged that Digital transformation is growing at a very high rate in Nigeria, which also opens the opportunity to innovate CSR, although the full-scale implementation of the metaverse is in its infancy. The study fingdings revealed that the CSR in the metaverse is not merely an Internet expansion of conventional CSR but more of a disruptive reconfiguring. Metaverse-based CSR allows interactive, immersive, and decentralized ways of communication, unlike traditional CSR campaigns, which take place in a physical or two-dimensional virtual environment. It was concluded in the study that CSR in the metaverse is a strategic opportunity, as well as an ethical imperative. When properly designed, it may not only allow firms to perform better, but also play a significant role in digital equity and sustainable development in the new virtual economy. It was recommended in the study that firms must make sure that CSR activities in the metaverse are material, open, or consistent with long-term sustainability objectives.

Keywords: Corporate Social Responsibility; Metaverse; Firm Performance; Digital Innovation; Sustainability.

RESUMEN

El metaverso puede describirse, en términos generales, como un ecosistema virtual coherente, persistente e interrelacionado, que integra y combina tecnologías de realidad virtual (RV), realidad aumentada (RA), cadena de bloques e inteligencia artificial (IA) para facilitar las conexiones sociales y económicas en tiempo real. Por lo tanto, la implementación de la RSE en el metaverso es una perspectiva de estrategia empresarial sostenible que resulta transformadora. Las empresas pueden utilizar tecnologías inmersivas para ofrecer experiencias de RSE en nuevos formatos: voluntariado virtual, filantropía tokenizada, simulaciones de sostenibilidad con un gemelo digital o centros comunitarios en todo el mundo. El estudio reconoció que la

transformación digital está creciendo a un ritmo muy elevado en Nigeria, lo que también abre la oportunidad de innovar en materia de RSE, aunque la implementación a gran escala del metaverso se encuentra en sus inicios. Las conclusiones del estudio revelaron que la RSE en el metaverso no es simplemente una expansión en Internet de la RSE convencional, sino más bien una reconfiguración disruptiva. La RSE basada en el metaverso permite formas de comunicación interactivas, inmersivas y descentralizadas, a diferencia de las campañas tradicionales de RSE, que tienen lugar en un entorno físico o virtual bidimensional. El estudio concluyó que la RSE en el metaverso es una oportunidad estratégica, así como un imperativo ético. Si se diseña adecuadamente, no solo puede permitir a las empresas obtener mejores resultados, sino también desempeñar un papel importante en la equidad digital y el desarrollo sostenible en la nueva economía virtual. En el estudio se recomendó que las empresas se aseguren de que las actividades de RSC en el metaverso sean significativas, abiertas o coherentes con los objetivos de sostenibilidad a largo plazo.

Palabras clave: Responsabilidad Social Corporativa; Metaverso; Rendimiento Empresarial; Innovación Digital; Sostenibilidad.

INTRODUCTION

Over the past 20 years, corporate social responsibility (CSR) has developed beyond being a discretionary philanthropic practice into a strategic requirement fully enshrined in firm strategy, governance and operations. CSR involves more than just the compliance efforts but an effort at responding to the expectation of the stakeholders in the society, environment and governance.[1,2] According to extensive studies, CSR is also associated with improved performance of the firm by introducing reputational benefits, enhancing stakeholder trust, higher employee engagement, and risk reduction.[3,4] As much as this relationship has been studied in several industries and geographies, the advent of the digital economy and especially the metaverse has produced new opportunities and challenges in the implementation of CSR.

The metaverse can be generally described as a coherent, persistent and interrelated virtual ecosystem, integrating and combining virtual reality (VR), augmented reality (AR), blockchain, and artificial intelligence (AI) technologies to facilitate real-time social and economic connections.[5] Big techs, such as Meta, Microsoft, and Google, have heavily invested in building metaverse, with the application expected to be used not only in gaming and entertainment, but also in commerce, professional teamwork, education, and cultural exchange. [6] Analysts estimate that the metaverse economy will be worth billions of dollars in the coming decade (2030) and highlight that it can transform the business model and stakeholder interactions.[7]

The implementation of the CSR in the metaverse is a sustainable business strategy perspective that is transformational. Companies can use immersive technologies to provide CSR experiences in new formats- virtual volunteering, tokenized philanthropy, simulations of sustainability with a digital twin, or community hubs around the world. As an illustration, the non-fungible token (NFT) initiative of luxury brands such as Gucci and Guerlain with conservation and biodiversity connections combines digital innovation and social responsibility. [8] Meanwhile, there are new risks associated with CSRs: metaverse platforms based on blockchain can have a greater carbon footprint,[9] VR can cause immersion, so its use risks privacy and behavioral data collection,[10] and socioeconomic factors may marginalize vulnerable groups to the digital world.[11]

Although there is an increasing corporate and popular interest, the academic research on CSR in the metaverse remains young. In the literature about CSR and firm performance, the vast majority of researches are conducted in traditional industries,[3,4] online corporate communication,[12] or sustainability reporting.[13] The meta-analysis of CSR initiatives in the metaverse and their effects on the firm performance has been very sparse. This creates a severe gap: as companies test metaverse-based CSR initiatives, managers and researchers require theoretical models and empirical data on the impact of these initiatives on organizational performance.

Thus, this article has a three-fold goal. To begin with, it aims to review and synthesize literature on CSR, the metaverse, and firm performance in order to define the theoretical and empirical basis of this intersection. Second, it suggests a conceptual framework to describe the mechanisms based on which metaverse-enabling CSR initiatives can influence the firm performance with the focus on trust, engagement, operational effectiveness, and risk reduction. Third, it uses exemplary stories and emerging empirical data to show the opportunities and threats of metaverse CSR, and identifies the directions of future research and management practice.

This introduction explains the importance of the study as it places it at the intersection point of CSR theory, digital innovation, and strategic management. The metaverse is not just a technological phenomenon; it reshapes relationships between the stakeholders and their responsibilities and performance indicators. CSR within the metaverse therefore ought not to be regarded as something symbolic or even experimental but as a strategic course on how to generate collective value in the digital age.[14]

DEVELOPMENT

Corporate Social Responsibility and Firm Performance

One of the most researched issues in the field of business and management literature has been the connection between CSR and firm performance. The initial definitions of CSR like the pyramid of responsibilities suggested by Carroll[1] saw CSR as a set of economic responsibilities, legal responsibilities, ethical responsibilities, and philanthropic responsibilities. Scholars have over the years been interested in the question of whether, and how, such responsibilities are measureable into performance outcomes.

Meta-analyses have revealed that the overall relationship between CSR and financial performance is positive, but depending on the context and methodology used the strength of this relationship differs.[3,4,15] Such mechanisms, detected in this literature, are the increased reputation and brand equity,[16] the increased trust and loyalty of stakeholders,[17] and the minimized risk exposure.[18] Besides that, non-financial performance including employee satisfaction, innovation, and customer engagement has been associated with CSR activities.[19,20]

Nevertheless, there is no automaticity in the relationship between CSR and performance. Researchers point out that results are determined by the credibility of the CSR efforts, consistency with the business strategy, and institutional environment.[21] These symbolic or greenwashing efforts might not generate any performance advantages and can actually work against a company when stakeholders view them as being fake.[22] Therefore, CSR is effective as a matter of substance and perception.

CSR and Digital Transformation

The digital age has transformed the media and the modalities of CSR. Companies today share information about CSR practices over internet platforms, mostly over corporate websites, social media and online sustainability report. It has been found that when digital CSR communication is conducted in a transparent manner, it enhances visibility, as well as stakeholder involvement.[17,23] According to [12] confirm the fact that the application of digital CSR disclosures to stock market performances can be measured with the help of deep learning algorithms.

New types of CSR implementation have also become possible due to the use of digital technologies. In particular, digital twins are employed by companies to simulate sustainability results, blockchain to make supply chain traceable, and AI to make it more inclusive and more accessible.[24] These technological affordances would extend CSR to the operational and structural level on top of communication, which would further support the claim that CSR during the digital era would have a direct impact on the performance of firms.

However, CSR is being digitalized, which presents new ethical and governance challenges. Matters like data privacy, algorithmic bias, and digital exclusion have now been crucial CSR dimensions in their own right.[25] Not only are firms under growing responsibility of their social and environmental practices but also the governance of the digital technologies they implement.

The Metaverse: What and Why it Matters to Business

The metaverse is an environment defined as a persistent, immersive, networked 3D virtual world that incorporates VR, AR, blockchain and AI technologies.[5] The metaverse provides real-time embodied interaction, ownership of digital assets and complex economies through decentralized technologies, unlike the traditional online platform.[6]

Researchers and professionals believe that the metaverse will transform retail, education, healthcare, and entertainment industries. According to [7] the metaverse has the potential to bring about a value of between 4-5 trillion by 2030. Among companies, the metaverse opens new avenues of consumer relationships, building brand narratives, and innovation.[11] Notably, it also provides a platform where CSR engagements can be executed and presented in immersive and exciting ways.

However, the metaverse is rather dangerous as well. Blockchain and VR infrastructures have the potential to increase environmental issues because of the energy consumption required.[26] Immersive space data, including biometric data of VR headsets, presents new privacy issues never seen before.[27] Moreover, the use of metaverse sites is usually costly to acquire equipment and fast internet connections, posing a question of digital discrimination and inequality.[11]

CSR within the Metaverse: New Scholarship

There are not many academic contributions on CSR directly related to the metaverse, although they are starting to materialize. After noting that privacy-aware architectures and data handling transparency are the key ethical concerns in the metaverse,[27] ethical data governance is a principle CSR role in the metaverse.[26] investigate the sustainability of metaverse ecosystems, focusing on energy use and carbon release, and ESG.

Evidence of CSR in the metaverse is case-based, evidences on how firms are experimenting with it in the industry. As an example, Guerlain initiated an NFT project based on biodiversity, the proceeds of the NFT sales financed conservation efforts in the real world (Cryptobees), a Guerlain initiative.[8] Metaverse activations

have not only been used by Gucci and other luxury brands to promote their brands, but also raise awareness regarding social and environmental issues.[28] The above initiatives imply that CSR based on the metaverse can be used both strategically and in the interest of the society.

Theoretically, metaverse-based CSR may be placed in either the stakeholder theory,[29] or resource-based view (RBV).[30] The stakeholder theory underlines that companies should not ignore the interests of various stakeholders to remain legitimate and continue operating in the future. The metaverse increases the scope of stakeholder engagement through giving it a global, real-time, and immersive interaction. According to the RBV, metaverse capabilities (e.g. digital twin modeling, immersive storytelling) can be strategic resources that facilitate CSR effectiveness and competitive advantage in case they are valuable, rare, and inimitable and embedded in the organization (VRIO framework).

CSR-Metaverse-Performance Nexus

By combining the streams of literature presented above one can conceptualize the CSR-metaverse-performance nexus as follows:

- CSR bases: CSR can have a positive effect on the performance of the firms through reputation, trust, and engaging stakeholders.[3,4]
- Digital transformation: Digital tools extend CSR's reach and measurability but create new governance issues.[12,25]
- Metaverse context: The metaverse amplifies these dynamics by offering immersive, persistent spaces that enable both innovative CSR practices and novel risks.[5,10]

According to the literature, CSR in the metaverse is potentially able to yield better performance results than conventional CSR provided there is authenticity and risk management. Nonetheless, there is very limited systematic empirical testing, which requires conceptual frameworks as well as case based synthesis.

Conceptual Framework
Rationale of a conceptual framework used in the study

The metaverse of CSR is still young and there are not many empirical studies. To address this gap, a conceptual framework is needed to present how CSR activities being undertaken in the metaverse impact on firm performance. The framework unites three research areas, including: (a) classical theories of CSR, (b) digital transformation research, and (c) new metaverse research. Its main thesis is that CSR initiatives powered by the use of metaverse can positively impact the performance of firms by increasing the depth of stakeholder engagement, creating new types of value, and reducing the risks linked to the digitalization process as long as ethical governance and sustainability are considered.

Such a framework relies on a stakeholder theory [29] according to which a firm gains long-term success when it is able to generate value to all stakeholders and on a resource-based view (RBV) [30] according to which unique digital capabilities embedded in metaverse CSR can become strategic assets contributing to a competitive advantage.

Structure of the Framework

There are three layers connected to each other in the framework:

- CSR in the Metaverse: Virtual philanthropy (e.g. NFTs to support societal causes), sustainable digital infrastructure (e.g. low-carbon blockchain technologies), ethical data governance, and accessibility efforts are examples of CSR in the metaverse.
- Stakeholder Responses: These initiatives impact the way the stakeholders who include the customers, employees, investors, communities, and regulators perceive and relate with the firm. The response is in the form of increased trust, loyalty, advocacy, and co-creation.
- Firm Performance Results: The responses of the stakeholders result in enhanced brand equity, innovation and operational efficiency and risk reduction, which all contribute to financial and non-financial performance.

Most importantly, the model has feedback loops. The positive reactions of stakeholders are strengthening the credibility of CSR, whereas the negative reactions (e.g., due to greenwashing or digital alienation) may reduce the benefits of performance.

Conceptual Framework Diagram
CONCEPTUAL FRAMEWORK: CSR in the metaverse and firm performance

As illustrated in figure 1, CSR initiatives enabled by the metaverse, like NFTs as conservation tools, virtual volunteering, and green servers, contribute to firm performance by triggering such mechanisms as trust,

brand equity, engagement, and operational efficiency. The mechanisms are what influence the reaction of the stakeholders, provoking more loyalty, positive word-of-mouth, and readiness to pay, which consequently lead to the improvement of overall performance at a firm.
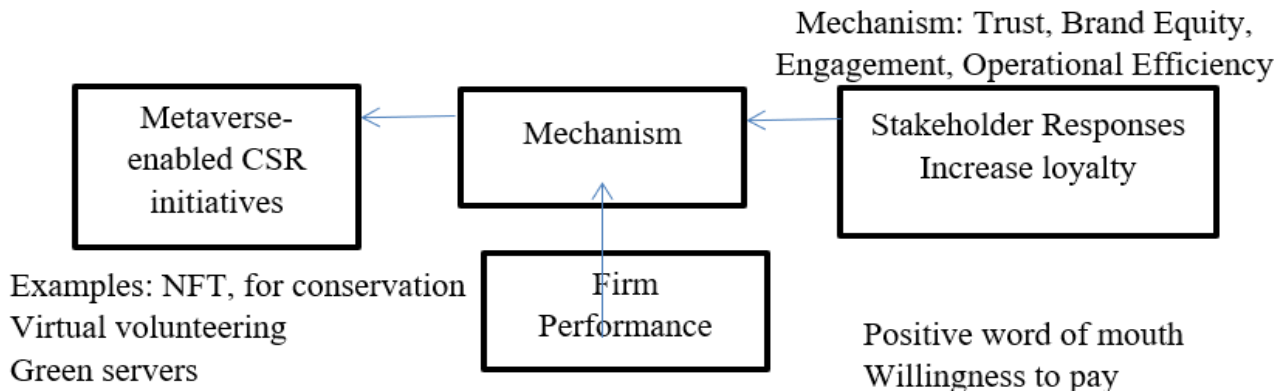

Figure 1. Conceptual Framework Linking CSR in the Metaverse and Firm Performance

Explanatory Narrative

The conceptual model proves that CSR activities in the metaverse are not individual projects but are also components of an interactive ecosystem. When companies use metaverse technologies as a means of CSR (e.g. immersive sustainability experiences, NFTs as a tool in conservation funds, or privacy-friendly virtual worlds), they have a higher chance of establishing emotional appeal and trust among stakeholders. This, subsequently, creates competitive advantages which are converted to high firm performance.

Simultaneously the framework underlines contingency of the outcomes of CSR in the metaverse. Without making them inclusive (i.e., without involving stakeholders lacking access to VR) or causing environmental issues (e.g., through a disproportionate energy consumption of blockchain), stakeholders can negatively react to them and negate the desired performance gains. Therefore, to achieve successful CSR in the metaverse, there must be alignments of authenticity, transparency, and sustainability.

Examples of Cases and Empirical Data
Nigerian and African Situations

Digital transformation is growing at a very high rate in Nigeria, which also opens the opportunity to innovate CSR, although the full-scale implementation of the metaverse is in its infancy. Digital CSR has been leading the pack of telecommunication giants like the MTN Nigeria and Airtel Africa through digital education, mobile money inclusion, and environmental sustainability.[31] As an example, the virtual learning platforms and coding bootcamps supported by the MTN Foundation have proven that virtual CSR can go online. Although they are not entirely metaverse-based, they can be used to build the basis of immersive educational CSR programs that can subsequently be provided in metaverse-based classrooms or virtual campuses.

The financial sector in Nigeria has shown financial experimentation with blockchain technologies also, the foundation of metaverse economies. As an example, Guaranty Trust Holding Company (GTCO) has tried fintech innovations that do not directly address the goals of CSR inclusivity and financial access.[32] With the growing use of metaverse, financial institutions can also adopt tokenized philanthropy or VR-enhanced financial literacy campaign as a subset of CSR, and this will enable them to diversify stakeholder engagement.

The same patterns can be observed all over Africa. Safaricom M-Pesa, a CSR-led financial inclusion innovation popular in Kenya, has now introduced digital ecosystems that may one day transform to immersive metaverse services.[33] In South Africa, retail chains like Woolworths have piloted augmented reality shopping experiences combined with sustainability reporting, signaling an early move toward metaverse-enabled CSR.[28] These efforts show that African companies are up to date in their early stages, but they are making efforts to align CSR with immersive technologies. However, challenges remain, the problem of digital exclusion is quite sharp in Africa, where the internet access and cost of VR gadgets are still low.[34] Unless firms can focus on reducing inequalities in access, attempting metaverse-based CSR, they will create barriers between the social spheres instead of mitigating them. Therefore, metaverse-based African CSR should be a compromise between innovation and inclusivity.

Case of Global industries

Other companies in the world have been the first ones to implement CSR initiatives directly within the metaverse.

Guerlain (France) created the NFT-based initiative, the Cryptobees, in the process of which the sale of

1,828 NFTs financed the rewilding of 1 828 hectares of biodiversity-rich land.[8] This project is an example of tokenized philanthropy and an illustration of how CSR can be combined with blockchain to provide quantifiable environmental impact, as well as build brand equity in digitally native younger consumers. Gucci (Italy) developed immersive experiences in Roblox and The Sandbox to advertise cultural awareness and social responsibility programs. The Vault project by Gucci emphasized the digital-inclusive nature and asked its users to discuss the topic of diversity.[28] This shows the potential to reinforce CSR values of inclusivity and cultural sustainability through metaverse virtual community activity. The example of Hyundai (South Korea), Mobility Adventure in Roblox, a metaverse world, which also features virtual exhibitions about sustainable mobility and environmentally friendly cars.[35] This project is in line with CSR promise on environmental sustainability and it involves immersive experiences as a way of creating awareness among stakeholders.

Microsoft (United States) has looked at using metaverse in the workplace as an aspect of workplace inclusiveness, with its Mesh for Teams platform, which allows, virtual collaboration to be accessible. Microsoft has explicitly linked the developments with such CSR promises as accessibility and equal participation.[6]

These examples show that CSR in the metaverse can be not only double-purpose in the combination of pursuing social and environmental interests but also increasing stakeholder trust and competitiveness of firms.

Comparative Analysis: Africa vs. Global Cases

Comparing the African and global cases, it is possible to identify three major differences:

- Stage of Development: there are already immersive CSR campaigns being tested out by global companies in metaverse platforms (e.g., Roblox, The Sandbox). While African companies are mostly in the preparation phase and they concentrate on digital CSR (e.g. e-learning, mobile inclusion) but with possible progressions into immersive spaces.
- CSR Priorities: CSR in Africa is more developmental focusing on education, health and financial inclusion.[36] While the multinational companies focus on brand-driven CSR like sustainability programs, cultural sensitivity, and diversity programs.
- Risks and Challenges: the infrastructural issues (low VR incorporation, poor broadband) in African companies are constraining access to the metaverse. Thus, the reputational risks faced by the global companies are mostly the allegations of opportunistic or CSR-washing when CSR metaverse campaigns appear to be marketing campaigns instead of genuine commitments.[24]

Nevertheless, irrespective of these differences, African and global companies have a common opportunity to engage with stakeholders and improve their image with the help of metaverse CSR. With inclusivity and sustainability in mind, the African companies might bypass CSR innovation phases by using mobile-first systems to implement metaverse CSRs at low costs.

Empirical Intuitions and Hypothetical Facts.

Since there is scarcity of empirical research, hypothetically modeling the results can help forecast the performance implication of CSR in the metaverse. For instance, a recent exploratory survey by Han et al.[12] showed that digital CSR disclosures positively influence investor confidence and firm valuation. The effect can be enhanced in the case of the metaverse, where disclosures and campaigns are immersive. In the same manner,[10] claim that CSR that is privacy-protecting in immersive environments builds stakeholder trust, which directly positively correlates with loyalty and advocacy.

As an example, we can take a hypothetical Nigerian bank that introduces a financial literacy program, based on the metaverse and aimed at young people. The stakeholders may react with increased confidence in the bank inclusivity activities, which increases customer retention and deposit mobilization. The performance indicators (e.g., the number of customers gained, the ratio of costs and income) would probably be better compared to those of peers who could only use the traditional CSR campaigns.

In essence combining both empirical and case based evidence suggestions, this implies that, CSR events in the metaverse increase the level of stakeholder engagement by providing immersive and participatory experiences. These initiatives would be in form of better performance by the firm, reputational, customer loyalty and capacity to innovate, in case they are authentic. In the event of risk, it includes digital exclusion and environmental costs that need to be resolved to maintain credibility. The CSR in the metaverse, when properly planned and ethically addressed, can be the central source of performance in the digital age of firms.

DISCUSSION

Reframe CSR in the Metaverse Era

The evidence that has been analyzed indicates that CSR in the metaverse is not merely an Internet expansion of conventional CSR but more of a disruptive reconfiguring. Metaverse-based CSR allows interactive, immersive, and decentralized ways of communication, unlike traditional CSR campaigns, which take place in a

physical or two-dimensional virtual environment. This reconfiguring of things has both theoretical and practical implications.

The metaverse expands the stakeholder map of the firm as per a stakeholder theory.[29] The stakeholders can no longer be limited by time or place, but they can engage in the campaigns of CSR in real-time immersive environments. This change increases the inclusiveness and transparency needs because the stakeholders feel the impact of CSR initiatives directly and not passively when they are provided with reports or via postings in social media. To use the example, a company that conducts a campaign of environmental awareness in the metaverse cannot make abstract statements; the experience offered by the immersive environment must show authenticity.[11]

Metaverse-enabled CSR is a potential strategic resource (based on the resource-based view, or RBV).[30] Well-designed and integrated immersive platforms, ethical governance procedures, and tokenized philanthropy have potential to be rare, valuable, and inimitable capabilities. An example is the Cryptobees initiative by Guerlain, where brand identity and conservation was made as a blockchain-based program, and thus formed a unique CSR asset that cannot be easily duplicated by competitors. It means that companies ought to consider the role of CSR in the metaverse as an obligation and as a strength-instilling practice.

Performance Implications, Direct and Indirect Pathways

The direct and indirect paths that relate CSR to firm performance can be broken down into the metaverse as:

- Direct Pathways: This implies that firms will benefit directly by increasing their brand equity, customer interaction, and market penetration. The campaigns in the form of immersives appeal to the digitally native, especially Generation Z and Alpha, consumer segment that is more sensitive to authenticity and social responsibility.[6] This translates to increased sales, customer loyalty and high potential premium prices.
- Indirect Pathways: The other indirect advantages of CSR in the metaverse are enhanced innovation ability and risk management. Through the experimentation of CSR using immersive technologies, companies develop organizational capabilities that are transferred to other sectors, including product design and digital service delivery. Likewise, those companies that actively take metaverse risks (e.g., privacy, digital exclusion) make them resilient and minimize reputational liabilities.[32]

Consequently, CSR in the metaverse is a strategy and a market-facing process, as well as an organisational learning process.

Risks and Limitations

Although the growth opportunity of CSR in the metaverse is massive, threats need to be identified as indicated below:

- Digital Exclusion: Metaverse technology may need costly hardware (e.g. VR headsets), fast internet connections, and marginalized communities cannot afford either, especially in Africa and the Global South.[34] This goes against an inclusivity requirement of CSR and it could cause the loss of key stakeholders.
- Environmental Costs: Blockchain infrastructure that forms the foundation of most metaverse economies is energy-intensive. Even though there are movements to switch to proof-of-stake systems which alleviate this issue, companies should be open regarding the carbon footprint of their metaverse CSR efforts.[26]
- Ethical and Privacy implications: Immersive environments gather sensitive information, such as biometric and behavioral data. The misconducts that may arise when managing such data include ethical issues that may result in reputation losses and legal repercussions that negate the quality CSR goals companies are aiming to pursue.[25]
- Perceptions of Opportunism: Stakeholders can go through with perceiving metaverse CSR as a marketing gimmick in case initiatives lack substance. According to [22] symbolic CSR (greenwashing) undermines trust, and the dangers are increased in a more immersive setting where the stakeholders want more transparency.

These risks are drivers to the process of meeting CSR in the metaverse in order to provide sustainable performance results.

Implications to Nigeria and Africa

To the Nigeria and African firms, CSR in metaverse has its opportunities and challenges. On the one hand, the young population of the continent and increasing digital penetration provide fertile soil of immersion-

based CSR efforts.[37] Firms could leverage the metaverse to scale educational CSR programs, deliver virtual healthcare campaigns, or create decentralized platforms for cultural preservation. Conversely, structural barriers, including lack of broadband infrastructure, affordability, and regulatory uncertainty are barriers on a grand scale.[37] By not resolving these challenges to the systems, metaverse CSR initiatives will be prone to being elitist, only entirely consumed by a small digital elite group.

Policymakers thus can contribute to the provision of enabling environments by making investments in digital infrastructure, controlling data privacy, and encouraging sustainable digital innovation. Companies, in turn, would need to focus on inclusivity by creating CSR initiatives with mobile-first and low-bandwidth-friendly values, and at reasonable prices accessible to larger audiences.

Theoretical Contributions

The review introduces new knowledge to the field of CSR and digital transformation in three manners:

- Applying CSR Theory to Immersive Space: Although, earlier models of CSR focused on physical, and online activities, this review proves that CSR can also be redesigned to apply to immersive, decentralized ecosystems such as the metaverse.
- Combining Stakeholder and RBV Approaches: The paper, connected the stakeholder theory and RBV, demonstrates that CSR in the metaverse can fulfill, both the external legitimacy requirements and internal capability-building, which can enhance the discussion of CSR and performance.
- The emphasis on Contingency Factors: The discussion makes it clear that the outcome is contingent on inclusivity, authenticity, and alignment of sustainability. This implies that there is a need to incorporate the contingency theory in the metaverse studies of CSR.

Managerial Implications

To the managers, a number of lessons can be learned:

- Authenticity Matters: Metaverse CSR should be material and not formal. The companies ought to harmonize efforts with the main principles and show quantifiable results openly.
- Inclusivity Is a Strategy: Building CSR programs that meet the demands of digital gaps would increase legitimacy and prevent the need to be blamed.
- Sustainability by Design: It must be proactive and avoid environmental and privacy risks. Companies are advised to implement green blockchain systems and blockchain privacy systems.
- Strategic Capability-Building: Managers need to think of metaverse CSR as a pathway to the wider digital transformation, developing unique and uncopyable abilities that go beyond CSR.

Toward a Research Agenda

Although there are increasing experiments in the industry, there are little systematic academic research works on CSR in the metaverse. Thus, it is suggested in this study that future research should follow the following directions:

- Empirical Testing: Use longitudinal testing methods to quantify the effect of metaverse CSR activities on the financial performance indicators of firms in terms of returns to assets, brand equity and employee output.
- Comparative Analysis: Discover the difference in CSR in the metaverse by region, in particular between developed economies and the Global South.
- Stakeholder Perspectives: Explore the perceptions and reactions of a variety of stakeholder groups (consumers, employees, regulators) to metaverse CSR efforts.
- Sustainability Assessment: calculate the environmental impact of metaverse-driven CSR activities and investigate green digital infrastructure.
- Ethical Frameworks: Develop normative models for ethical governance of CSR in immersive environments, integrating privacy, inclusivity, and fairness.

CONCLUSION

This review has investigated the dynamics between CSR and the metaverse with firm performance during the digital age. Theory, industry examples, and an emerging literature demonstrate that the metaverse offers invaluable opportunities to firms to reframe CSR as immersive, interactive, and decentralized experiences that build stakeholder trust, and can create strategic value. Incorporating CSR into metaverse platforms, companies can increase brand equity, drive innovation, and risk management, and, at the same time, solve societal and environmental issues.

The study however also underscores that the performance pros of CSR in the metaverse depends on authenticity, inclusivity, and alignment in terms of sustainability. The risks like digital exclusion, privacy, environmental cost, and perceived opportunism should be proactively taken care. In the case of African

countries, such as Nigeria, metaverse CSR has a potential in capitalizing on young populations and mobile-first economies, but infrastructure and regulatory challenges need to be resolved first.

In general, CSR in the metaverse is a strategic opportunity, as well as an ethical imperative. When properly designed, it may not only allow firms to perform better, but also play a significant role in digital equity and sustainable development in the new virtual economy.

RECOMMENDATIONS

Considering the results of this review, the following recommendations can be offered:

- Firms must make sure that CSR activities in the metaverse are material, open, or consistent with long-term sustainability objectives.
- Firms should develop metaverse CSR initiatives that focus on eliminating digital divide so that various stakeholders can easily access them, especially in emerging markets.
- Firms must incorporate green blockchain solutions and privacy-enhancing digital systems to minimize the environmental and ethical risks.
- Firms managers need to consider metaverse CSR as a chance to create uncommon digital abilities that contribute to both the social impact and competitive edge of the business.

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CONFLICT OF INTEREST
The authors declare that there is no conflict of interest.

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