

## Crypto Visual Culture and Participation in Platform Based Creative Economies

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### Abstract

This study examined the role of visual design in Non-Fungible Tokens (NFTs) as a strategic component of value creation and inclusive participation within the decentralized creative economy. The research addressed the growing need to understand how visuals influence identity, accessibility, and community-driven economic engagement in digital platforms. The study was conducted using a qualitative interpretive approach, employing visual rhetorical analysis and digital ethnography. Ten top NFT collections on the OpenSea marketplace were analyzed based on their visual characteristics, creator inclusion, and community interaction. The visual elements were assessed through rhetorical lenses ethos, pathos, and logos, while participation was observed through social media metrics and community discourse. The findings indicated that accessible and culturally resonant visual designs enhanced user engagement and contributed to broader economic inclusion. Collections with visually open, emotionally engaging, and culturally inclusive features attracted stronger community involvement and sustained market relevance. In contrast, NFTs with elitist or exclusive visual narratives demonstrated more limited participation and accessibility. The study concluded that visual identity plays a central role in shaping the success of NFTs not only as aesthetic artifacts but as instruments of economic democratization. It was recommended that future research explore algorithmic visual production and long-term community dynamics across diverse cultural contexts. This research highlighted the potential of visual design to foster equity, representation, and sustainable value in the evolving digital economy.

**Keywords:** *NFT, visual identity, decentralized economy, creative industries, digital inclusion.*

### INTRODUCTION

Business transformation in the digital era has redefined the landscape of multiple industries, driven by the proliferation of digital technologies that foster inclusive business models, enhance accessibility, and facilitate equitable economic participation across diverse communities [1]. Among the most disruptive innovations in this space is the emergence of Non-Fungible Tokens (NFTs) unique, blockchain-based digital assets whose authenticity and ownership can be publicly verified. NFTs have reshaped how creators monetize their digital works, offering an alternative pathway to creative entrepreneurship, especially in the context of decentralized and borderless digital marketplaces [2], [3].

Beyond serving as digital commodities, NFTs reflect a broader paradigmatic shift in the creative economy, where value is no longer determined solely by functional utility but by visual storytelling, symbolic credibility, and emotional resonance [4], [5]. In this context, visual design becomes a critical component not only for brand differentiation but also for engaging audiences and building community trust. As digital marketplaces like OpenSea evolve, aesthetic and

symbolic elements increasingly define how attention is earned, maintained, and converted into economic value [6].

This visual-centric shift is intimately linked to the rise of inclusive digital business models. NFTs allow creators from various geographic, cultural, and socioeconomic backgrounds to reach global audiences without relying on traditional intermediaries such as galleries or art dealers [7], [8]. This decentralization creates new avenues for marginalized communities to participate meaningfully in the digital creative economy an important milestone in democratizing both artistic recognition and financial opportunity.

At the heart of NFT success lies the strategic deployment of visual identity and cultural symbolism. A strong visual presence enables creators to establish authenticity, attract collectors, and foster lasting emotional engagement. In the attention economy, where visibility equates to value, visual design is not merely decorative; it is central to the marketplace [9]. Leading collections such as Bored Ape Yacht Club, Azuki, and CloneX have demonstrated that visual rhetoric comprising ethos (credibility), pathos (emotion), and logos (logic), plays a pivotal role in influencing consumer perception and driving engagement [10].

A key strength of NFTs lies in their ability to monetize visual identity and cultural symbolism through digital media. Strong visual identities allow creators to build brands, attract markets, and generate emotional engagement that enhances economic value [11], [12]. In the age of the attention economy, where user focus is a scarce commodity, visual power becomes a decisive strategic tool for engagement and market success [13], [14].

In Indonesia, creative industries are considered strategic sectors within the national development agenda, particularly in design, digital media, and communication. As outlined in the RPJMN 2020–2024, the integration of technology with visual culture is seen as key to driving national digital economic growth [15], [16]. Within this framework, NFTs present a transformative opportunity for Indonesian creators to participate in global digital economies while retaining cultural identity and narrative sovereignty.

However, not all NFTs achieve the same level of traction or economic value. Success in NFT marketplaces is heavily dependent on the ability to integrate visual elements strategically through coherent styles, relevant symbolism, and cultural resonance that aligns with current digital trends [2]. Herein lies the importance of visual rhetoric as an analytical lens to decode how visual communication influences trust, meaning, and value in digital environments.

Visual rhetoric refers to the use of imagery and symbolic representation to construct arguments and influence audience perception. In the NFT ecosystem, visual rhetoric is essential in crafting persuasive designs that build credibility, elicit emotional responses, and convey symbolic narratives. This is especially critical in platform-driven economies, where visual impact can directly affect market viability [10]. Furthermore, NFT innovation illustrates the convergence of technology and artistic expression in ways that transcend traditional creative boundaries. Generative art projects such as Art Blocks, which utilize algorithmic aesthetics, exemplify how mathematical logic, visual design, and artificial intelligence can collectively shape new creative economies [17] [19]. This signals a move toward data-driven and automated art systems that redefine both authorship and artistic value in the digital age.

From a digital economic standpoint, visual design is no longer a secondary feature, it is the new currency. In algorithmically curated platforms, artworks with strong visual appeal are more likely to trend, be shared, and receive widespread attention. As such, visual strategy becomes

central not only to branding and storytelling but also to visibility, virality, and ultimately, commercial success [20], [21].

This research investigates how visual design strategies contribute to the success of NFTs in capturing attention, constructing identity, and generating economic value. Through a qualitative lens informed by visual rhetorical analysis and digital community engagement, this study seeks to expand our understanding of the role of visual culture in shaping inclusive, platform-based business transformations in the creative digital economy.

## METHOD

This study adopts a qualitative interpretive approach to explore how visual design strategies in NFTs serve not only as aesthetic devices but also as mechanisms for inclusive and participatory digital business transformation. The research focuses on the intersection of visual representation, community engagement, and economic value creation within the decentralized creative economy. It aims to understand how NFT visuals contribute to identity construction, influence user perception, and enable broader economic participation through digital platforms [22], [23].

Given the central role of imagery and symbolism in NFT culture, this research applies visual rhetorical analysis as its core analytical framework. Visual rhetoric enables a systematic examination of how elements such as layout, iconography, style, and color function to convey ethos (credibility), pathos (emotion), and logos (logic). This framework has been used to investigate symbolic communication in visual media and is particularly relevant to NFT ecosystems, where visual impact directly correlates with perceived value and social resonance [24].

Data were collected from ten top-selling NFT collections on the OpenSea marketplace from 2024 to 2025, selected based on criteria such as sales volume, community interaction, and diversity of visual expression. The collections analyzed include PFP avatars, generative art projects, and interactive or narrative-driven assets. Each NFT was studied for its visual attributes, supporting metadata (e.g., title, creator, description), and its position within its broader community context. Beyond static visual analysis, this study also incorporates a digital community ethnography method [25], including observations of user interactions on Twitter, Discord, and Instagram. Particular attention was paid to community participation metrics such as likes, retweets, meme sharing, fan art, and discussions about identity, meaning, and value. This allowed the research to map how visual elements mobilize community engagement and how such engagement contributes to economic performance within NFT markets [26].

The research process was conducted in two main stages. The first involved visual rhetorical deconstruction, evaluating how visual components within NFTs function rhetorically to communicate creator credibility, build emotional appeal, and convey symbolic narratives [27]. The second stage included interactional discourse analysis, focusing on user-generated responses and behaviors that illustrate how visuals facilitate economic participation, co-creation, and community loyalty [28], [29].

To ensure validity, the study applied methodological triangulation by combining visual artifact analysis, metadata examination, and social media discourse. This approach reduces researcher bias while capturing the layered realities of digital interactions around NFT collections. All data used in this study were publicly accessible, and ethical digital research guidelines were followed throughout, including anonymity of user identities and non-interference with online

communities.

This methodology contributes to the discourse on digital transformation and inclusive innovation, especially within the creative economy, by demonstrating that value creation is not determined solely by rarity or technology but also by visual impact and participatory culture. As digital marketplaces continue to evolve, understanding the cultural and rhetorical dimensions of visual design in NFTs is essential for explaining how decentralized systems enable more equitable and accessible models of economic participation.

Moreover, this study connects NFT-driven digital transformation to broader theoretical frameworks. From a value co-creation perspective, NFT platforms function as arenas where creators, collectors, and communities jointly shape cultural and economic value [30]. Likewise, stakeholder theory highlights the interdependence among creators, platforms, investors, and communities in sustaining equitable growth [31]. Finally, applying a platform strategy lens underscores how NFT marketplaces operate as multi-sided platforms where governance, inclusivity, and network effects determine long-term success [32]. Integrating these perspectives enriches the analysis of NFTs as both cultural artifacts and strategic economic enablers.

## RESULTS AND DISCUSSION

The findings of this study reveal that visual design in NFTs plays a significant role not only in enhancing aesthetic and market credibility, but also in fostering creator inclusion, digital community participation, and the transformation of business models toward more democratic frameworks. An analysis of the top ten NFT collections on OpenSea during the 2024–2025 period demonstrates a strong relationship between visual styles, symbolic narratives, and inclusive community engagement.

### Visuals as Representations of Identity and Inclusion

In the context of digital business transformation, visual design is no longer merely an aesthetic choice it is an active representation of identity, cultural value, and economic accessibility. Within the NFT ecosystem, visuals become not only the face of the digital asset but also cultural identifiers that communicate who the work is for and who belongs to the community behind it. NFTs offer opportunities for creators from diverse social, geographic, and cultural backgrounds to express identity through digital mediums. In this study, collections like Azuki, Pudgy Penguins, and Doodles stand out for their inclusive visual styles adopting accessible, globally recognizable aesthetics and creating open narrative spaces for cross-cultural participation.

Conversely, collections such as Bored Ape Yacht Club (BAYC) reflect a more exclusive visual identity, characterized by yacht club symbolism, elite fashion, and hyper-masculine cartoon characters. While economically successful, this kind of visual storytelling narrows community access by aligning itself with a digitally elite lifestyle, thus turning visual identity into a gatekeeping mechanism rather than a bridge for inclusion.

To clarify these dynamics, the table below outlines how NFT visuals reflect identity inclusion across various indicators:

**Table 1. Visual Identity and Inclusion Characteristics in Selected NFT Collections**

<b>NFT Collection</b>	<b>Key Visual Traits</b>	<b>Cultural Representation</b>	<b>Gender &amp; Diversity</b>	<b>Visual Accessibility</b>	<b>Inclusion Narrative</b>
<i>Azuki</i>	Anime, fashion, youth	East Asia, global streetwear	Androgynous, trendy	Highly accessible	Openness to creative global community
<i>Pudgy Penguins</i>	Cute characters, bright colors	Universal, childlike	Neutral, all ages	Newbie-friendly	Promotes togetherness and humor
<i>Doodles</i>	Free-form illustration	Digital pop, internet generation	Gender-fluid, playful	Visually light and engaging	Supports unique self-expression
<i>BAYC</i>	Masculine cartoon, elite style	Western elite culture	Dominantly masculine, exclusive	Requires cultural familiarity	Status symbol, exclusive identity
<i>Mad Lads</i>	Absurd, humorous, provocative	Meme culture, anti-institutional	Non-dominant gender	Visually bold and contrasting	Open social critique and humor

*Source: OpenSea (2025)*

From the table above, visual inclusion in NFT design can be understood through several dimensions:

- **Cultural Representation:** Azuki, for instance, draws heavily from East Asian visual culture while adapting it for a global digital audience, creating a culturally hybrid space for engagement.
- **Gender and Diversity:** Doodles and Pudgy Penguins utilize gender-neutral and universally appealing characters, making them more inclusive and relatable to wider demographics.
- **Visual Accessibility:** Simple, vibrant, and easy-to-understand visuals allow collections like Pudgy Penguins to engage users beyond the crypto-savvy elite, welcoming audiences who may not have previous exposure to digital art or blockchain.
- **Narrative of Inclusion:** Visual storytelling that promotes openness, humor, and community tends to foster a more cooperative and accessible culture. Mad Lads, despite its absurd aesthetic, creates space for free expression and social critique.

NFT visuals, as cultural and economic signifiers, reflect a shift in the digital economy toward more democratic models. Creators from the Global South and other marginalized regions are able to express their identity and access global markets, provided their visual narratives evoke universal resonance. In this sense, visuality functions as both a communicative medium and a



form of soft power within cultural and economic negotiations.

Overall, these findings emphasize that inclusive visual strategies through accessible style, open narratives, and culturally resonant representation have a significant impact on expanding community participation, building user trust, and establishing a more just and diverse digital economy. In the era of digital business transformation, the success of NFT collections is not solely dependent on monetary value, but also on the extent to which their visuals reflect a world that is open, diverse, and collaborative.

### **Economic Value Transformation Through Visuals and Accessibility**

In the digital economy, value is no longer determined solely by material scarcity or practical utility, but increasingly by visual representation, cultural symbolism, and digital community participation. Within the NFT landscape, this transformation of economic value is realized through the intersection of visual strategy and accessibility. In other words, the way an NFT is visually designed and how broadly it can be accessed by a global audience directly influence its perceived and market value.

NFTs as blockchain-based digital assets enable value creation through uniqueness, aesthetic appeal, and social connectedness. Collections such as *Otherdeed (Otherside)* and *Art Blocks Curated* exemplify how complex and symbolic visuals can create new types of value previously absent in traditional creative economies. Both collections show that economic value can be generated not just from artistic style, but from narratives embedded in the visual ranging from metaverse property concepts (*Otherdeed*) to algorithmic art aesthetics (*Art Blocks*).

*Otherdeed*, for instance, presents virtual land plots with topographic, futuristic visuals that simulate digital landscapes. These images represent not only aesthetic content but also virtual property ownership, adding both utility and symbolic weight to their economic value. The artwork conveys value by being both visually immersive and functionally integrated into the metaverse. Similarly, *Art Blocks Curated* produces algorithmic, generative art that is abstract and often unpredictable. Each piece is created through coded systems, resulting in one-of-a-kind digital visuals. Buyers are not just acquiring an image, but an algorithmic experience further deepening the asset's conceptual and collectible worth. These projects reflect how innovation in visual design can be a driving force in the creation of new, intellectually oriented digital economies.

However, economic value is not defined by complexity alone. Collections such as *Pudgy Penguins* and *Doodles* demonstrate how approachable, joyful visual styles can attract broader participation and generate significant market activity. Their designs are intentionally simple, bright, and emotionally appealing, making them particularly engaging for audiences new to NFTs. These visuals lower the entry barrier and encourage broader demographic involvement, particularly among users who may lack technical or artistic training.

This accessibility translates into economic value because the easier it is for users to connect with a visual design, the more likely they are to share it, identify with it, and support it financially. Visuals that invite engagement foster stronger community loyalty, which in turn boosts trading activity, brand expansion (through merchandise or media), and long term market viability. From a business transformation perspective, accessible visuals support the democratization of digital economic participation. They shift control of value creation away from traditional gatekeepers (galleries, agencies, institutional curators) and place it in the hands of creators and their audiences. The platform economy makes it possible for anyone with a compelling visual identity to reach a

global market and build economic capital through design.

Thus, NFT visuality is not simply decorative it is instrumental in shaping inclusive, community driven, and resilient models of value. NFT collections that effectively merge visual accessibility with creative storytelling are more likely to thrive in the algorithm-driven attention economy. They embody a new paradigm where visual culture and financial systems are deeply intertwined, reshaping how creators and audiences participate in and benefit from the digital economy.

### **The Convergence of Visual Value and Economic Participation**

In the evolving digital economy, particularly within the NFT ecosystem, there is a growing convergence between visual value and economic participation. Visual design is no longer a secondary element it is central to how digital assets are perceived, shared, and monetized. NFTs demonstrate that artistic value, community engagement, and market performance are increasingly interdependent.

NFTs operate within decentralized platforms where traditional gatekeepers such as galleries, curators, or institutions are replaced by digital communities and algorithmic visibility. Within this context, visual appeal directly influences an NFT's reach and reception. Collections with engaging, emotionally resonant, and culturally relevant designs are more likely to attract attention, encourage social sharing, and drive financial transactions.

*Mad Lads*, for example, uses chaotic, absurd, and meme-ready visual language to generate humor, virality, and participatory culture. Its community responds not just by collecting the NFTs, but by creating memes, engaging in social media dialogue, and co-creating meaning. Here, visuals act as a starting point for community formation and economic interaction. Similarly, *Azuki* uses anime-inspired characters to appeal to youth culture, fashion aesthetics, and Asian digital identities. The recognizable and stylized visuals form the foundation of brand loyalty and cultural resonance.

This participatory dynamic aligns with the concept of “prosumption,” where users are both producers and consumers of value. NFT communities remix, repurpose, and reinterpret visual content, creating a ripple effect that extends the value of the original artwork. The more a visual identity can be adapted, shared, and emotionally connected to, the more it circulates and the more value it generates in both symbolic and monetary terms.

The influence of platform algorithms further amplifies this relationship. Visuals that prompt high engagement likes, shares, remixes are often promoted on NFT marketplaces like OpenSea, increasing visibility and driving market activity. In this way, strong visual design becomes a self-reinforcing engine for economic participation.

However, not all visuals succeed equally. Projects that lean heavily into elitism, abstract complexity, or niche symbolism may limit accessibility and alienate wider audiences. Conversely, collections with open, inclusive, and emotionally rich visuals tend to cultivate more active communities and sustain long-term engagement.

In conclusion, the convergence of visual value and economic participation reflects a deeper transformation in how digital business is conducted. Visuals are no longer mere decoration; they are strategic assets that shape community identity, economic inclusivity, and platform-based business success. In NFT ecosystems, the ability of visuals to connect culturally, emotionally, and socially is what turns design into value.

## CONCLUSION

This study reveals that visual design plays a fundamental role in shaping inclusive, participatory, and economically viable models within the NFT ecosystem and the broader digital economy. Beyond aesthetics, visuals function as strategic tools that influence perception, foster trust, and drive user engagement in platform based creative markets. The analysis of top NFT collections such as Azuki, Pudgy Penguins, and Doodles demonstrates that accessible, emotionally resonant, and culturally inclusive visuals significantly enhance community engagement and market visibility. These findings suggest that value creation in the digital era is increasingly defined by participatory design and shared narrative identity. In contrast, collections with exclusive or niche aesthetics, like Bored Ape Yacht Club, illustrate the limitations of designs that restrict broader audience involvement.

This convergence between visual value and economic participation marks a shift from institutionally controlled markets to decentralized, community driven economies. Visuals that invite interaction, remixing, and emotional resonance foster sustainable growth by encouraging collective ownership and collaboration. In turn, this reflects the evolving nature of digital business transformation where inclusivity and user engagement are vital economic assets. In addition to these conclusions, several recommendations and implications emerge. First, the study recommends further exploration of visual rhetoric as a methodology for understanding user perception and decision-making within platform-based economies. This approach can be expanded across other visual-driven platforms, such as digital games, AR/VR assets, or fashion NFTs, offering a flexible theoretical framework for cross-disciplinary research.

Second, the findings have implications for creators, developers, and platforms seeking to build equitable and accessible creative economies. Inclusive visual strategies can serve not only as market differentiators but also as tools for social representation and cultural empowerment across diverse communities. Lastly, this study opens pathways for future research into how AI-generated visuals, cross-platform integrations, or metaverse environments further shape the connection between visual identity and economic participation. Longitudinal studies on NFT communities may also reveal how visual loyalty translates into lasting economic value.

Based on these findings, several actionable strategies emerge for both creators and platforms. For platforms, designing inclusive onboarding processes such as multilingual guides, mentorship programs for underrepresented artists, and transparent royalty structures can lower entry barriers and foster participation from diverse communities. For creators, leveraging visual storytelling techniques not only strengthens brand identity but also builds trust and emotional resonance across global audiences. By integrating such practices, both platforms and creators can transform NFTs from speculative assets into vehicles of cultural exchange, sustainable participation, and long-term digital equity.

In summary, visual design in NFTs is not merely decorative it is a vehicle for inclusion, participation, and innovation. As decentralized economies continue to evolve, the ability to craft culturally responsive and emotionally powerful visuals will remain central to building transformative digital business models.

## REFERENCES

- [1] J. Bruineberg, "Rethinking the cognitive foundations of the attention economy," *Philos. Psychol.*, pp. 1–23, 2025.



- [2] R. Li, B. Yecies, Q. Wang, S. Chen, and J. Shen, "Empowering Visual Artists with Tokenized Digital Assets with NFTs," *arXiv Prepr. arXiv2409.11790*, 2024.
- [3] H. Chen *et al.*, "Web3 Metaverse: State-of-the-art and vision," *ACM Trans. Multimed. Comput. Commun. Appl.*, vol. 20, no. 4, pp. 1–42, 2023.
- [4] H. Chen, Z. Yang, and T. Lyu, "Empirical investigation of digital collectibles purchase intention: the roles of value, risks, identification, and scarcity," *Int. J. Human-Computer Interact.*, pp. 1–20, 2024.
- [5] S. Li, B. Zhu, H. Zhu, and Z. Yu, "Consumer sticky purchase intention for personalized digital collections of cultural heritage in metaverse: from the prospective of self-concept," *Electron. Commer. Res.*, pp. 1–39, 2024.
- [6] L. Zhang and I. G. Phang, "Building brand attachment in China's luxury fashion industry: The role of NFT characteristics," *J. Glob. Fash. Mark.*, vol. 15, no. 3, pp. 397–416, 2024.
- [7] H. Li, T. Xue, A. Zhang, X. Luo, L. Kong, and G. Huang, "The application and impact of artificial intelligence technology in graphic design: A critical interpretive synthesis," *Heliyon*, vol. 10, no. 21, 2024.
- [8] H. Choi, "Consumption of visual cues in computer-mediated environments," *J. Distrib. Sci.*, vol. 18, no. 8, pp. 23–33, 2020.
- [9] M. Frackowiak, *Photography as Social Transformation: How the Idea of Change Helps Us to Understand the Taking, Sharing, and Debating of Images*. Routledge, 2025.
- [10] C. A. Hill and M. Helmers, *Defining visual rhetorics*. Taylor & Francis, 2012.
- [11] G. Lovink, "Political Economy of the Crypto-art Craze," in *Defining Web3: A Guide to the New Cultural Economy*, Emerald Publishing Limited, 2024, pp. 97–103.
- [12] P. Messaris, *Visual persuasion: The role of images in advertising*. Sage, 1997.
- [13] L. J. Ramirez Lopez and G. G. Morillo Ledezma, "Employing Blockchain, NFTs, and Digital Certificates for Unparalleled Authenticity and Data Protection in Source Code: A Systematic Review," *Computers*, vol. 14, no. 4, p. 131, 2025.
- [14] K. Nelson-Field, *The Attention Economy: A Category Blueprint*. Springer Nature, 2024.
- [15] L. Bernika and A. K. Monika, "Peran Ekonomi Kreatif terhadap Perekonomian Indonesia Selama Pandemi dengan Analisis Tabel Input-Output," *J. Ekon. Indones.*, vol. 13, no. 3, pp. 249–271, 2024.
- [16] Y. M. Hartarini, Z. Nafiah, and S. Sopi, "Kajian tentang ekonomi kreatif di Kabupaten Kendal," *EKOMA J. Ekon. Manajemen, Akunt.*, vol. 2, no. 1, pp. 77–89, 2022.
- [17] Z.-H. Bai, C. Xu, and S.-E. Cho, "Content Characteristics and Customer Purchase Behaviors in Nonfungible Token Digital Artwork Trading," *J. Theor. Appl. Electron. Commer. Res.*, vol. 20, no. 2, p. 65, 2025.
- [18] Y. Guo *et al.*, "Pathway to future symbiotic creativity," *arXiv Prepr. arXiv2209.02388*, 2022.
- [19] T. R. Gadekallu *et al.*, "Blockchain for the metaverse: A review," *arXiv Prepr. arXiv2203.09738*, 2022.
- [20] A. Koc, *Memetic Aesthetics: Value, Virality, and Vibeology in the Age of Digital Social Media*. McGill University (Canada), 2024.
- [21] K. Chayka, *Filterworld: how algorithms flattened culture*. Random House, 2025.
- [22] S. Cao and M. Foth, "BLOCKCHAIN FOR GOOD."
- [23] S. Badi, "The role of blockchain in enabling inter-organisational supply chain alignment for value co-creation in the construction industry," *Constr. Manag. Econ.*, vol. 42, no. 3, pp. 266–288, 2024.
- [24] A. T. M. Rahman, M. R. Haque, and S. Sultana, "DAIEM: Decolonizing Algorithm's Role as a Team-member in Informal E-market," *arXiv Prepr. arXiv2506.12910*, 2025.
- [25] S. Pink, H. Horst, T. Lewis, L. Hjorth, and J. Postill, "Digital ethnography: Principles and practice," 2015.
- [26] S. H. Park, K. Lundquist, and V. Stolzenburg, "Global value chains for inclusive development," 2023.
- [27] J. C. B. SANDOVAL, V. F. DE SANTANA, S. BERGER, L. T. QUIGLEY, and S. HOBSON, "A Responsible and Inclusive Technology Framework for Attending to Business-to-Business Contexts," *Responsible Comput.*, vol. 2, no. 1, 2025.
- [28] D. Pramod, V. Bharathi S, and K. P. Patil, "Tokenizing Tangible Intentions: Unraveling the Motives to Try NFTs," *J. Comput. Inf. Syst.*, pp. 1–14, 2024.
- [29] Q. Yang, Y. Zhao, H. Huang, Z. Xiong, J. Kang, and Z. Zheng, "Fusing blockchain and AI with metaverse: A survey," *IEEE Open J. Comput. Soc.*, vol. 3, pp. 122–136, 2022.
- [30] C. K. Prahalad and V. Ramaswamy, *The future of competition: Co-creating unique value with*

*customers*. Harvard Business Press, 2004.

- [31] R. E. Freeman, *Strategic management: A stakeholder approach*. Cambridge university press, 2010.
- [32] M. A. Cusumano, A. Gawer, and D. B. Yoffie, *The business of platforms: Strategy in the age of digital competition, innovation, and power*, vol. 320. Harper Business New York, 2019.