

Decentralised Brands in Social Media Networks and Beyond



About this paper

In our era of rapidly advancing technology, the detrimental consequences of Moloch's race, a metaphor for self-perpetuating competitive behaviour that leads to suboptimal or catastrophic outcomes, can be mitigated through innovative concepts like 'decentralised brands'. These ideas represent a shift from a singular unit of value (i.e., particular currency), advocating for a diversified and resilient system. Implementing decentralised brands inside decentralised social media networks may be a crucial first step towards this transformation. By leveraging artificial intelligence technology together with blockchain technology, we can counterbalance the inherent friction costs of decentralisation, thus facilitating the coexistence of various value systems. This shift from centralised structures to a more decentralised model fosters sustainable, inclusive, and resilient communities, providing a feasible strategy to evade the pitfalls of Moloch's race. The centralised nature of current social media platforms has raised concerns regarding data privacy, control, and manipulation. Decentralised social networks, characterised by distributed control and user empowerment, offer a promising strategy for creating decentralised brands. This paper outlines background and research ideas across multiple disciplines to understand better and achieve the vision of decentralisation that supports general social interests. This report has been produced by the EU Blockchain Observatory and Forum Experts Panel and team.

Authors

- Sînică Alboaie, Axiologic Research
- Kristina Livitckaia, Konstantinos Votis, Centre for Research and Technology Hellas

Note

While we have done our best to incorporate the comments and suggestions of our contributors where appropriate and feasible, all mistakes and omissions are the sole responsibility of the authors of this report.

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1 The Concept of the Value and the Role of Decentralisation

From ancient barter systems to modern financial markets, societies have always sought ways to define and measure value. Historically, as economies grew more complex, there was a noticeable gravitation towards a singular understanding of value, predominantly gauged by monetary metrics such as GDP or personal wealth¹. This singular focus has inadvertently shaped societal norms, often propelling behaviours towards unchecked competition. The repercussions of such a trajectory are evident in today's challenges, including stark income inequality, environmental degradation, and a general neglect of broader social welfare.

Nassim Nicholas Taleb, renowned for his works *The Black Swan*² and *Antifragile*³, delves deep into the discussion of value. He champions the inevitability of a singular value measure, primarily attributing its necessity to arbitrage opportunities (e.g., an opportunity to buy something at a very low price and sell it at a much higher price). In Taleb's view, a unified measure simplifies markets, streamlining transactions and facilitating easier comparisons. He argues that if a plethora of value measures existed, market actors would inevitably exploit discrepancies, leading to arbitrage opportunities. Over time, this would naturally push the system back towards a single unit of measure. However, the implications of Taleb's arguments extend beyond mere efficiency. They touch upon deeper societal structures and the potential pitfalls of over-simplification.

While the allure of the simplicity of a single measure is undeniable, it is not without its perils. Over-reliance on a dominant measure, such as the US dollar as a global reserve currency, can intertwine global stability with the health of individual economies⁴. Moreover, the existence of continuous arbitrage does not necessarily lead to a singular value unit. The foreign exchange market, with its diverse array of currencies, stands as a testament to this. Here, currencies retain their unique identities amidst constant arbitrage. It is also worth noting that singular economic metrics, like GDP, often overlook critical facets like environmental sustainability or societal well-being. The introduction of parallel and decentralised value systems could bridge these gaps, fostering a more comprehensive understanding of value.

Before we delve deeper, it is essential to understand Moloch's Dilemma, a concept that underscores the pitfalls of unchecked competition⁵. This dilemma accentuates the need for diverse parallel value systems. Such systems could disrupt entrenched monolithic structures, paving the way for a more balanced societal fabric. Economist Bernard Lietaer, a luminary in economic diversity, has been a vocal advocate for multiple parallel monetary systems^{6,7,8,9}. With their inherent limited interoperability, Lietaer posits that these systems can bolster societal resilience and curtail systemic risks. However, embracing this decentralised approach is not devoid of challenges. Barriers to value transfer might impede trade and economic expansion. Moreover, the intricacies of managing and regulating parallel systems could usher in new forms of risk.

In the modern era, the rise of digital currencies and blockchain technology underscores the viability of multiple value systems. Cryptocurrencies, operating outside traditional monetary frameworks, have heralded novel methods for value storage and transfer¹⁰. While they introduce new complexities, they also promise unprecedented innovation and diversification in the value landscape.

¹ Roser, M. (2021). What is economic growth? And why is it so important? Published online at OurWorldInData.org. [Online source](#) [Accessed: 9 November 2023].

² Taleb, N. N. (2010). *The Black Swan: The Impact of the Highly Improbable* (2nd ed.). Random House Trade Paperbacks. ISBN-13: 978-0812973815.

³ Taleb, N. N. (2014). *Antifragile: Things That Gain from Disorder*. Random House Publishing Group. ISBN-13: 978-0812979688.

⁴ Associated Press. (2023, August 16). Emerging Economies Push to End Dollar's Dominance, With Few Viable Alternatives. Voice of America. [Online source](#) [Accessed: 9 November 2023].

⁵ Olsson, O. (May 7). Moloch — a race to the bottom where everyone loses. Medium. [Online source](#) [Accessed: 9 November 2023].

⁶ Larue, L. (2020). The Ecology of Money: A Critical Assessment. *Ecological Economics*, 178, 106823. [Online source](#) [Accessed: 9 November 2023].

⁷ Lietaer, B., Ulanowicz, R., & Goerner, S. (2009). Options for Managing a Systemic Bank Crisis. *Sapiens*, 2(1). [Online source](#) [Accessed: 9 November 2023].

⁸ Lietaer, B., Ulanowicz, R., Goerner, S., & McLaren, N. (2010). Is Our Monetary Structure a Systemic Cause for Financial Instability? Evidence and Remedies from Nature. *Journal of Futures Studies*, 14(3), 89-108. [Online source](#) [Accessed: 9 November 2023].

⁹ Lietaer, B., Arnspenger, C., Goerner, S., & Brunnhuber, S. (2012). Money - Sustainability: The Missing Link. Report from the Club of Rome - EU Chapter to Finance Watch and the World Business Academy. Triarchy Press with The Club of Rome. [Online source](#) [Accessed: 9 November 2023].

¹⁰ García-Monleón, F., Erdmann, A., & Arilla, R. (2023). A value-based approach to the adoption of cryptocurrencies. *Journal of Innovation & Knowledge*, 8(2). [Online source](#) [Accessed: 9 November 2023].

The technological renaissance, especially the advancements in AI, offers a counterbalance to the inherent inefficiencies of decentralisation. AI, with its unmatched prowess in computation, pattern recognition, and predictive analysis, can adeptly navigate the intricacies of multiple value systems. Concurrently, innovations like blockchain promise secure, transparent, and efficient cross-system transactions¹¹. The inherent redundancy in decentralised systems, far from being a drawback, enhances resilience, offering a unique form of efficiency in the face of adversity. Moreover, redundancy can be taken as a strategic approach to ensure systems' reliability and continuous operation achieved via multiple copies of data, system duplication, and distributed architecture.

In conclusion, as societies evolve, so must our understanding of value. While evident, the allure of a singular value measure should not overshadow the potential and promise of decentralised systems. As we venture into this digital age, the intricate dance between technology and value will undoubtedly sculpt our societal structures, demanding adaptability and foresight.

2 Decentralised Brands and Social Networks

2.1 THE DOMINANCE OF CENTRALISED SOCIAL MEDIA PLATFORMS

The simple presence of vast centralised social networks poses potential threats to societal well-being in aspects like monopolistic control of culture, privacy and surveillance risks, algorithmic biases, and systemic vulnerability^{12,13,14,15}. Large social media platforms can exert a disproportionate influence over public discourse, leading to potential manipulation of opinions, censorship, and stifling of innovation. By embracing a decentralised brand approach, a more diverse ecosystem of platforms would emerge, encouraging open dialogue and fostering a healthier democratic environment.

Centralised social media networks often collect large amounts of personal data, exposing users to risks such as data breaches, identity theft, and invasive targeted advertising. Decentralised platforms, emphasising user privacy and data ownership, can mitigate these threats by empowering individuals to control their information and online presence¹⁶. Algorithm-driven content curation on centralised platforms can result in echo chambers, promoting extreme viewpoints and reinforcing existing beliefs. Decentralised social media platforms allow users to develop and adopt alternative algorithms, providing a broader range of perspectives and promoting more nuanced discussions.

The reliance on a few massive social media networks creates a single point of failure, making the entire system susceptible to cyberattacks, technical issues, and censorship. With their distributed nature, decentralised networks enhance resilience and antifragility by reducing the impact of any single point of failure¹⁶.

2.2 DEFINING A DECENTRALISED BRAND

A decentralised brand, emphasising multiple independent entities operating under a shared identity, offers a potential model for managing the tension between autonomy and unity. This approach allows for diversity and local adaptability while maintaining a shared brand identity, fostering resilience and mitigating systemic risks.

¹¹ Sharma, T.K. (2023, May 23). The Potential of Decentralized Artificial Intelligence in the Future. Blockchain Council. [Online source](#) [Accessed: 9 November 2023].

¹² Frank, R.H. (2021, February 11). The Economic Case for Regulating Social Media. The New York Times. [Online source](#) [Accessed: 9 November 2023].

¹³ Luo, H., Cai, M., & Cui, Y. (2021, December 16). Spread of Misinformation in Social Networks: Analysis Based on Weibo Tweets. Security and Communication Networks, 2021. [Online source](#) [Accessed: 9 November 2023].

¹⁴ Shahbaz, A., & Funk, A. (n.d.). Social Media Surveillance. Freedom House. [Online source](#) [Accessed: 9 November 2023].

¹⁵ Manheim, K., & Kaplan, L. (2019). Artificial Intelligence: Risks to Privacy and Democracy. The Yale Journal of Law & Technology, 21. [Online source](#) [Accessed: 9 November 2023].

¹⁶ Livitckaia, K., Papoutsoglou, I., Votis, K., Revolidis, I., Ellul, J., Ferreira da Silva, C., Szegő, D., & Joshi, A. (2023, October 19). Decentralised Social Media. EU Blockchain Observatory and Forum. [Online source](#) [Accessed: 9 November 2023].

In the context of this article, a '**decentralised brand**' refers to an online community that employs strong governance based on blockchain technologies, ensuring transparency and accountability in the activities of elected leaders. In the spirit of decentralisation, this approach facilitates the creation of 'forks' when the elected leader misbehaves, making it easy to transfer value obtained from activities within one community to another.

Although this model can be generalised to other human governance systems, serious experimentation in new types of social networks should allow for safer and faster evolution of the concept.

2.3 STRATEGIES OF DECENTRALISED BRANDS WITHIN SOCIAL MEDIA NETWORKS

In the evolving social media landscape, decentralised networks facilitate the creation of a new paradigm for brand interaction and user engagement¹⁷. This section delves into the key strategies that decentralised brands employ, focusing on governance mechanisms, user empowerment, community value, and AI-driven content curation (see *Figure 1*). These strategies are not just theoretical but practical approaches that can address the challenges of a digital ecosystem that is increasingly becoming user-centric and autonomy-oriented.

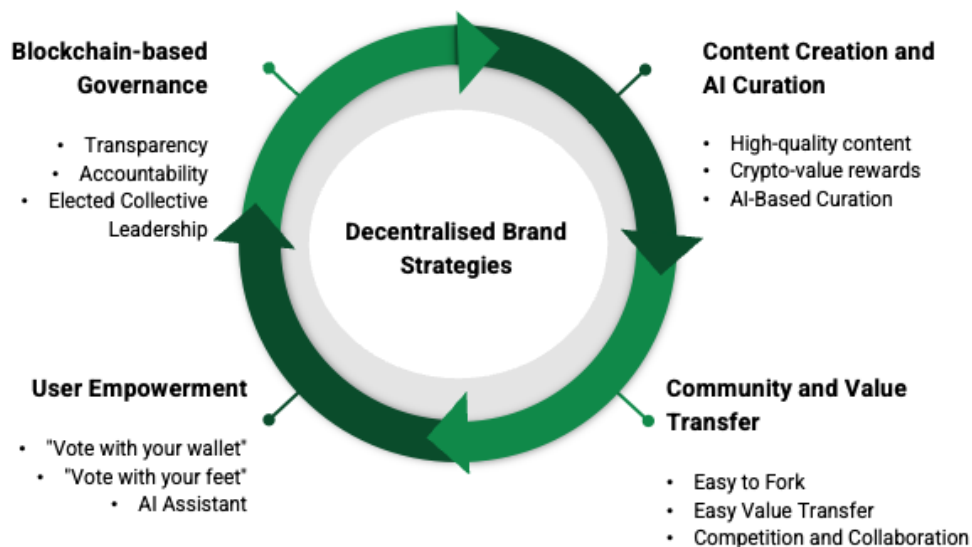


Figure 1: Decentralised brand strategies

At the heart of these strategies is a shift in power dynamics, where users are active participants in content creation, curation, and governance. By leveraging blockchain technology and artificial intelligence (AI), decentralised brands are introducing an operational model of social media that prioritises user empowerment, equitable value distribution, and a more personalised online experience.

As the AI revolution unfolds, creating content is becoming increasingly effortless. Therefore, low-quality content and manipulation through repetitive propaganda are expected to increase dramatically. Our vision of decentralised brands in social networks posits that the most effective way to combat spam and low-quality content is by developing methods to transfer value from content creators to their audience through governance crypto tokens¹⁸ but also aims to incentivise high-quality content providers by mandating consumers show appreciation, enabling creators to use the accumulated value to produce even more exceptional content.

¹⁷ Freund, A. (2019, November 26). Decentralized Brand Economies: The Key to Blockchain Mass Adoption. ConsenSys. [Online source](#) [Accessed: 9 November 2023].

¹⁸ Toufaily, E. (2022). An integrative model of trust toward crypto-tokens applications: A customer perspective approach. *Digital Business*, 2(2), 100041. [Online source](#) [Accessed: 9 November 2023].

To compensate for the inevitable centralisation that is caused by democratic voting, the decentralised brand governance approach should encourage **'forking'**, **'vote with your feet'**¹⁹, and **'vote with your wallet'**²⁰ governance methods besides democratic voting.

'Forking' for communities within a decentralised brand that is part of a decentralised social network refers to creating a new, independent community derived from an existing one. Forking allows users to customise their experiences, address specific needs, or establish new governance models when the original community no longer aligns with their values or interests. A group of users creates a new community, branching off from the original one. This new community shares some foundational elements with the original – such as the blockchain-based governance system or certain content curation mechanisms – but introduces modifications that address the specific concerns or aspirations of the 'forking group'. To support a seamless transition for users who wish to join the new community, the decentralised social network facilitates the easy transfer of value (e.g., reputation, crypto assets) between the original community and the forked one. This allows users to maintain their status, influence, and investments as they move between communities.

The original and forked communities continue to coexist within the decentralised social network, fostering competition and encouraging continuous improvement in governance, content quality, and user experience. Users can choose to participate in one or multiple communities based on their preferences and **'vote with their feet'** by joining or leaving communities as they see fit.

In a decentralised brand within a decentralised social network, the **'vote with your wallet'** principle is about using governance crypto tokens as an alternative to traditional democratic voting, which can sometimes facilitate demagoguery and create unsurmountable divisions. This approach empowers users to actively shape the community by allocating their tokens to support content creators, fund community initiatives, and participate in governance decisions. Doing so fosters a competitive environment that drives innovation, improved user experiences, and better governance models.

To further address the potential issues associated with democratic voting, the leadership structure within decentralised brands should adopt a collective approach, thereby preventing the concentration of power and promoting diverse perspectives. Simplifying decision-making processes can be achieved by delegating voting power to the elected leaders, allowing them to represent the broader community's interests effectively. This combination of user empowerment through governance crypto-tokens, collective leadership, and delegated decision-making creates a more representative, diverse, and dynamic online environment while mitigating the risks associated with simplistic democratic voting systems.

Another important feature is enabling AI-based content curation using artificial intelligence (AI) algorithms to analyse and organise content based on user values and preferences. It is essential to note that AI processing must be enabled and subsequently guided by the users themselves to mitigate potential challenges and biases. This process enhances user experiences by providing relevant and engaging content, tailoring news feeds, and filtering out spam or inappropriate content.

By offering personalised experiences, AI curation encourages user retention, platform growth, and the overall success of decentralised networks. AI assistants can also play a significant role in decentralised governance by summarising activities and advising users on decision-making matters, trained based on users' values and preferences, ensuring personalised and relevant insights. By streamlining complex governance information

¹⁹ Collins English Dictionary. Vote with your feet. In CollinsDictionary.com. [Online source](#) [Accessed: 9 November 2023].

²⁰ Cambridge Dictionary. Vote with your wallet. [Online source](#) [Accessed: 9 November 2023].

and offering tailored recommendations based on user preferences, AI assistants can empower users to make more informed decisions, enhancing the overall effectiveness of decentralised governance systems^{21,22}.

3 Applying Decentralised Brands Beyond Social Media

3.1 SECTORS & STAKEHOLDERS

The 'decentralised brand' concept permeates various sectors or stakeholders, fostering innovation and efficiency, including¹⁷:

- entrepreneurship,
- co-creation tools,
- corporate governance,
- community initiatives,
- non-governmental organisations (NGOs).

Entrepreneurship around decentralised social media will likely flourish as decentralised brands create new opportunities for innovation and collaboration. This entrepreneurial spirit can drive the development of novel business models, services, and products that leverage the unique features and capabilities of decentralised networks.

Co-creation tools in social media can be revolutionised by decentralised brands, enabling users to create and curate content, resources, and knowledge collectively. This collaborative approach encourages diverse perspectives, drives innovation, and fosters a sense of shared ownership and responsibility within online communities.

Decentralised brand thinking can also influence large **corporations** by addressing systemic issues in various sectors, such as healthcare. By creating decentralised alternatives to traditional systems, these brands can promote transparency, patient-centricity, and data ownership, ultimately leading to improved outcomes and more efficient processes.

Local **community**-based social networks have not gained significant traction thus far, primarily due to challenges related to participation and governance. However, decentralised brands have the potential to overcome these obstacles by leveraging blockchain and AI technologies, enabling more accessible and effective collaboration within localised communities.

Artificial intelligence can play a crucial role in resolving the issues that previously hindered collaborative **governance** structures' emergence. With the combination of blockchain and AI, it is now possible to obtain objective summarisations and conclusions, facilitating informed decision-making and enabling users to participate more effectively in the governance of their decentralised communities.

3.2 NEW RESEARCH DIRECTIONS

²¹ Khan, F. (2023, September 18). The role of AI in social media content curation. Crowdfire. [Online source](#) [Accessed: 9 November 2023].

²² Alboaie, S., Como, M., & Tan, A.-G. (2022). Correcting AI's Caused Power Imbalance Through Decentralised Brands. In *Lucrări Ştiinţifice*. Vol. 65. Editura "Ion Ionescu de la Brad" Iaşi. [Online source](#) [Accessed: 9 November 2023].

'Decentralised brands' also prompt the exploration of new directions in research to fully realise the potential of decentralisation. One main research direction that could be considered for further investigation is a study of psychological and sociological dimensions of decentralised networks, focusing on understanding individual and group dynamics to foster healthy online communities. Such a study can explore trust-building mechanisms in decentralised environments, the role of online identity and anonymity, and the impact of decentralisation on user behaviour, motivation, and mental health. Examining these aspects could help to develop a deeper understanding of the factors influencing the success and sustainability of decentralised social networks and contribute to creating more inclusive and democratic online spaces.

Another important research course is to explore the aspects of governance and economic systems in decentralised social media to develop sustainable and democratic online communities. This investigation can undertake a comparative analysis of centralised and decentralised governance structures, explore incentive mechanisms for user participation and content creation, and examine the role of tokenomics in decentralised networks and its broader economic implications. Exploring these aspects would contribute to advancing more equitable and effective governance and economic models within decentralised social media platforms, fostering their long-term success and impact on society. Moreover, involving AI in governance within decentralised social networks has the potential to expand into various social and economic environments. The applicability of this research spans areas such as urban planning and smart city development, healthcare systems management and optimisation, environmental and natural resource management, financial systems and regulations, education systems and administration, transportation and infrastructure planning, public safety and emergency response, policy development and implementation, labour market and workforce development, and finally, social welfare programs and services. Exploring the integration of AI in governance across these diverse sectors can contribute to developing more efficient, equitable, and sustainable solutions that have a lasting impact on society.

The third research direction that needs to be considered is the investigation of the role of AI and advanced computer architectures in decentralised social networks to enhance user experiences and platform functionality. This study is expected to explore AI-driven content curation and recommendation algorithms, scalable and secure distributed architectures for decentralised social networks, and privacy-preserving AI techniques for decentralised environments. Examining these aspects could contribute to the optimisation of decentralised social networks, ensuring their robustness, security, and privacy while enriching user experiences and fostering the long-term success of these platforms.

New research directions should promote interdisciplinary research and collaboration in holistically studying decentralised social networks to address their challenges and opportunities, which could lead to developing frameworks for interdisciplinary collaboration, identifying synergies and gaps in knowledge across disciplines, and analysing case studies of successful and unsuccessful decentralised networks to extract best practices. Interdisciplinary cooperation can enhance the understanding of decentralised networks, facilitate knowledge sharing, and contribute to developing robust and sustainable solutions that ensure the long-term success of these platforms.

4 Concluding Remarks

The metaphor of Moloch's race provides a compelling perspective for analysing societal and cultural shifts in assessment of value. Diversifying value systems and adopting models like parallel monetary systems and decentralised brands could mitigate the risks associated with Moloch's dilemma. However, as with any significant societal shift, it is crucial to consider the potential downsides and complexities associated with these changes. It is particularly encouraging to note that the concept of a 'decentralised brand' inherently enables rapid experimentation, where failures do not impact the entire system. This decentralisation acts as a

safeguard, ensuring that potential issues are isolated and can be addressed without threatening the system's health. In essence, this provides a pragmatic pathway for innovation.

Decentralised brands in decentralised social networks hold significant potential to transform various aspects of society and online interactions. These use cases illustrate how these brands can shape the future of decentralised social media. Decentralised brands are poised to become the future of decentralised social media, employing blockchain-based governance and fostering user-centric ecosystems that offer an alternative to traditional centralised platforms. This shift promotes more democratic, transparent, and accountable online environments, empowering users to shape their communities actively.

The flexibility enabled by the 'decentralised brand' approach allows for unique adaptations and variations under a shared identity, which can be tested and tweaked in real-time based on performance. In the face of challenges like Moloch's dilemma, learning from failures, adapting, and innovating becomes increasingly critical. With the built-in resilience and adaptability of models like 'decentralised brands' and better monetary systems, societies can better navigate the complexities of the modern world and foster sustainable, inclusive growth.

In essence, while decentralisation and adopting multiple value systems may introduce certain inefficiencies, the leaps in efficiency provided by AI and technology may compensate for this. The balance achieved could foster efficient and resilient systems, offering a robust counterargument to the inevitable convergence towards a single unit of measure due to arbitrage.