

# Blockchain reactions

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### *Propositions and implications*

Table 18 presents cornerstone propositions and their implications, meticulously curated to fill the research gaps in BCT marketing as initially framed in this dissertation's introduction. Each proposition is a catalyst that triggers a multi-dimensional discourse. The propositions are grounded in the initial Knowledge, Persuasion, and Decision stages of Rogers et al.'s (2014) innovation-decision process and contain intrinsic cues that open avenues for further exploration into the later stages of Implementation and Confirmation. Subsequent to Table 18, the dissertation provides a detailed exploration of the impact of each proposition, shedding light on its relevance and utility for both academic research and practical application.

**Table 1.** *Proposition and implications*

<b>No.</b>	<b>Propositions</b>	<b>Source</b>	<b>Implications</b>
1	Early BCT adoption in marketing reflects a trend of experimentation.	Chapters one and two	Prioritize developing adaptive strategies and theoretical models to navigate the nascent, exploratory phase of BCT in marketing.
2	BCT's latent potential is solidifying into established attitudes, marking the persuasion stage of adoption.	Chapters one and two	Intensify educational and outreach efforts to align with and capitalize on the maturing attitudes toward BCT's practical applications.
3	BCT disrupts digital advertising by challenging centralized dominance.	Chapters three and four	Leverage BCT to democratize digital advertising, challenging centralization and enhancing trust, efficiency, and stakeholder equity.
4	BCT serves as a beacon for trust and authenticity.	Chapters two and three	Adopt BCT to reconfigure digital trust paradigms, elevating brand reputation and stakeholder value through algorithmic trustworthiness.
5	Unexplored opportunities in BCT-enabled advertising require empirical validation.	Chapter four	Invest in pioneering BCT-based advertising models to address industry challenges and differentiate in the market, while encouraging scholarly refinement.
6	Data privacy concerns will outweigh data utility benefits.	Topic integration	Prioritize "privacy by design" and reevaluate data governance to maintain trust and compliance, while scholars reassess utilitarian frameworks.
7	BCT and Artificial Intelligence will converge in enabling Universal Basic Income settings.	Topic integration	Emphasize the urgency of exploring symbiotic models that marry intuition with predictive capabilities for an equitable future economy.
8	Consumer skepticism towards digital advertising will intensify.	Topic integration	Stress the importance of adapting to evolving consumer attitudes by transitioning to transparent and consumer-centric advertising models.
9	The integration of ethical algorithms in digital advertising will become a societal imperative, reducing algorithmic bias and fostering inclusivity.	Societal extrapolation	Integrate ethical reasoning into digital advertising algorithms to mitigate bias, enhance inclusivity, and stay ahead in regulatory compliance.

*Proposition 1: Early BCT adoption in marketing reflects a trend of experimentation.*

Theoretical implications. The early adoption phase of BCT aligns with historical patterns of risk and reward in technology integration within marketing (Alford & Page, 2015; Pfleeger & Menezes, 2000). This phase offers scholars an opportunity to develop, adjust, or revolutionize existing theoretical models. By contextualizing BCT within the larger narrative of technology adoption in marketing, this proposition enriches existing theories and facilitates a comprehensive understanding of BCT's role in the evolving digital landscape.

Managerial implications. Early adoption of BCT is characterized by a blend of curiosity and risk-taking. This phase highlights the need for organizations to be open to iteration and prepared for uncertainties. Understanding this experimentation stage enables decision-makers to formulate adaptive strategies, whether they choose to be early adopters or learn from the experiences of others.

*Proposition 2: BCT's latent potential is solidifying into established attitudes, marking the persuasion stage of adoption.*

Theoretical implications. This proposition extends the Diffusion of Innovations theory (Rogers et al., 2014) by focusing not just on the temporal stages of adoption but also on the psychological transformations that occur as BCT's potential becomes more distinct.

Managerial implications. Recognizing the market is in the persuasion stage suggests a readiness for clarifying BCT's benefits and applications. For BCT providers, this phase is opportune for targeted educational initiatives and case study promotions. For firms considering BCT, a proactive engagement with BCT-enabled marketing services is advised. This awareness allows for more effective strategy formulation to align with evolving market attitudes.

*Proposition 3: BCT disrupts digital advertising by challenging centralized dominance.*

This proposition presents decentralization as a game-changing perspective in the discourse on digital advertising. Historically, a few central players have wielded significant control over market dynamics, data, and revenue (Joo et al., 2023). BCT challenges this centralized model, suggesting a transition toward decentralized, transparent, and trust-based frameworks. This alters prevailing power structures and stakeholder roles, reshaping industry models that have long been centralized. The proposition enriches the academic discourse on how disruptive technologies like BCT can catalyze shifts in industry paradigms.

Managerial implications. For managers, this proposition underlines the strategic advantage of using BCT in digital advertising. It highlights BCT's capability to democratize data, reach, and revenue streams while enhancing transparency and reducing fraud. For advertisers, BCT offers a pathway to transparent, consent-based advertising, increasing trust and audience engagement. Existing market leaders must adapt to BCT or risk losing their competitive edge to more agile, BCT-enabled competitors.

*Proposition 4: BCT serves as a beacon for trust and authenticity.*

Theoretical implications. This proposition contends that BCT could redefine digital trust paradigms, which have traditionally relied on central authorities and intermediaries (Gordon et al., 2021). BCT's decentralized architecture allows algorithms, not central entities, to establish trust. This calls for scholars to reconsider existing theories of digital trust, extending the concept beyond institutional and interpersonal interactions to include technological architectures.

Managerial implications. This proposition identifies an immediate opportunity for organizations to adopt BCT to enhance trust and security in digital platforms. Amid growing data breaches and privacy issues (Marthews & Tucker, 2023), BCT provides a competitive advantage through its immutable and transparent features. It helps build long-term and addresses data integrity and user consent issues in privacy-sensitive sectors. Therefore, managers gain a tool for improving brand reputation and stakeholder value in the digital realm.

*Proposition 5: Unexplored opportunities in BCT-enabled advertising require empirical validation.*

Theoretical implications. Proposition 5 calls for scholarly investigation into the emerging intersection of BCT and advertising. Unlike traditional, centralized advertising models (Gusic & Stallone, 2020), BCT presents a paradigm shift towards decentralization, transparency, and secure record-keeping. This demands a reevaluation and possible expansion of existing theoretical frameworks to include BCT's unique attributes (Tan & Saraniemi, 2022), specifically in terms of user and creator incentives.

Managerial implications. The proposition highlights an underexplored frontier for business innovation. BCT promises businesses greater transparency, reduced fraud, direct consumer interaction, and cost-efficiency. Faced with industry-wide issues such as ad fraud, managers have a window of opportunity to lead in BCT-based advertising innovations. Such endeavors could optimize ad budgets and strengthen trust among consumers and partners. Thus, the proposition advocates for managerial investment in BCT technologies to position firms at the forefront of advertising innovation.

*Proposition 6: Data privacy concerns will outweigh data utility benefits.*

Theoretical implications. This proposition postulates that future societal norms will tip the scale in favor of data privacy, compelling a reevaluation and likely stricter interpretation of existing frameworks such as the GDPR, CCPA, or their global counterparts. This shift has crucial theoretical implications. Firstly, it necessitates the rethinking of utilitarian frameworks that have often been applied to justify data collection and analysis in service of broader societal goals, such as healthcare, public safety, or economic growth (Nissenbaum, 2017). Secondly, it calls for a revisitation of the privacy paradox—the discrepancy between consumers' expressed concerns about privacy and their actual behavior (Acquisti et al., 2020). If privacy concerns outweigh utility, it would mark a major shift in consumer attitudes, potentially resolving this paradox. Lastly, predicted stricter laws impact legal theory, urging a re-examination of how societal norms might influence international law.

Managerial implications. For managers, this proposition is a timely warning and a call for proactive change. It indicates the end of laissez-faire data practices, foreshadowing stricter oversight and regulation. Thus, firms that anticipate and adapt to this trend will be better positioned to maintain consumer trust and legal compliance. For instance, managers should consider adopting privacy-by-design principles that prioritize data minimization and enhanced security measures in the development and deployment of new systems or services (Kaya & Stallone, 2022). Stricter laws could demand more transparent data governance, urging firms to review collection practices and consumer consent. Companies could invest in R&D for high-utility, low-privacy-risk solutions like differential privacy.

*Proposition 7: BCT and Artificial Intelligence will converge in enabling Universal Basic Income settings.*

Theoretical implications. The seventh proposition focuses on the expected synergy between BCT and Artificial Intelligence (AI) in the creation and management of Universal Basic Income (UBI) systems. This emerging synergy presents a fertile area for research across interdisciplinary domains such as economics, public policy, information systems, and cryptography. By examining Altman's Worldcoin as a case study, we can see a vivid demonstration of how biometric data, AI algorithms, and blockchain can come together to create a fair and transparent distribution of resources (Nieva, 2023; Wilser, 2023). AI-driven BCT systems pose fresh challenges to longstanding questions about governance, privacy, and equity. Can BCT's transparent ledger and AI's predictive capabilities usher in a new era of trust and efficiency in public wealth distribution?

Managerial implications. For leaders, this proposition unveils a frontier merging tech innovation with social impact. Adopting BCT and AI technologies in harmony could significantly lower the administrative burdens and costs traditionally associated with UBI schemes, thereby making them more feasible and appealing for governments or large institutions. For instance, Worldcoin's iris scans innovate fraud prevention but raise ethical concerns for management (Nieva, 2023; Wilser, 2023). Yet, merging BCT and AI presents challenges like security risks, ethical dilemmas, and the need for wide social acceptance. Firms venturing into this space should adopt a comprehensive risk management strategy, encompassing technological hurdles and ethical and societal considerations. As BCT and AI become cornerstones of welfare programs like UBI, early adopters gain both a first-mover advantage and an opportunity to shape social equity.

*Proposition 8: Consumer skepticism towards digital advertising will intensify.*

Theoretical implications. This proposition explores shifting consumer attitudes toward digital advertising, emphasizing the need for transparent, consumer-centric models. This can be understood within the broader frameworks of Information Asymmetry (Akerlof, 1970) and Trust Theory (Mayer et al., 1995). Traditional models of advertising have often relied on a 'push' strategy, where consumers are bombarded with targeted promotional messages. Consumer skepticism, fueled by concerns about data privacy and ad intrusiveness, has eroded this model's effectiveness. Additionally, the rise of transparent, consumer-centric models brings forth a new dimension of Co-Creation (Prahalad & Ramaswamy, 2004), where the consumers are not just passive recipients but active contributors in the advertising process. The impact of this democratization on ad effectiveness and consumer trust offers rich avenues for future research.

Managerial implications. For practitioners, this proposition suggests a significant reallocation of advertising budgets and campaign strategies. In a market crowded with noise, authenticity and relevance can serve as differentiators. Consumer skepticism can be tackled through Opt-in models, where consumers voluntarily engage with ads, can also mitigate skepticism. This not only increases engagement but can significantly boost conversion rates, offering better ROI on advertising spends. Brands should leverage social proof like user content, reviews, and influencer partnerships for authenticity. Moreover, firms must educate consumers on data usage and protection. Transparency tools should be developed to allow consumers to see and control how their data affects the ads they see. This proactive approach adheres to increasingly strict data privacy regulations and can also serve as a brand differentiator in a skeptical market. This shift necessitates new organizational skills, such as data ethics and transparency management, for future advertising teams.



*Proposition 9: The integration of ethical algorithms in digital advertising will become a societal imperative, reducing algorithmic bias and fostering inclusivity.*

Theoretical implications. The proposition holds relevance in multiple disciplines, especially in Science and Technology Studies, where it builds upon existing discussions about algorithms shaping societal norms. It advocates for ethical algorithms with measurable societal impacts, such as reducing hate speech and discrimination (Stark et al., 2020). Moving from interdisciplinary concerns, the proposition emphasizes the need to embed ethical norms into computational design. It makes a compelling argument for the necessity of incorporating ethical standards into the very algorithms that govern digital spaces. Adding yet another dimension, the proposition challenges the traditional utilitarian approach to algorithmic design, which often relegates human users to mere data points (Stark et al., 2020). Instead, it champions a nuanced understanding of utility, one that prioritizes societal welfare, human dignity, and inclusivity over simple efficiency or profit maximization.

*Managerial implications.* The proposition calls for a recalibration of how success is measured, pushing for the inclusion of ethical considerations alongside traditional metrics like efficiency. In doing so, it opens the door to developing new industry standards that place equal emphasis on ethical and economic performance (Magin & Stark, 2020; Montalbano, 2021). This could be facilitated through rigorous auditing mechanisms, turning ethics from a vague ideal into quantifiable metrics. Additionally, the proactive adoption of ethical algorithms offers companies a strategic advantage, influencing consumer behavior and enhancing shareholder value. Lastly, early adopters are not just better prepared for future regulations but also become active contributors in shaping public policy. This underscores the proposition's argument that organizational ethics in algorithmic design can significantly impact broader societal structures.