SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANIZATION AND MANAGEMENT SERIES NO. 240

DIGITAL SOCIAL RESPONSIBILITY AND THE ISSUE OF THE SEMANTIC CONCEPT OF TRUTH

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Purpose: The aim of the article is to present the meaning and function of truth understood in its semantic version for digital social responsibility. Understanding the concept of truth in the digital age seems to raise many interpretive problems. The author believes that the semantic concept of truth formulated by the Polish logician Alfred Tarski may prove helpful.
Design/methodology/approach: The article analyzes selected literature on both the understanding of the concept truth formulated on the basis of Alfred Tarski's semantic concept of truth and the possibility of its application to the digital world. Philosophical analyses of the semantic concept of truth contained in the article have been kept to a minimum and are only intended to explicate the proper understanding of this concept.
Findings: It is important to remember that a computer system operates on binary data and formal models, meaning a certain approximation of the real world. This approximation is the result of a compromise between software developers and their clients. The operation of any IT system is therefore tied to a certain agreement—an agreement to limit the image of the environment in which the IT system is to function to its most important elements. Simplifying a complex reality is necessary for its modeling. The task of an IT system is to process data.
Research limitations/implications: The article refers to a limited number of studies. The very idea of the semantic concept of truth is discussed to the extent necessary to understand the issues of algorithmic truth.
Originality/value: The article is an attempt to capture the meaning and function of truth understood on the basis of its semantic theory in the concept of digital social responsibility. Truth is an essential element of this concept.
Keywords: digital social responsibility, semantic concept of truth, Alfred Tarski, logic.
Category of the paper: Conceptual paper.

1. Introduction

This paper explores the intricate relationship between corporate digital responsibility (CDR) and the philosophical understanding of truth, particularly in an era saturated with information, misinformation, and disinformation (Søe, 2019; Rascão, 2024). The advent of

digital technologies has fundamentally altered how knowledge is produced, validated, and disseminated, introducing novel epistemological challenges such as algorithmic bias and the proliferation of intentionally deceptive content. This requires a re-evaluation of corporate obligations concerning the veracity of information circulated through their platforms and services (Lamy, 2022). Specifically, the pervasive nature of digital platforms has given rise to the concept of "algorithmic truth", where artificial intelligence systems increasingly mediate public knowledge, thereby reconfiguring the epistemic conditions under which truth is both generated and authenticated (Shin, 2025).

This paradigm shift transforms algorithmic verification into an emergent epistemic architecture, where truth is constructed through data pipelines and optimization protocols rather than traditional intersubjective deliberation or institutional scrutiny. This computational epistemology contrasts sharply with classical frameworks, where truth was dialogically constituted through human reasoning and social negotiation, raising concerns about the potential displacement of human agency in validating information (Shin, 2025). The profound implications of this shift extend to corporate responsibility, as digital entities become de facto arbiters of truth, often without robust mechanisms for accountability or transparency.

Consequently, a critical examination of digital corporate responsibility must address how these entities manage the epistemological challenges inherent in their operations, particularly concerning the intentional or unintentional distortion of truth (Shin, 2025). This re-evaluation must consider the "Floridian dilemma", which posits that semantic information, traditionally considered inherently truthful, may inadvertently encompass true misinformation and disinformation while excluding false misinformation and disinformation (Søe, 2019).

Outlined above complex landscape compels a deeper inquiry into the ethical frameworks guiding digital corporations, particularly as their AI technologies increasingly shape perceptions of reality and exert influence over human behavior (Swindell et al., 2024). This requires a comprehensive framework for digital corporate responsibility that transcends mere legal compliance, embracing an ethical obligation to foster an information ecosystem conducive to informed public discourse and genuine understanding (Elliott et al., 2021). This framework must acknowledge that AI algorithms, while designed for efficiency, can operate as "black boxes", making their internal workings opaque and thus challenging accountability for the information they disseminate.

The opacity of these AI systems, which synthesize disparate and often conflicting claims into confident truth-statements, necessitates a deeper examination of how corporations can be held responsible for the "operationalization of truth" within their platforms (Munn et al., 2023) (Elliott et al., 2021). This raises critical questions regarding the epistemic authority of AI systems and the potential for these systems to manipulate users who uncritically accept AI-generated outputs as objective facts.

Indeed, the uncritical acceptance of AI-generated content can lead to significant societal ramifications, as these systems, despite their sophisticated outputs, are prone to "hallucinating" false information, thereby undermining the very notion of "ground truth" (Jaton, 2021).

The semantic concept of truth, formulated by the eminent Polish logician Alfred Tarski, relativizes the concept of truth to language. However, this refers not to natural languages, but to formalized ones. They are characterized by unambiguity, meaning that each sentence has exactly one meaning. This article attempts to apply this strict definition of truth to the analysis of digital corporate responsibility. There appears to be a significant research gap in this area, which this article aims to at least partially fill. The author poses the following research question: can the semantic concept of truth be useful in the analysis of truth in the digital era and what is its relationship with Digital Social Responsibility?

2. The Concept of Digital Corporate Responsibility

CDR emerged as an extension of traditional Corporate Social Responsibility (CSR), adapting its foundational principles to the unique challenges and opportunities presented by the digital age (Radavoi, 2025; Orbik, Zozuľaková, 2019). This evolution reflects the increasing digitalization of business operations and the pervasive integration of digital technologies into daily life, necessitating a re-evaluation of corporate obligations in areas such as data privacy, algorithmic fairness, and digital inclusion (Kunz, Wirtz, 2023; Trier et al., 2023).

This expanded scope considers the ethical implications of AI, blockchain, and other emergent technologies, pushing for responsible innovation and deployment that respects human rights and societal well-being (Lipare, 2023). This includes navigating the complexities of data governance, cybersecurity, and the ethical deployment of artificial intelligence to mitigate digital harms and promote an equitable digital society (Elliott et al., 2021). Central to this effort is the transparency of AI decision-making, especially as these systems increasingly influence critical domains such as financial services and healthcare, where opaque algorithms can have profound societal impacts (Olatoye et al., 2024; Elliott et al., 2021). Indeed, the "black box" nature of many machine learning algorithms poses significant challenges to accountability and fairness, demanding robust frameworks to ensure their ethical deployment and prevent the reinforcement of existing social injustices.

Businesses, therefore, bear a significant responsibility to address these concerns by adopting transparent practices and mitigating algorithmic bias to ensure AI applications uphold fairness principles (Olatoye et al., 2024; Dangar, 2025). This proactive approach necessitates a comprehensive understanding of AI's societal implications, moving beyond mere compliance to fostering a culture of ethical innovation and responsible technology stewardship (Olatoye et al., 2024). Furthermore, organizations must integrate digital ethics proactively into their

corporate social responsibility policies to build long-term sustainability and enhance stakeholder confidence (Dangar, 2025). This integration often involves establishing clear ethical guidelines for digital transformation, embracing open data principles, and actively promoting digital accessibility to ensure inclusive technological advancements. The increasing prevalence of AI and digital technologies has led to a critical examination of corporate responsibilities in preventing unintended societal consequences, such as algorithmic bias and privacy infringements (Kunz, Wirtz, 2023; Fioravante, 2024).

These phenomena require a shift towards "responsible AI" practices and robust corporate governance to manage the ethical implications of AI deployment effectively within organizational workflows (Olatoye et al., 2024). This includes rigorous impact assessments of AI systems, transparent communication about data usage, and the establishment of internal oversight mechanisms to ensure accountability in the development and application of artificial intelligence (Dangar, 2025; Kunz, Wirtz, 2023). This shift towards greater accountability in AI development is further driven by increasing regulatory activity, exemplified by initiatives like the European Union's Artificial Intelligence Act and President Biden's Executive Order on AI, which place a spotlight on the crucial role of corporations in minimizing AI risks and negative impacts (Radavoi, 2025). This highlights the growing imperative for corporations to proactively integrate ethical considerations into their AI strategies, moving beyond mere compliance to foster a culture of responsible innovation and deployment (Olatoye et al., 2024).

This involves embedding ethical AI principles within core business strategies, ensuring that technological advancements align with broader CSR objectives and societal well-being (Dangar, 2025). However, despite the growing regulatory landscape, a clear and unified message from the business sector against AI misuse remains elusive, often leading to corporations exploiting nascent governance frameworks (Radavoi, 2025). The lack of unified corporate opposition enables practices where human decision-making is outsourced to AI, thereby allowing companies to evade accountability for potential wrongdoings (Radavoi, 2025). The evasion of responsibility underscores the urgent need for a more robust ethical framework for DCR, one that explicitly addresses the challenges posed by AI in shaping public perception and understanding of truth.

The imperative to integrate ethical considerations into AI development is heightened by the potential for AI to manipulate information and perpetuate misinformation, which directly impacts the semantic concept of truth and societal stability (Dangar, 2025). Therefore, developing a coherent DCR framework for AI requires not only technical safeguards but also a philosophical grounding in how AI influences and potentially distorts shared understandings of reality (Radavoi, 2025). This framework must delineate specific corporate obligations regarding data provenance, algorithmic transparency, and the prevention of deceptive AI-generated content, thereby safeguarding the integrity of information in the digital sphere. This includes ensuring that AI systems are designed to foster fact-based communication and

mitigate the spread of misinformation, thereby upholding public trust and promoting an informed citizenry (Dangar, 2025).

Moreover, addressing the issue of semantic truth in the age of AI requires corporations to implement robust data quality assessments to curtail inherent biases and improve the efficiency and ethical integrity of their AI tools and applications (Dubey, Alam, 2024). This proactive approach is crucial, given that while scholars propose various ethical AI solutions, corporations often fail to adopt them due to the sheer volume and diversity of these proposals, leading to contradictions and uncertainty (Radavoi, 2025). This underscores the necessity for a more streamlined and universally accepted set of ethical guidelines that can be practically integrated into corporate AI development lifecycles (Weber-Lewerenz, 2021). This challenge is further complicated by the rapid pace of AI innovation, which often outstrips the development of regulatory and ethical oversight mechanisms (Tóth, Blut, 2024). Consequently, a critical gap emerges between technological advancements and the frameworks designed to govern them, necessitating adaptive and agile approaches to digital corporate responsibility. This dynamic environment demands continuous re-evaluation of ethical norms and corporate practices to ensure AI deployment remains aligned with societal values and avoids "digital ethics washing", where superficial commitments to ethics mask actual conduct (Schultz et al., 2024).

3. The Foundations of Tarski's Semantic Concept of Truth

Alfred Tarski's foundational work on the semantic concept of truth provides a framework for defining truth by articulating the conditions under which a sentence in a given language can be considered true (Tarski, 1944). This involves establishing a meta-language to define truth conditions for an object language, thereby avoiding semantic paradoxes inherent in self-referential statements within natural languages (Søe, 2016). His theory posits that a sentence is true if and only if what it states is the case, effectively linking linguistic expressions to objective reality through a rigorously defined correspondence (Tarski, 1944). Tarski’s conception aligns with the classical Aristotelian view, asserting that "to say of what is that it is, or of what is not that it is not, is true" (Aristotle, Metaphysics G.7, 1011b26-27).

Tarski’s approach, while primarily focused on formal languages, offers a robust framework for analyzing the truth-functionality of sentences, wherein the truth of compound sentences is strictly contingent on the truth of their constituent parts (Runehov, Taliaferro, 2013). The term semantic refers to the meaning of expressions (Kamp, 2013). Specifically, Tarski's extensional definition of truth dictates that all instances falling under a particular concept must satisfy the defined truth conditions (Søe, 2016). This rigorous formalization extends to understanding truth within complex systems, including the outputs of digital systems, by treating their statements

as elements within a defined object language whose veracity can be assessed against a corresponding meta-language.

However, applying Tarski's framework to digital corporate responsibility introduces significant complexities, as the "reality" against which digital pronouncements are measured is often dynamic, multifaceted, and shaped by algorithmic processes. This complexity arises because the "truth outputs" generated by algorithms often represent probabilistic classifications or embedded heuristics rather than definitive statements, diverging from classical epistemologies where truth is dialogically constituted (Shin, 2025). Consequently, the semantic evaluation of truth in digital contexts requires an adaptation of Tarski's correspondence theory to account for the computational nature of information generation and dissemination, where truth is often a function of data provenance, algorithmic transparency, and probabilistic inference rather than a direct correspondence to a static external reality (Runehov, Taliaferro, 2013; Sher, 2022). It should be remembered that Tarski's semantic conception simply indicates a method for defining the concept of a true sentence in relation to a large class of languages with a strictly defined syntax (Woleński, 2019). Therefore, in my opinion, it can also be useful in analyzing the concept of truth in AI-based systems.

This task demands a re-evaluation of traditional truth theories, moving from human-centered verification to computational epistemology, where AI models interpret truth probabilistically (Shin, 2025). The probabilistic interpretation often conceptualizes truth around "ground truth", which serves as a fundamental benchmark for training and testing data, representing an unmediated set of facts for model evaluation (Munn et al., 2023). However, the practical application of "ground truth" in complex, real-world digital environments frequently encounters challenges due to data biases, inherent ambiguities, and the dynamic evolution of information, complicating its role as an infallible arbiter of veracity (Munn et al., 2023). This re-evaluation implies that the standards of truth themselves have a history, with probabilistic approaches being a comparatively recent development in epistemology. The probabilistic methodologies, emerging in the eighteenth century alongside efforts to quantify chance, assign probabilities to "facts", thereby rendering truth conditional and relative.

Such a departure from absolute truth to a more nuanced, context-dependent understanding poses significant challenges for DCR, particularly when algorithmic systems operate with inherent opacities and their outputs are deemed factual without transparent justification (Munn et al., 2023). This change fundamentally alters the nature of epistemological inquiry, transitioning from human deliberation and contextual understanding to statistical inference and pattern matching as the primary arbiters of truth.

The concept of truth has been one of the key topics of philosophy since its beginning. This concept is important not only in philosophy or its part, epistemology, but is also important for scientific knowledge as such. The concept of truth is difficult to define (David, 2004). The expressions "true" and "false" are used in different contexts and with different meanings (Walker, 2017). Only some of their uses are philosophical in nature. The basic philosophical

meaning of these concepts refers to sentences or propositions. By propositions one means propositions, i.e., sentences endowed with a specific meaning, and by propositions one understands the meanings of such sentences. In epistemology, truth is treated as an authentic property of certain statements or propositions. The task of a philosophical theory of truth is to answer the question of what this property consists of. Various philosophical theories offer different answers to this question. The dominant theory, both in the history of philosophy and among contemporary philosophical trends, is the so-called correspondence or classical theory. Briefly speaking, it sees the nature of truth in correspondence with reality. The semantic concept of truth developed by Tarski is a version of the classical concept, mentioned above, formulated in antiquity by Aristotle. Figure 1 gives a general overview of different theories of truth.

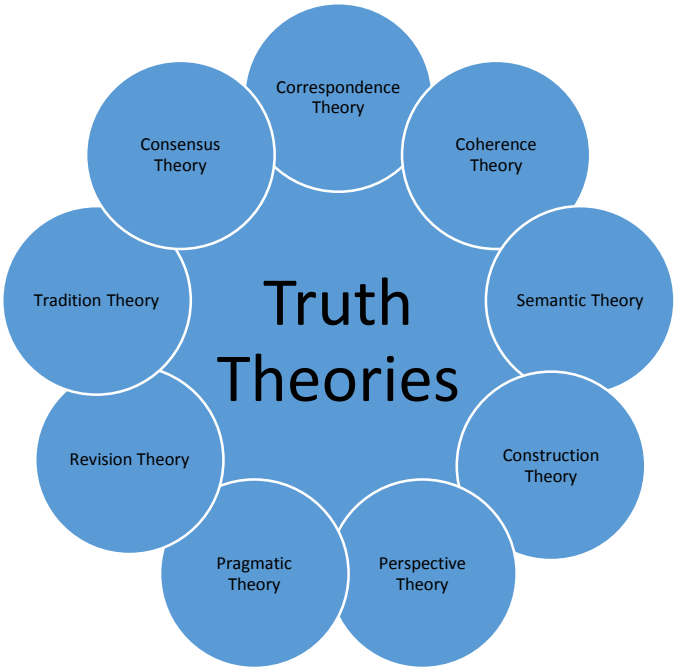

Figure 1. Theories of truth.
Source: own work.

This new epistemic logic prioritizes predictive performance over semantic meaning, leading to a reconceptualization of how veracity is established within digital systems (Shin, 2025). The transformation from traditional epistemology to computational epistemology requires a critical examination of how AI-driven systems, such as large language models, synthesize and present truth claims, often blending disparate understandings of veracity into seemingly coherent statements. This blending introduces complexities where AI outputs may appear factually coherent but lack genuine understanding or justification, challenging the traditional definition of knowledge as justified true belief (Mugleston et al., 2025). Indeed, these models, particularly generative AI, operate on statistical likelihoods of text sequences rather than an inherent understanding of meaning or factual accuracy, further complicating the assessment of truth in their outputs (Jaton, 2023). In other words, these systems operate at the syntactic level.

The probabilistic generation of content, often devoid of genuine comprehension, can lead to "hallucinations" or "botshit"—coherent-sounding but inaccurate information—thereby creating significant epistemic risks for users (Hannigan et al., 2024). These phenomena highlight the difficulty for users to calibrate their trust in AI outputs, given the inherent opacity of their data and algorithms, which often obscures the probabilistic nature of their truth claims (Heersmink et al., 2024). Furthermore, the rise of "infrastructural epistemology" demonstrates how AI systems reconfigure epistemic authority, shifting from socially deliberated truth to algorithmically determined fact labels and misinformation warnings. This transformation requires a critical examination of how users perceive and interact with AI-generated information, particularly given the observed tendency for individuals to anthropomorphize these systems and develop a sense of trust in their outputs.

4. Methods

This section outlines the research design, data collection methods, and analytical approaches employed to investigate the complex interplay between DCR and the semantic concept of truth in the age of artificial intelligence. Specifically, this study employs a mixed-methods approach, combining a systematic literature review with a qualitative content analysis of corporate responsibility reports and policy documents, to provide a comprehensive understanding of current practices and identify areas for improvement.

The systematic literature review component meticulously synthesizes existing scholarship on digital ethics, Corporate Digital Responsibility, and the philosophical underpinnings of truth in digital environments, establishing a theoretical foundation for the subsequent empirical analysis. This review also highlights the shift in corporate social responsibility to include digital ethics, addressing issues such as data privacy, artificial intelligence, and disinformation within the digital economy (Dangar, 2025; Kunz, Wirtz, 2023). The qualitative content analysis further scrutinizes how corporations articulate and operationalize their commitments to digital responsibility, specifically examining how they address data privacy, algorithmic transparency, and the prevention of misinformation in their reporting. By analyzing these documents, the research aims to identify discrepancies between stated ethical principles and actual corporate conduct, particularly concerning the potential for "ethicswashing" (Schultz et al., 2024). This dual approach allows for a robust examination of both theoretical frameworks and practical applications, offering insights into the challenges and opportunities for integrating ethical considerations into digital corporate strategies (Merbecks, 2023; Hussain, 2025).

Furthermore, the methodological framework incorporates a detailed examination of prompt engineering techniques like in-context and chain-of-thought prompting to evaluate their role in enhancing AI output quality and adherence to Responsible AI principles, thereby ensuring

fairness and accountability in AI applications (Hautamäki et al., 2024). This holistic methodology ensures a comprehensive investigation into how corporations navigate the complexities of digital ethics, aiming to bridge the gap between theoretical frameworks and practical implementation in the evolving landscape of AI-driven digital environments. By integrating these diverse analytical lenses, the study aims to generate actionable insights for policymakers and corporate leaders seeking to foster a more responsible and truth-aligned digital ecosystem.

Comprehensive analysis provides a foundation for developing more rigorous frameworks for digital corporate responsibility that explicitly address the semantic challenges posed by advanced AI systems (Schultz et al., 2024). The methodological rigor will thus allow for the identification of best practices and areas requiring further development in corporate strategies for maintaining information integrity (Olatoye et al., 2024). This includes a critical examination of how AI-driven tools, while offering significant advancements in data analysis and content generation, also introduce new complexities regarding data privacy and the potential for creating detailed individual profiles (Kunz, Wirtz, 2023). Such practices necessitate a deeper ethical inquiry into data aggregation and its implications for individual autonomy and societal trust, particularly as these profiles can be leveraged for targeted communication, potentially influencing perceptions of truth.

Moreover, the ethical dilemma is further complicated by the increasing reliance on automation and artificial intelligence in decision-making processes, which can introduce biases that disproportionately affect marginalized communities and challenge principles of fairness and justice (Dangar, 2025). Therefore, navigating these ethical challenges requires businesses to integrate robust ethical values into their digital operations, addressing dilemmas arising from digital transformation. This involves adopting open data policies and promoting algorithmic transparency to foster a more equitable digital landscape (Dangar, 2025). The study also considers the challenges and opportunities for corporate social responsibility in the digital age, particularly focusing on data security, privacy, and the spread of misinformation. This systematic approach will also shed light on how ethical governance can promote responsible and sustainable digital transformation within corporations.

The deep dive into Corporate Digital Responsibility underscores the necessity for companies to not only understand but also actively mitigate the ethical implications of advanced AI and interactive marketing (Kunz, Wirtz, 2023). This includes a critical examination of how AI-driven tools, while offering significant advancements in data analysis and content generation, also introduce new complexities regarding data privacy and the potential for creating detailed individual profiles (Saura et al., 2024; Kunz, Wirtz, 2023). The ethical implications intensify when considering the automation strategies employed for massive data collection, which inherently link to the profitability of AI-based digital marketing actions. Such practices require a deeper ethical inquiry into data aggregation and its implications for

individual autonomy and societal trust, particularly as these profiles can be leveraged for targeted communication, potentially influencing perceptions of truth (Sarioguz, Miser, 2024).

5. Literature review

This section explores the confluence of the semantic concept of truth and DCR, examining how the digital economy necessitates a re-evaluation of fundamental assumptions regarding corporate accountability and the nature of truth in a technologically mediated environment (Lankoski, Smith, 2021; Ogbujah et al., 2022). The pervasive influence of digital technologies has fundamentally reshaped corporate social responsibility, integrating concerns such as data privacy, algorithmic fairness, and the ethical implications of artificial intelligence into its purview (Hwang, 2024; Dangar, 2025). This expansion has led to the emergence of "corporate digital responsibility", a holistic approach addressing both the opportunities and risks presented by digitalization to ensure ethical behavior and contribute to human and social value creation (Carl, Hinz, 2024). This requires a critical examination of how truth is constructed and disseminated within digital ecosystems, particularly as companies increasingly leverage digital tools that can influence perception and reality.

This situation underscores a paradigm shift where truth becomes algorithmically determined rather than socially deliberated, leading users to exhibit automation bias by deferring to AI outputs even when explanatory transparency is lacking (Shin, 2025). This phenomenon necessitates a comprehensive review of the ethical implications of AI deployment in business, emphasizing responsible AI practices and corporate accountability (Olatoye et al., 2024). It is also important to remember the impact of the use of various AI-based technologies and computational methods on various contexts of human social life (Suchacka, 2019).

The rapid advancement of digital technology, while offering increased productivity and global interconnectedness, has also introduced significant ethical challenges, including the spread of misinformation (Dangar, 2025). This phenomenon introduces a "Floridian dilemma", where semantic information, traditionally considered inherently truthful, may inadvertently encompass or even actively propagate certain forms of misinformation and disinformation, thereby blurring the lines between fact and falsehood in the digital realm (Søe, 2019). Consequently, corporate digital responsibility must encompass strategies for mitigating the dissemination of such "true misinformation" and "true disinformation", given that these can arise even from well-formed, meaningful data (Van der Merwe, Al Achkar, 2022). This necessitates a robust framework for discerning digital truth from non-truth, especially given the simultaneous circulation of both within digital media, often without clear distinctions (Rascão, 2024).

The challenges extend beyond merely identifying falsehoods, as the digital environment can also render certain truths "useless" or obscure them amidst an overwhelming volume of information (Rascão, 2024). Corporate digital responsibility, therefore, must develop sophisticated mechanisms for content authentication and provenance tracking to ensure the veracity of information disseminated through their platforms (Stahl, 2024; Pappas et al., 2023). Furthermore, the ethical implications of AI, such as biased algorithms trained on skewed datasets, underscore the urgent need for businesses to prioritize accountability, transparency, and equity in their digital practices (Wirtz et al., 2022). This includes establishing ethical AI frameworks and governance structures to enhance corporate integrity and mitigate inherent biases, especially given the expansive scope of rapidly advancing technologies and their omnipresence (Tóth, Blut, 2024; Kunz, Wirtz, 2023).

The very concept of a "digital truth" is emerging as a critical construct, demanding a universal definition not only for scientific research but also for guiding human conduct and decision-making in the digital age, fostering harmony, peace, and socio-economic well-being. This universal digital truth, therefore, is posited as a conscious human action rooted in decision-making that respects human dignity (Rascão, 2024). his concept underscores the critical need for corporations to integrate ethical considerations into every aspect of their digital operations, moving beyond mere compliance to proactive engagement in shaping a responsible digital future. This involves a commitment to transparency in AI algorithms and decision-making processes, ensuring that technological advancements align with ethical standards and societal values to build trust among stakeholders (Olatoye et al., 2024). This focus on transparency and ethical alignment is particularly vital in mitigating the potential for AI-generated content to create a false sense of authenticity and authority, which can (Kim, Kong, 2023). Furthermore, the integration of AI into business processes necessitates a thorough understanding of responsible AI practices to ensure that technological advancements align with ethical standards and societal values (De Blasio, Selva, 2021).

Organizations must, therefore, prioritize the implementation of robust ethical AI frameworks, encompassing principles of fairness, accountability, and transparency, to navigate the complexities of AI deployment responsibly and sustain stakeholder trust. This proactive approach is essential for preventing the erosion of public trust that can result from opaque or biased algorithmic decision-making (Olatoye et al., 2024). Moreover, responsible AI practices require continuous evaluation and adaptation, as the evolving nature of AI systems can introduce unforeseen ethical dilemmas that demand proactive mitigation strategies.

Moreover, the ethical imperative for corporations extends to safeguarding data privacy and security, advocating for responsible data handling practices in an era where vast amounts of personal information are routinely collected and processed. This includes establishing clear standards for data governance, conducting regular external audits, and fostering an equitable power dynamic within digital service ecosystems to protect customer privacy and mitigate

potential harms. his commitment necessitates adopting frameworks that prioritize data dignity, treating user data as an extension of personal identity requiring meticulous ethical handling throughout its lifecycle (Saura et al., 2024).

A separate issue related to the semantic concept of truth is its significance for logic. However, this issue is not discussed in this article because it concerns a topic that is not directly related to the subject under discussion. In the most general sense the semantic concept of truth in logic, largely formalized by Alfred Tarski, provides a rigorous framework for defining what it means for a statement to be true within a given formal language. Tarski's seminal work in the 1930s laid the groundwork for the modern logico-mathematical Theory of Models, enabling the association of formal signs with their corresponding objects in an underlying structure (Longo, 2019; Tarski, 1944). This approach fundamentally treats truth as a semantic property, focusing on the relationship between linguistic expressions and the objects or states of affairs they denote.

This paper explores the intricate relationship between the philosophical concept of truth, particularly in its semantic dimension, and the emergent field of digital social responsibility, critically examining how digital environments necessitate a re-evaluation of both concepts. The pervasive influence of digital technologies on societal moral systems necessitates a systematic investigation into how these platforms transform fundamental human values, such as truth and trust (Danaher, Sætra, 2022).

6. Results and Discussion

This research offers a significant theoretical contribution by bridging the hitherto disconnected fields of DCR and the semantic concept of truth, thereby advancing our understanding of ethical considerations in the digital sphere (Carl, Hinz, 2024; Herden et al., 2021). Specifically, it introduces a novel framework that integrates principles of semantic accuracy into the operationalization of DCR, addressing critical issues such as algorithmic bias and misinformation prevalent in digital communication (Dangar, 2025; Rascão, 2024). Furthermore, this interdisciplinary approach illuminates how digital technologies, particularly AI, reshape corporate responsibilities beyond traditional CSR frameworks, demanding a re-evaluation of how truth is constructed and maintained in digital interactions (Schultz et al., 2024). This becomes especially important in the post-truth era, when narratives often take precedence over truth, which is blurred and distorted (Surahman, 2024). In this situation, it becomes necessary to develop clear criteria for assessing the veracity of digital information, which in turn presupposes an understanding of truthfulness.

It also highlights the imperative for companies to proactively develop and implement robust internal mechanisms and external auditing procedures to ensure the veracity of digital information, thereby fostering greater transparency and accountability in their digital ecosystems (Dangar, 2025). Moreover, this framework extends beyond mere compliance, proposing that genuine commitment to semantic truth in digital contexts can enhance stakeholder trust and cultivate long-term reputational advantages. By articulating the intricate relationship between data ethics, algorithmic transparency, and the fidelity of digital communication, this work offers a foundational understanding for future research into responsible AI deployment and ethical data governance.

It additionally posits that the evolving landscape of digital communication necessitates a redefinition of CSR to incorporate digital ethics, moving beyond traditional philanthropic and environmental concerns to address the profound impact of technology on societal perceptions of reality (Kargbo et al., 2025). It requires a strategic shift towards embedding ethical considerations at every stage of digital product development and service delivery, ensuring that technological advancements align with broader societal values (Kunz, Wirtz, 2023). This redefinition is crucial as AI-driven systems increasingly shape information dissemination and public discourse, thereby influencing epistemic production and the very notion of truth itself. The inherent complexity of generative AI, for instance, challenges established notions of content authenticity and requires novel approaches to verifying information (Kim, Kong, 2023). It represents a paradigmatic change where truth becomes algorithmically determined rather than socially deliberated, leading to an infrastructural epistemology where truth is computed, not argued.

The above mentioned conceptualization underscores the urgency for corporations to engage with the ethical implications of AI, recognizing that the systems they deploy actively shape public understanding and the validation of knowledge (Shin, 2025). Such a programmatic approach to truth, where algorithms determine what is considered valid, demands a re-evaluation of accountability frameworks, particularly concerning the ethical implications of data pipelines and optimization protocols. This, in turn, highlights the need for a detailed analysis of how architecture and technical infrastructure interact with social relations and cultural norms to produce distinctive forms of truth (Munn et al., 2023). It requires a robust framework for algorithmic transparency and accountability, ensuring that the methodologies underlying AI-driven truth claims are open to scrutiny and subject to ethical oversight.

Moreover, integrating artificial intelligence into corporate communication requires a critical analysis of how these systems might perpetuate or mitigate existing biases, thereby influencing the perceived credibility and fairness of information presented to stakeholders (Buhmann, 2023). Therefore, robust structural mechanisms ensuring enforceability, transparency, and redress become essential to counteract potential "ethical whitewashing" and ensure true accountability in AI governance (Ibitoye et al., 2025). This includes developing clear protocols for addressing algorithmic bias and implementing mechanisms that enable stakeholders to

challenge AI-generated outcomes, going beyond technical solutions and supporting systemic epistemic justice (Oguz, 2025). Such approaches are crucial for navigating an evolving landscape in which AI systems not only detect falsehoods but also actively construct particular versions of truth, deeply embedded in their sociotechnical design.

The operationalization of truth within AI systems, particularly large language models, synthesizes often-conflicting claims into smoothly presented truth-statements, highlighting a shift from deliberative knowledge production to probabilistic inference (Munn et al., 2023). Algorithmic determination of truth, derived from training pipelines and heuristic logic, often leads users to exhibit automation bias, deferring to AI outputs even without explanatory transparency (Shin, 2025). This requires a critical evaluation of how such systems reconfigure epistemic authority, potentially displacing human reasoning with probabilistic automation.

The issues outlined above point to the need to develop a DCR framework that considers not only the factual accuracy of AI-generated content but also the mechanisms underlying its perceived veracity and potential manipulation (Munn et al., 2023). Therefore, understanding the social shaping of AI truth claims, from data acquisition to user interaction, is crucial to developing effective DCR strategies (Munn et al., 2023). To minimize these risks, organizations must adopt a proactive approach by incorporating ethical considerations into the design, development, and implementation phases of AI systems, moving beyond reactive compliance (Zhao et al., 2025). Such proactive approach requires a focus on resolving issues quickly, thereby protecting stakeholders and demonstrating a commitment to responsible AI practices. Figure 2 illustrates the relationship between digital corporate responsibility and the semantic concept of truth.

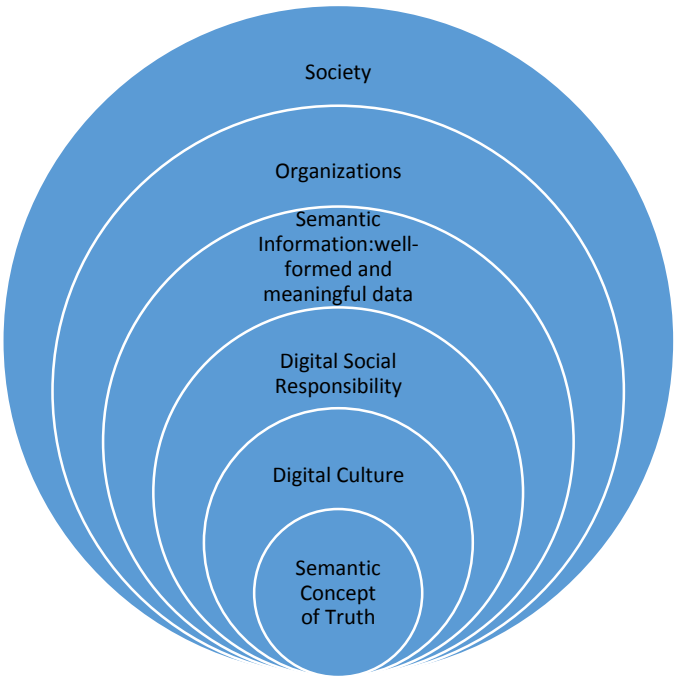

Figure 2. The scope of influence of DSR and the Semantic Concept of Truth.
Source: own work.

The analyses presented above suggest that developing a robust framework for algorithmic transparency and accountability is crucial to mitigating the risks associated with AI-generated content, ensuring users can clearly identify the origin and potential biases of information (Olatoye et al., 2024). Furthermore, future research should focus on developing new epistemic tools and educational initiatives aimed at improving digital literacy, enabling individuals to critically assess the veracity of information encountered in increasingly complex algorithmic environments. Further research is also needed on the long-term psychological and sociological impact of ubiquitous AI-generated content on human cognitive processes and social trust mechanisms.

7. Summary

This article has explored the complex interplay between DCR and the semantic concept of truth in the age of AI. It has emphasized how algorithmic truth, embedded with normative assumptions and data-driven biases, reconfigures epistemic authority and necessitates robust frameworks for transparency and accountability in AI systems (Shin, 2025; Olatoye et al., 2024). Further research is imperative to delineate specific mechanisms by which corporations can ensure the veracity of AI-generated content and foster public trust in automated decision-making processes.

The answer to the research question posed in the Introduction seems positive. The research significantly advances the theoretical understanding of DCR by integrating it with the nuanced philosophical underpinnings of the semantic concept of truth, thereby offering a more robust framework for evaluating corporate conduct in the digital age. It also provides actionable insights for organizations to develop and implement ethical digital strategies that foster transparency and maintain stakeholder trust (Herden et al., 2021).

Furthermore, it highlights the critical need for continuous interdisciplinary research to address the evolving ethical challenges posed by rapid digital transformation and the increasing importance of human-centric approaches in technology (Pappas et al., 2023; Dangar, 2025). The work elucidates the necessity for a paradigm shift in corporate digital ethics, moving beyond mere compliance to embrace a proactive stance on truth preservation and dissemination (Carl, Hinz, 2024). Such a paradigm requires a deeper exploration into the epistemological foundations of digital information and its impact on the collective understanding of reality, urging corporations to prioritize verifiability and authenticity in their digital interactions.

This involves developing sophisticated frameworks for data provenance and integrity, ensuring that information disseminated through digital channels can be traced to its origin and verified for accuracy (Ateeq, Milhem, 2024). Moreover, this framework extends to scrutinizing

algorithmic biases and their potential to distort information, underscoring the imperative for corporations to ensure that their digital tools and platforms uphold semantic truth.

Such a commitment to semantic truth also extends to the ethical development and deployment of AI, where transparency in algorithmic decision-making and accountability for outputs are paramount to maintaining stakeholder trust and adhering to societal values (Olatoye et al., 2024). The integration of AI, IoT, and blockchain technologies presents both opportunities and challenges in this regard, necessitating robust governance structures to ensure these technologies contribute to, rather than detract from, the pursuit of truth and accountability (Florek-Paszkowska, Ujwary-Gil, 2025; Lei et al., 2023). Specifically, the intersection of these technologies demands a re-evaluation of traditional notions of truth verification, moving towards a computational epistemology where truth becomes a probabilistic function rather than a deliberative outcome.

It requires robust ethical guidelines, algorithmic transparency, and continuous bias detection to secure truth in communication during the generative AI era (Kim, Kong, 2023). Implementing this project requires a proactive, ethics-by-design approach for AI development, ensuring that these systems are built with mechanisms to uphold semantic truth and prevent the propagation of misinformation, thereby aligning technological advancements with societal values (Weber-Lewerenz, 2021; Olatoye et al., 2024). The current arms race among trillion-dollar corporations in developing AI technologies further exacerbates the complexity, as their pursuit of increased user engagement through AI-driven platforms risks creating an ecosystem rife with misinformation and conspiracy theories (Swindell et al., 2024). This urgent situation underscores the necessity for comprehensive regulatory frameworks and corporate responsibility initiatives to mitigate the potential for AI to erode the semantic concept of truth within the digital sphere (Kim, Kong, 2023). Therefore, distinguishing truth amid the rapid development of AI technologies requires a bifurcated approach addressing both front-end and back-end AI concerns to enhance transparency and mitigate algorithmic biases.

Swindell et al. (2024) point out that the current arms race among trillion-dollar corporations developing AI technologies further exacerbates this complexity, as their pursuit of increased user engagement through AI-driven platforms risks creating an ecosystem rife with misinformation and conspiracy theories. This situation highlights the need for comprehensive regulatory frameworks and corporate social responsibility initiatives to mitigate the risk that AI could undermine the semantic concept of truth in the digital sphere (Kim, Kong, 2023). Therefore, discerning truth in the face of rapid AI technology development requires a decoupled approach, addressing both front-end and back-end AI issues to increase transparency and mitigate the risks.

Front-end AI strategies focus on making AI-generated content more transparent and explainable, while back-end AI aims to improve the underlying algorithms to reduce inherent biases. Such a dual approach, encompassing both user-facing transparency and internal algorithmic integrity, is crucial for preserving the semantic concept of truth in an increasingly

AI-driven information landscape. This dual approach is essential for preventing the dissemination of disinformation and maintaining public trust in digital communication channels (Kim, Kong, 2023). This robust framework ensures that corporations actively contribute to a more truthful and transparent digital environment, aligning their operational practices with the fundamental principles of semantic truth.

Our analysis revealed that the unchecked proliferation of AI-generated content, particularly from front-end AI, significantly challenges the semantic concept of truth by fostering disinformation and blurring the lines between authentic and manipulated information. This paradigm shift transforms truth into an algorithmically determined outcome, rather than a product of social deliberation, leading users to often accept AI-generated information as objective despite its computational origins.

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