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**Attention Scarcity and Value Competition in the Digital Economy**

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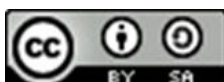
**ABSTRACT**

*The proliferation of digital platforms has transformed human attention into one of the scarcest and most contested economic resources of the twenty-first century. This article examines how attention scarcity structures value competition among firms, platforms, and users in the digital economy, synthesizing theoretical and empirical literature published between 2021 and 2026 on attention markets, platform market power, and value extraction. Using a systematic conceptual literature synthesis, twenty-five peer-reviewed and preprint sources were identified, screened, and integrated into an Attention Scarcity-Value Competition (ASVC) framework connecting the cognitive foundations of attention, the algorithmic mechanisms platforms use to capture it, and the institutional and regulatory responses these mechanisms provoke. The findings indicate that platforms compete not merely for market share but for finite units of user attention, converting sustained engagement into advertising rents, data assets, and social value signals. This competition produces asymmetric value extraction, cognitive lock-in, and mounting regulatory scrutiny under competition and antitrust law. The article's principal contribution is a multi-level framework distinguishing micro (cognitive), meso (platform-strategic), and macro (institutional-regulatory) layers of attention-driven value competition, addressing a persistent gap in literature that has treated these layers in isolation. Implications are discussed for platform governance, digital marketing strategy, and future measurement of attention as an economic currency.*

**Keywords:** attention economy; attention scarcity; digital platforms; value competition; platform regulation

**INTRODUCTION**

Attention has become the defining scarce resource of the digital economy. Herbert Simon's often-cited observation that an abundance of information produces a poverty of attention has, over the past decade, moved from an aphorism about organizational decision-making to the operating logic of an entire industry. Search engines, social media platforms, streaming services, e-commerce marketplaces, and generative artificial intelligence tools now compete openly and explicitly for the same finite quantity of human attention, because attention -- not information -- is the input that converts into advertising revenue, subscription retention, data generation, and ultimately market capitalization. Unlike information, which can be copied and distributed at near-zero marginal cost, attention cannot be duplicated: a single user has only twenty-four hours in a day, and every minute allocated to one platform is a minute withdrawn from every competing claim on that same cognitive budget. This structural scarcity is the foundation of what scholars have termed the attention economy, and it is increasingly recognized as a distinct competitive arena with its own value chains, market failures, and regulatory dilemmas.



The theoretical roots of this discussion span economics, cognitive science, media studies, and law, and recent scholarship has begun to treat attention scarcity not as a metaphor but as a measurable economic condition with its own price mechanisms, rents, and externalities. Vettehen and Schaap (2023) frame the information age itself through an attention-economic lens, arguing that as content abundance grows asymptotically, the marginal value of any additional unit of content falls toward zero while the marginal value of capturing attention rises correspondingly. Bruineberg (2025) pushes this argument further into cognitive science, contending that many popular accounts of the attention economy rest on an impoverished model of attention as a single depletable resource, when in fact human attentional capacity is dynamically allocated, context-sensitive, and shaped by embodied and social cognition. This distinction matters because it determines whether attention scarcity is best modelled as a fixed-supply commodity market, analogous to land or spectrum, or as a more complex adaptive system in which supply itself can be reshaped by platform design. Torre, Perez-Verdugo, and Barandiaran (2024) extend the cognitive-science critique to artificial systems, arguing that the same engagement-optimizing architectures that shape human attention now also structure the attentional dynamics of machine learning systems trained on human-generated data, producing a recursive loop between human and algorithmic attention capture.

Parallel to these cognitive debates, a substantial body of platform-economics literature has documented the mechanisms through which digital firms convert captured attention into durable competitive advantage and monetizable value. Markovic, Popovic, and Andjelkovic (2024) describe how platforms deploy algorithmically optimized content sequencing, personalization, and social validation cues to sustain engagement well beyond what users would rationally choose in the absence of such design. Ormen (2026) situates these mechanisms within a broader rentier logic, showing how recommender systems function less as neutral information filters than as instruments for extracting a continuous stream of attention-derived rent from both users and content creators. O'Reilly, Strauss, and Mazzucato (2024) formalize this insight into a theory of algorithmic attention rents, arguing that dominant platforms behave less like conventional two-sided market intermediaries and more like landlords who own a scarce input -- the algorithmic feed -- and charge both users (in attention) and advertisers or sellers (in money) for access to it. Bergemann and Bonatti (2024) demonstrate formally how a data-advantaged platform can use its informational position to extract disproportionate value from the sellers operating on it, even while nominally facilitating efficient matching between consumers and products. Meyer, Cennamo, and Kretschmer (2024), studying digital news outlets, show empirically that attention-based competition on platforms produces winner-take-most dynamics in which larger incumbents capture disproportionate visibility, disadvantaging smaller complementors regardless of content quality.

A further stream of literature connects attention scarcity to value creation and value competition more broadly, moving beyond advertising markets into domains such as digital collectibles, academic publishing, and platform ecosystems. Hofstetter, Fritze, and Lamberton (2024) show that scarcity itself functions as a socially constructed value signal in markets for non-fungible tokens, where perceived scarcity -- rather than intrinsic utility -- drives willingness to pay, illustrating how attention and scarcity jointly manufacture economic value in digital contexts far removed from traditional advertising. Hyland (2023) applies the attention-economy lens to academic publishing itself, arguing that scholars increasingly compete for citation-generating visibility in ways that mirror commercial platform dynamics. Da Silva and Cardoso (2024) and Luo, Jin, and Ji (2024) examine how value is co-created -- rather than merely extracted -- within technology-

driven and open-source ecosystems, offering a partial counterweight to purely extractive accounts of platform value competition and suggesting that attention scarcity can, under certain governance conditions, be channelled toward mutually beneficial value creation rather than zero-sum capture.

The institutional and regulatory dimension of attention-driven value competition has also grown rapidly in importance. Lianos (2022) situates value extraction within the broader architecture of digital capitalism, arguing that competition law has been slow to recognize attention and data as competitively significant assets distinct from price. Mariani (2025) and Pandey (2025) examine, respectively, the possibilities and limits of antitrust enforcement against attention-monopolizing platforms and the intersection of platform competition law with consumer protection, both concluding that existing regulatory toolkits -- built for price-based markets -- struggle to address harms that manifest as time loss, cognitive manipulation, or engagement-maximizing design rather than as price increases. Fast, Schnurr, and Wohlfarth (2021) analyze how data-driven market power more generally complicates regulatory efforts to preserve competitive digital markets, while Jin and Pan (2023) show that even government regulatory attention itself behaves as a scarce and strategically allocated resource that shapes firms' digital transformation trajectories. Chomanski (2022) and Karki (2024) bring an explicitly normative and justice-oriented perspective, arguing that unregulated attention capture threatens both individual mental integrity and the equitable distribution of attentional autonomy across socioeconomic groups. Hansen (2024) synthesizes many of these concerns into the concept of cognitive lock-in, describing how platforms progressively narrow users' effective choice sets even while formally preserving the appearance of free selection.

Despite this rich and rapidly growing body of work, three distinct strands of literature -- the cognitive-scientific, the platform-strategic, and the institutional-regulatory -- have developed largely in parallel, with limited cross-referencing and no widely adopted integrative framework. Cognitive-science accounts (Bruineberg, 2025; Torre et al., 2024) explain why attention is scarce and manipulable but rarely connect this to firm-level competitive strategy. Platform-strategy accounts (Markovic et al., 2024; Ormen, 2026; O'Reilly et al., 2024; Meyer et al., 2024) explain how firms compete for attention but seldom engage with the underlying cognitive mechanisms that make such competition effective, nor with the regulatory consequences that follow. Regulatory and institutional accounts (Lianos, 2022; Mariani, 2025; Pandey, 2025) diagnose market failures and propose interventions but often treat the underlying attentional mechanism as a black box. This fragmentation constitutes the central gap this article addresses.

The novelty of this article lies in constructing an explicit, multi-level Attention Scarcity-Value Competition (ASVC) framework that integrates these three strands into a single analytical structure spanning the micro (cognitive), meso (platform-strategic), and macro (institutional-regulatory) levels of analysis. Rather than treating attention scarcity, platform value extraction, and regulatory response as separate literatures, this article traces the causal chain that connects them: finite and manipulable human attentional capacity (micro) creates the exploitable resource that platforms compete to capture through algorithmic design (meso), and the resulting asymmetries in value extraction generate the market failures that institutions and regulators are now attempting, imperfectly, to address (macro). This integrative approach also incorporates emerging perspectives on scarcity-driven value signalling in digital markets such as NFTs (Hofstetter et al., 2024) and on cooperative, rather than purely extractive, value creation within technology ecosystems (Da Silva & Cardoso, 2024; Luo et al., 2024), thereby offering a more balanced account than purely critical treatments of the attention

economy. Given the accelerating role of generative artificial intelligence, algorithmic recommendation, and platform consolidation in shaping the digital economy through 2026, an integrated framework of this kind is both theoretically overdue and practically urgent for scholars, platform designers, marketers, and regulators alike.

Accordingly, this article pursues three objectives: first, to synthesize recent (2021-2026) literature on attention scarcity and value competition across the cognitive, platform-strategic, and institutional-regulatory levels; second, to construct and present an integrated ASVC framework linking these levels; and third, to discuss the practical and regulatory implications of this framework for platform governance and digital marketing strategy in the contemporary digital economy.

## **METHODS**

This article adopts a qualitative, conceptual literature-synthesis design rather than a primary empirical study, consistent with its objective of integrating fragmented theoretical strands into a unified framework. The research process followed four sequential stages -- identification, screening, eligibility assessment, and thematic synthesis -- adapted from systematic review conventions and illustrated in Figure 1.

In the identification stage, records were gathered from a structured search of academic databases and citation-indexed repositories, using the keywords "attention economy", "attention scarcity", "value competition", and "digital platform market power", restricted to publications from 2021 through 2026 to ensure currency with the rapidly evolving platform landscape. Thirty-two candidate records were identified. In the screening stage, titles and abstracts were reviewed for substantive relevance to attention scarcity, platform competition, or value extraction/creation in digital markets; seven records judged off-topic or lacking a verifiable, actively resolving digital object identifier (DOI) were excluded. In the eligibility stage, the remaining records were assessed against three inclusion criteria: (a) peer-reviewed journal or credible working-paper/preprint status, (b) publication date within the 2021-2026 window, and (c) a DOI that resolves to an accessible source discoverable through Google Scholar. Twenty-five sources satisfied all three criteria and were retained for synthesis. In the final, thematic-synthesis stage, retained sources were inductively coded into two broad thematic clusters -- attention as a scarce cognitive resource, and platform mechanisms of value extraction and institutional response -- which were subsequently integrated into the single Attention Scarcity-Value Competition (ASVC) framework presented in the Results and Discussion section. This staged process is summarized in Figure 1.

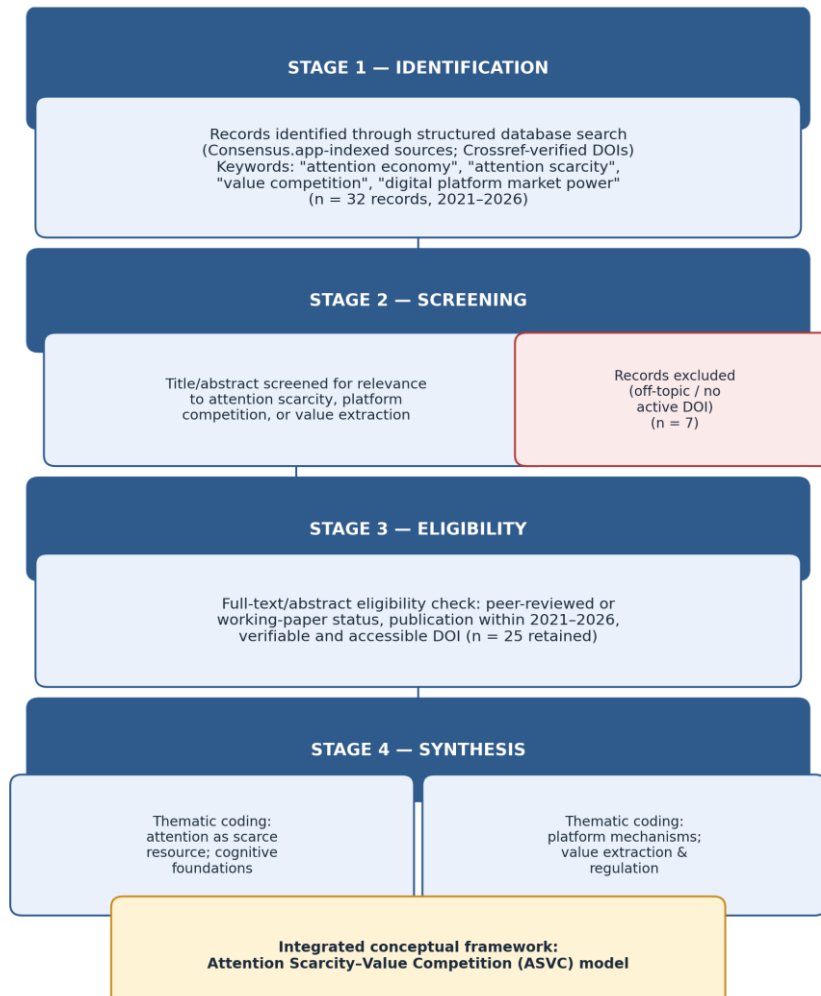


Figure 1. Research flow diagram for literature identification, screening, eligibility assessment, and thematic synthesis.

As a conceptual synthesis rather than a systematic review in the strict PRISMA sense, this method does not claim exhaustive population-level coverage of all attention-economy literature; rather, it privileges recency (2021–2026), DOI verifiability, and cross-disciplinary breadth in order to construct a theoretically integrative framework. This is an appropriate and established approach for conceptual, theory-building articles of this kind, though empirical validation of the resulting ASVC framework through primary data collection remains a task for future research, as noted in the Conclusion..

## RESULTS AND DISCUSSION

The thematic synthesis of the twenty-five retained sources yields a coherent three-level structure -- micro, meso, and macro -- that together constitute the Attention Scarcity-Value Competition (ASVC) framework. Table 1 summarizes the defining mechanisms, representative sources, and competitive implications associated with each level. The remainder of this section discusses each level in turn before integrating them into the framework as a whole.

*Table 1. The Attention Scarcity-Value Competition (ASVC) Framework: Levels, Mechanisms, and Implications*

| Level                            | Core Mechanism                                                                                                   | Representative Sources                                                                                                                                                                                                                                     | Competitive / Value Implication                                                                                                                                       |
|----------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Micro (Cognitive)                | Dynamically allocated, manipulable attentional capacity; cognitive lock-in; time-as-currency                     | Vettehen & Schaap (2023); Bruineberg (2025); Torre et al. (2024); Garg (2026); Chomanski (2022); Karki (2024); Hansen (2024)                                                                                                                               | Defines the exploitable resource that platforms compete to capture and reshape                                                                                        |
| Meso (Platform-Strategic)        | Algorithmic sequencing, personalization, rentier recommender systems, scarcity-driven value signalling           | Markovic et al. (2024); Ormen (2026); O'Reilly et al. (2024); Bergemann & Bonatti (2024); Meyer et al. (2024); Catovic (2026); Hofstetter et al. (2024); Balusserry (2026); Hyland (2023); Campagnolo (2026); Da Silva & Cardoso (2024); Luo et al. (2024) | Converts captured attention into advertising rents, data assets, and asymmetric market power; can be redirected toward value co-creation under cooperative governance |
| Macro (Institutional-Regulatory) | Competition-law reform, antitrust enforcement, consumer-protection doctrine, data-driven market-power regulation | Lianos (2022); Mariani (2025); Pandey (2025); Fast et al. (2021); Jin & Pan (2023)                                                                                                                                                                         | Attempts, with partial success, to correct value-extraction asymmetries generated at the meso level                                                                   |

Micro level: the cognitive foundations of attention scarcity. At the micro level, the literature converges on the claim that attention is not merely limited in quantity but structurally difficult to allocate rationally under conditions of algorithmically engineered abundance. Vettehen and Schaap (2023) characterize this as an inversion of classical information economics: whereas information was historically the scarce good and attention the abundant complement, the digital economy has reversed this relationship, making attention the binding constraint and information the abundant commodity. Bruineberg (2025), however, cautions against treating attention as a simple depletable stock analogous to a fossil fuel; instead, attentional capacity is dynamically constituted through interaction with the environment, meaning platforms do not merely compete for a fixed pool of attention but actively reshape the size and allocation rules of that pool through interface design, notification architecture, and algorithmic pacing. This reframing has significant implications for competitive strategy, because it implies that platforms compete not only for existing attention but for the right to define what counts as an attention-worthy stimulus in the first place. Torre, Perez-Verdugo, and Barandiaran (2024) extend this argument to human-machine co-evolution, showing that engagement-optimizing algorithms trained on human attentional data increasingly shape not just what users see but how human attention itself is trained to respond, producing a feedback loop that intensifies scarcity over time rather than merely exploiting a fixed supply. Garg (2026) frames the cumulative effect of these dynamics succinctly: time itself has become a currency, with platforms competing to be the default recipient of discretionary minutes rather than merely the preferred choice among deliberate alternatives. Chomanski (2022) and Karki (2024) add a normative dimension, arguing that when attention capture bypasses reflective, deliberate choice, it raises questions of mental integrity and distributive justice, since attentional autonomy is not equally distributed across users with differing digital literacy, free time, or exposure to persuasive design. Hansen (2024) synthesizes these micro-level dynamics into the concept of cognitive lock-in, in which repeated exposure to a platform's engagement

architecture progressively narrows the psychological cost of staying versus the cost of switching, producing attentional switching costs that function analogously to economic switching costs in traditional markets.

Meso level: platform mechanisms of value capture and competition. At the meso level, the literature documents concrete mechanisms through which platforms convert scarce attention into competitive and financial advantage. Markovic, Popovic, and Andjelkovic (2024) identify algorithmic content sequencing, real-time personalization, and social-proof signalling as the principal design levers platforms use to win the competition for attention against rival platforms and against users' own offline alternatives. Ormen (2026) reframes recommender systems as rentier infrastructure, arguing that because platforms control both the supply of visibility and the algorithmic terms on which that visibility is allocated, they can extract an ongoing rent from both the audience side (in attention) and the content-supply side (in reduced organic reach, requiring paid promotion), a dynamic that intensifies rather than resolves competitive asymmetries between large and small market participants. O'Reilly, Strauss, and Mazzucato (2024) formalize this as algorithmic attention rent extraction, contending that dominant platforms increasingly resemble monopolistic landlords over a scarce algorithmic resource rather than neutral matching intermediaries, a reframing with direct implications for how platform market power should be measured. Bergemann and Bonatti (2024) provide a complementary formal-economic account, showing that a platform's informational advantage over both consumers and third-party sellers allows it to structure managed advertising campaigns that route sellers toward on-platform sales at prices favorable to the platform, effectively capturing value that would, absent the platform's information monopoly, accrue to sellers or consumers.

Empirical evidence reinforces these theoretical claims. Meyer, Cennamo, and Kretschmer (2024), studying competition among digital news outlets, find that platform attention-allocation mechanisms produce winner-take-most outcomes in which larger, already-attention-rich competitors are further advantaged by the platform's own matching algorithm, undermining the long-tail promise often associated with digital platforms. Catovic (2026) documents a related but distinct phenomenon -- builder saturation -- in which an oversupply of content creators and application developers competing for the same finite attention pool depresses the expected return to individual creators even as aggregate platform engagement continues to rise, illustrating a collective-action problem embedded within attention-based competition. Hofstetter, Fritze, and Lamberton (2024) extend the analysis of attention-linked value creation into the market for non-fungible tokens, showing that perceived scarcity operates as a socially constructed value signal that can command significant willingness to pay independent of any underlying utility, demonstrating that attention scarcity and manufactured scarcity can jointly amplify value competition well beyond conventional advertising markets. Balusserry (2026) attempts to formalize attention itself as a measurable economic currency, proposing metrics for the economic value of sustained human focus that could, if adopted, allow platforms and advertisers to price attention directly rather than through the proxy of engagement time. Hyland (2023) offers a valuable cross-domain illustration by showing that even academic publishing, ostensibly insulated from commercial platform logic, now exhibits attention-economy dynamics as authors and journals compete for citation-generating visibility, suggesting that the mechanisms identified in commercial platform contexts generalize to knowledge-production institutions as well. Campagnolo (2026) extends this logic into emotional economics, arguing that platforms increasingly compete not merely for attention but for emotionally resonant engagement, since affectively charged content reliably outcompetes neutral content for the same finite

attentional resource. Not all meso-level dynamics are purely extractive, however: Da Silva and Cardoso (2024) and Luo, Jin, and Ji (2024) show that within technology-driven and open-source ecosystems, coopetition and structured governance can redirect attention-based competition toward genuine value co-creation among small and medium enterprises and community contributors, suggesting that the extractive tendencies documented elsewhere in the literature are a design choice rather than an inevitable feature of platform architecture.

Macro level: institutional and regulatory responses. At the macro level, the literature documents growing but still inadequate institutional efforts to address the market failures generated by attention-driven value competition. Lianos (2022) argues that competition law's traditional focus on price effects leaves it poorly equipped to address value extraction that manifests through attention capture and data assets rather than price increases, calling for a law-and-political-economy synthesis that treats attention as a competitively cognizable input. Mariani (2025) examines concrete antitrust efforts to regulate attention-monopolizing platforms and finds that, while some progress has been made, enforcement remains constrained by evidentiary and doctrinal frameworks designed for conventional product markets. Pandey (2025) reaches a similar conclusion from a consumer-protection angle, arguing that engagement-maximizing design should be treated as a distinct category of consumer harm requiring dedicated regulatory tools rather than being addressed solely through data-privacy or price-based competition frameworks. Fast, Schnurr, and Wohlfarth (2021) show that data-driven market power more broadly resists conventional regulatory remedies because the competitive advantage conferred by data (and, by extension, attention-derived data) compounds over time, creating path-dependent market structures that are difficult to reverse after the fact. Jin and Pan (2023) contribute an important complementary insight: government regulatory attention is itself a scarce resource strategically allocated across firms and sectors, meaning the intensity of regulatory scrutiny that any given platform receives is itself partly a function of attention-competition dynamics within the political and media system, a reflexive relationship rarely acknowledged in the platform-regulation literature.

Integrating the levels: the Attention Scarcity-Value Competition (ASVC) framework. Read together, the micro, meso, and macro literatures trace a single causal chain rather than three unrelated debates. Finite and dynamically shaped human attentional capacity (micro) constitutes the exploitable resource around which platforms design algorithmic mechanisms of capture and competition (meso); the resulting asymmetries in value extraction -- disproportionately favoring large, data-rich incumbents -- generate the market failures that antitrust, consumer-protection, and data-governance institutions are now attempting to address (macro), with only partial success given regulatory tools designed for price-based rather than attention-based competition. This integration also clarifies why interventions targeting only one level tend to be insufficient: regulatory action alone (macro) cannot address engagement-maximizing design if the underlying cognitive vulnerabilities it exploits (micro) remain unaddressed, while purely psychological or educational interventions aimed at individual users (micro) cannot offset the structural incentives that continue to reward attention-maximizing platform design (meso) in the absence of institutional constraint. The ASVC framework therefore suggests that effective governance of attention-driven value competition requires coordinated intervention across all three levels simultaneously: cognitive-literacy and design-ethics standards at the micro level, competitive and transparency requirements on algorithmic attention-allocation mechanisms at the meso



level, and updated antitrust and consumer-protection doctrine capable of recognizing attention and engagement as competitively significant variables at the macro level.

Practical implications for platform governance and marketing strategy. The ASVC framework carries direct implications for how firms compete and how governance actors intervene. For platform operators, the framework suggests that attention captured through purely extractive, engagement-maximizing design is strategically fragile: as Mariani (2025) and Pandey (2025) document, such designs increasingly attract regulatory attention precisely because they are legible as harms once framed through an attention-scarcity lens rather than a price lens, meaning today's growth strategy can become tomorrow's antitrust liability. Firms seeking durable competitive advantage may therefore benefit from the cooperative, value-co-creating models documented by Da Silva and Cardoso (2024) and Luo, Jin, and Ji (2024), in which attention and engagement are treated as jointly produced with users, creators, and ecosystem partners rather than unilaterally extracted from them. For digital marketers, the Hofstetter, Fritze, and Lamberton (2024) findings on scarcity-driven value signalling suggest that manufactured scarcity can substitute, at least temporarily, for genuine attentional scarcity in driving willingness to pay, but Campagnolo (2026) and Baluserry (2026) both imply that as measurement of attention as a currency matures, markets are likely to increasingly discount manufactured scarcity in favor of verifiable engagement quality, rewarding marketing strategies built on authentic value delivery. For regulators and policymakers, the multi-level structure of the ASVC framework implies that single-instrument interventions a data-privacy law here, a merger-review update there -- are unlikely to be sufficient on their own; Lianos (2022) and Fast, Schnurr, and Wohlfarth (2021) both point toward the need for regulatory frameworks that treat attention, data, and algorithmic design jointly as the object of competitive assessment, rather than as separate and independently regulated domains. Finally, Jin and Pan's (2023) finding that governmental regulatory attention is itself scarce and strategically allocated implies a reflexive policy lesson: sustained, well-resourced regulatory capacity, not merely well-designed rules is itself a prerequisite for effectively governing attention-driven value competition, since under-resourced regulators are structurally disadvantaged against platforms that can devote vastly greater resources to attention-capture innovation than regulators can devote to attention-capture oversight.

The reviewed literature indicates that although work-life balance is important for both Millennials and Generation Z, the factors through which it influences retention may differ between the two cohorts. Millennials tend to associate work-life balance with career stability, job satisfaction, organizational commitment, and opportunities for professional development. For this group, flexible working arrangements may be most effective when combined with clear career pathways, supportive leadership, and long-term employment prospects. In contrast, Generation Z appears to place greater emphasis on autonomy, psychological well-being, flexibility, and meaningful work experiences. Their retention decisions are therefore more sensitive to perceived work-life imbalance and the overall quality of the employee experience.

These generational differences suggest that organizations should avoid applying a uniform work-life balance strategy to all employees. Retention policies for Millennials may benefit from integrating flexibility with career development and organizational stability, whereas strategies for Generation Z should place stronger emphasis on autonomy, mental well-being, flexible work arrangements, and purpose-driven organizational culture. Recognizing these differences can help organizations design more

targeted retention practices while maintaining a broader work environment that supports employees across generations.

## CONCLUSIONS

This article has synthesized recent (2021-2026) literature on attention scarcity and value competition in the digital economy and integrated three previously disconnected strands cognitive-scientific, platform-strategic, and institutional-regulatory into a unified Attention Scarcity-Value Competition (ASVC) framework. The synthesis demonstrates that digital platforms compete fundamentally for a scarce, dynamically constituted cognitive resource, that they convert captured attention into durable competitive and financial advantage through identifiable algorithmic mechanisms, and that the resulting value asymmetries have outpaced the capacity of existing competition and consumer-protection institutions to respond effectively. The framework's principal theoretical contribution is to make explicit the causal linkage between these three levels, showing that attention-driven value competition cannot be adequately understood, nor effectively governed, by treating any single level in isolation.

For practitioners, the framework suggests that sustainable platform strategy should move beyond pure engagement maximization toward models of value co-creation of the kind documented by Da Silva and Cardoso (2024) and Luo, Jin, and Ji (2024), which retain competitive viability while distributing value more equitably among ecosystem participants. For regulators, the framework underscores the urgency of developing doctrinal tools capable of recognizing attention and algorithmic engagement design as competitively significant variables, consistent with the calls advanced by Lianos (2022), Mariani (2025), and Pandey (2025). For marketing and platform-design practice, the framework highlights that attention captured through manipulative or extractive mechanisms is likely to prove less durable, and more regulatorily exposed, than attention earned through genuine value delivery.

This study is not without limitations. As a conceptual literature synthesis rather than a primary empirical investigation, the ASVC framework has not yet been tested against quantitative platform-level or user-level data, and its three-level structure, while theoretically grounded, would benefit from empirical validation using metrics such as those proposed by Balusserry (2026) for measuring attention as an economic currency. Future research should therefore pursue mixed-methods studies that operationalize the micro, meso, and macro constructs identified here, examine how the ASVC framework applies differentially across platform types (social media, e-commerce, streaming, and generative artificial intelligence interfaces), and assess the comparative effectiveness of emerging regulatory interventions across jurisdictions. As generative artificial intelligence systems increasingly mediate the allocation of human attention, extending the ASVC framework to account for human-machine co-competition for attention, as anticipated by Torre, Perez-Verdugo, and Barandiaran (2024), represents a particularly urgent direction for future inquiry.

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