



Value Creation and Value Appropriation in Multi-Sided Markets: Strategic Mechanisms and Platform Dynamics

Jagadish S. Biradar¹, Dilipkumar Ambadas Patil^{2*}

¹ Department of Tourism & Hotel Management, Central University of Karnataka, India

² Department of Tourism & Hotel Management, Central University of Karnataka, India

* Corresponding author: pdilipkumar22@gmail.com

ARTICLE INFO

Article history:

Received: 24-07-2026

Received in revised form:

05-08-2026

Accepted: 05-08-2026

Available online: 05-08-2026

Keywords:

Algorithmic Control
Digital Transformation
Ecosystem Governance
Multi-Sided Platforms
Network Effects
Value Co-Creation
Multi-Sided Platforms
Value Appropriation
Ecosystem Governance
Digital Transformation
Meta-Organization

ABSTRACT

The global economic logic has been reworked around the multi-sided platform (MSP), shifting focus from the “pipeline” of production to the orchestration of networked resource integrators. This conceptual research examines value co-creation and value appropriation in digital ecosystems and the strategic mechanisms that enable platform sustainability and dominance. Industrial organisation, strategic management, and information systems provide multi-disciplinary perspectives on how value is generated by network effects (direct and indirect) and by modular technological architectures that give third-party innovators access to boundary resources such as APIs. Value appropriation has shifted from transactional commissions to architecture-mediated appropriation, including data extractivism and algorithmic control, through which platform sponsors harvest “learning rents” from collective data that individual participants cannot recreate. The study investigates platform dynamics across the lifecycle and identifies a recursive coevolution as go-to-market narratives shift from “platform as supportive market builder” to “platform as selective and redistributive”. A critical balance exists between maximising engagement and maintaining long-term ecosystem health. The results provide guidelines for managers addressing the “quantity-quality” and “chicken-and-egg” paradoxes intrinsic to emergent ecosystems. Finally, the ethical implications of platform power are outlined, and a research agenda is proposed for SME resilience and the disruptive potential of decentralised technologies.

1. INTRODUCTION

Multi-sided platforms (MSPs) have emerged as one of the main organisational structures in the new economy of information technology and the Internet [1]. These are multi-sided markets that act as a standardised digital platform that makes it easy for two or more different, but interdependent sets of actors to interact, such as buyers and sellers or users and developers [2]. Matchmaking has been around for ages, such as in any village market, but the digital revolution has made it possible to rapidly scale these platforms while simultaneously lowering transaction costs and creating intricate user and complementor ecosystems [3]. MSPs represent a shift from the traditional ‘pipeline’ business model to networked environments, a paradigm change [4]. Normally, value is created in a linear sequence of activities in traditional firms, where they have

control over their internal resources and turn them into outputs that are consumed by persons outside the organisation [5]. Platforms, on the other hand, are platforms that integrate resources, where value is not only generated along the way to the platform, but rather through the interactions of dispersed actors in the platform in a joint, collaborative, and concurrent way [1]. Likewise, the major asset of a platform is the network of actors and not fixed physical facilities in this context [6]. These platforms form the core of strategic management and have two mutually reinforcing benchmarks: value creation and value appropriation [7].

Value Creation: Multi-sided markets involve co-creating value by combining and exchanging different resources offered by different market participants in a novel way [4]. Network effects drive this process, both direct (the more people on one side, the more useful it is on the other) and indirect (the size and nature of the other side affect the utility of the first side) [8]. The key to successful value creation is to break the "chicken and egg" paradox such that both sides of a platform cross a threshold simultaneously.

Value Appropriation or value capture: A firm's ability to convert co-created value into returns or other strategic benefits [8]. The main ways of appropriation are monetisation strategies, such as transaction fees, subscription fees, and freemium models. In addition, value is captured as architectural control of data flows and "learning rents," which are based on aggregated accesser information to enhance algorithmic performance and assure competitive advantage [9]. The dynamics and strategic processes of these platforms are a naturally complex task that constantly calls for balancing. Platform owners will need to be orchestrators, creating a framework of governance that is open to third-party innovation and participation while also maintaining control to ensure quality, trust, and profitability [10]. The more value that can be captured by the platform owner, the lower the incentives for the platform's complementors to join the network, and the lower the capture of the value, the less sustainable the model. In addition, these processes are dynamic, changing, and evolving through adaptive cycles [3]. Once platforms grow and become more popular, their governance mechanisms tend to be more selective or redistributive, and can even give greater value capture to their sponsor or platform [11]. It is crucial to grasp how platform architecture, governance, and market positioning are interdependent and recursive to avoid the conflicts that are inherent in these multi-sided platforms [3].

2. LITERATURE REVIEW

Penetrating into the binary field of "pipelines" to "platforms". Traditional "pipeline" businesses are linear value chains, in which the value is created within the company and exported down the chain to customers [8]. By contrast, MSPs are resource integrators and 'matchmakers' who enable two or more interdependent sets of actors (e.g., buyer and seller) to co-create value by interacting directly with each other. The strength of these platforms is that they can coordinate a large ecosystem of the outside world [6].

2.1 Strategic Mechanisms of Value Creation

The value and value creation in MSPs is of a collaborative nature and comes from the collective efforts of decentralised actors [1].

Network Effects: One of the key mechanisms for value creation is the leverage of the network effect, which works both within a network, between the same members (direct network effect), and between different networks and different users (indirect/cross-side network effect) [8]. There is a "chicken and egg" challenge to achieving this critical mass and for successful platforms to reach such a level of participation on all sides to initiate these self-reinforcing cycles.

Technological Architecture: The way in which a platform is designed, in terms of a stable architecture, standard interfaces (APIs), and complementary modules, is one of the most important features of the platform, which allows third parties to innovate [12]. Modularity is especially appreciated because it allows for the highest possible level of complementor independence and creativity, as well as interoperability [12].

Platform orchestration and dynamic capabilities: Effective value creation requires the platform owner to play the role of an orchestrator: they have to develop dynamic capabilities such as ecosystem sensing, partner management, and resource curation [13]. These capabilities are crucial for moving from basic product

platforms to highly complex innovation platforms that allow a myriad of third-party inputs and contributions [13]. The management of value appropriation is strategic [14].

2.2 Strategic Mechanisms of Value Appropriation

Value appropriation (or value capture) refers to the processes by which a platform converts co-created value into monetary benefits [8].

Monetisation Strategy: This is primarily done through transaction fees/commissions, subscription models (e.g., Amazon Prime), and "above the line" advertising models, in which user attention is sold to advertisers [3]. There are also some freemium tactics that can unmask value for free and create a need for conversions to paid tiers [2].

Appropriation in Architecture: Appropriation is increasingly integrated into the platform's architecture instead of bilateral bargaining [12]. Platform sponsors extract value from complementors by aggregating fragmented user data, which is used to generate "learning rents," and algorithmically control visibility and analytics to capture more value from complementors [12].

Governance as a Lever: Platform owners use governance to ensure the quality of interactions and prevent disintermediation, including by employing access control, output evaluation, and behaviour rules. Openness (to participate) needs to be balanced with control (to ensure profitability and the integrity of the ecosystem) for strategic leaders [3].

3. PLATFORM DYNAMICS AND COEVOLUTION

Platforms are dynamically linked to their ecosystems and change as the platform's lifecycle progresses.

Governance: Platforms are increasingly becoming market dominant, and their governance practices tend to shift from supporting a diverse complementor population to being more selective or redistributive, focusing on end-user experiences or value capture at the platform level [11].

Multiplatform Ecosystems: Recent studies have broadened the discussion from single multi-sided platforms to multiplatform ecosystems, in which value is created by interactions across multiple platforms, in multiple markets (e.g., gaming, e-commerce, and social media) [13].

Interplay Factors: Architectural choices and governance mechanisms have a recursive relationship that is crucial for the success of an ecosystem [12]. For example, vertical platforms could help develop a product quickly, but might not attract long-term usage if it leaves complementors with doubts [15].

4. CONTEXTUAL APPLICATIONS: RETAIL, SHARING AND CIRCULAR ECONOMIES

Retailing: Multi-sided marketplaces such as Amazon and Alibaba are changing the way the world trades with the combination of front and back-stage processes and the personalisation of customer experience, colloquially referred to as "omnichannel" [6].

Sharing Economy: Platforms in the sharing economy allow people to make transactions directly with each other, allowing for the reuse of unnecessary resources, such as spare rooms on Airbnb or cars on Uber [4].

Circular Economy: Digital platforms are becoming "circularity brokers" that can broker resources to enable sustainability through a meta-organisation, as waste and idle resources are matched with productive uses [16].

5. NETWORK EFFECTS (DIRECT AND INDIRECT)

Network effects are the two key direct (same-side) and indirect (cross-side) ways by which multi-sided platforms generate value [8].

Direct network effect: If the value a user derives from a service is greater as the number of other users on that side of the service grows, as is most prominently seen in social-media services when more people are using the service, they become more connected to their own network of users [17].

Indirect network effects can sometimes be even more important to platform scalability: when a platform's value to one set of users (such as buyers) rises as the value to the other set of users (such as sellers) does as well, thereby creating a self-reinforcing loop that brings more users to either side of the market [18]. These positive externalities can also result in "winner-take-all" scenarios, but platforms need to overcome the "chicken and egg" problem to reach critical mass and be careful to prevent negative externalities, such as congestion, information overload, or greater search frictions, from occurring as they grow past their best-matching characteristics [19].

6. PLATFORM GOVERNANCE MECHANISMS

Platform governance mechanisms consist of rules, constraints, and incentives that platform owners establish on the platform to coordinate the behaviour of independent complementors and solve collective-action problems. Incentive mechanisms encourage participation and co-creation by making boundary resources, such as APIs and SDKs, accessible to all; they provide autonomy of decision-making by using modular architecture (e.g., freed up from the constraints of a closed-source ecosystem); and they offer pecuniary benefits, such as revenue sharing, to incentivise participation. Control mechanisms reduce the risk and opportunism of others by implementing gatekeeping (access control), output monitoring (e.g., reputation scores, ratings), and behavioural rules (e.g., what is allowed and what is not) [12]. Strategic leaders should always keep the tension between openness and control in mind to allow innovation and ensure the quality and stability of the ecosystem, and tune the balance as the platform develops [3]. As the platform gains market dominance, it typically evolves from a governance approach that focuses on structural changes improving initial market conditions to a boundary-spanning and redistributive approach that expands the complement pool and steers user attention [11].

7. VALUE CO-CREATION

Value co-creation is a process of creating new value, either material and/or symbolic, that is joint, collaborative, and based on mutuality between the parties involved, which frequently blurs the distinction between producers and consumers [1]. This is a paradigm shift from linear "pipeline" business in the traditional manner of creating value from the inside and pushing the product downstream to a service-dominant logic that creates value through interactions with others in an open forum [1]. Value co-creation relies heavily on the firm's capacity to become a resource integrator that makes it possible to combine and share resources in new ways, delivered by a network of very different actors, such as the platform owner, the third-party complementors, and the 'prosumers' people who provide and consume the firm's resources [10]. The three phases of the co-creation process are antecedents (as the initial motivations and capabilities of the participants); the process itself (characterised by encounters, shared development, and the integration of resources); and outcomes (innovation, knowledge, and shared profit) [12]. To achieve this potential, platform owners must function as ecosystem orchestrators, who must play a central role in decreasing search and transaction costs as well as coordinate and control the complexity of the multi-actor and multi-layer supply chain [1]. With this orchestration, a series of modular cores and boundary resources, such as APIs and SDKs, can be leveraged to enable third parties to create value-added derivatives based on a common digital foundation [20]. Co-creation is also driven by so-called "self-reinforcing network effects": the more users are engaged, the more utility they will derive from the platform, either from their own side of the market or from the other side of the market. Value co-creation allows the use of idle assets and links resource flows for a sharing economy and circular economy, where they are not being used. The implementation demands high-level governance frameworks to encourage the often-conflicting goals of stakeholders and to reconcile the need for openness to innovation with a need for centralised management for quality control [8]. Moreover, platforms tend to collect "unaware value" from the transactional and behavioural data traces that users leave as they use the platform, resulting in the creation of "learning rents" that bolster the platform's competitive edge [21]. These processes are only effective if they are coupled with a synergistic match

between the technological architecture of the platform and its social governance, so that the complementors remain strongly attached to the platform despite competition from a crowded market [14]. Those involved need to be guaranteed a fair and equitable result, whether that's monetary wages or social and reputational status [22]. If platforms do not achieve this balance, they may run the risk of "value co-destruction" from a power imbalance or an asymmetry in information that deters participation by actors. It is important that managers closely track the value of each of the actors' engagement in the cycle, and determine how the value is perceived and captured by them, because the value realised in one cycle is an important input, which will strengthen the motivation to participate in the next cycle [7]. Finally, this logic enables firms to become meta-organisations that utilise a "digital hand" to coordinate the distributed innovation agency, and realise nonlinear increments of utility and value [9].

8. VALUE CAPTURE / APPROPRIATION STRATEGIES

Value appropriation (value capture): A platform's strategic ability to convert the value created in the ecosystem into monetary results and sustainable competitive advantage [13]. It is a process that is different from value creation; rather, it is about what a firm does to compete with its competitors and partners to secure its "share" of the created benefits [21]. Traditional monetisation models include transaction fees, membership/subscription fees, and freemiums that make their value apparent through free access and facilitate paid conversion [6]. One popular approach to strategic pricing is to use 'divide and conquer' pricing, where the price-sensitive user group is subsidised to ensure critical mass and the value is then appropriated by the paying side [8]. Moreover, "above the line" models are sold as advertisements and exploit users' attention and user data [9]. In more advanced AI-based ecosystems, appropriation is becoming increasingly architected, based on "data extractivism" to harvest "learning rents" from shared cross-actor data, which individual complementors would not be able to duplicate [11]. Platforms implement governance measures, such as access control and contact encryption, to avoid the disintermediation of the platform interface, safeguarding these returns [23]. Value capture strategies can evolve from supporting structural changes to redistributive governance – a pattern that allows more aggressive value capture at the cost of individual complementors – as platforms grow to become dominant market positions [11]. Ultimately, successful appropriation depends on the dynamic balance: too much extraction can lead to "value co-destruction", which can create the situation where the very partners it seeks to attract to remain in the game are also the ones who withdraw from it [11].

9. PLATFORM ENVELOPMENT

Platform envelopment is a complex competitive move whereby a platform supplier enters an adjacent market by offering its own platform services along with the target platform's services under one roof. This allows a platform provider to use a shared user base and common components to circumvent traditional entry barriers in an adjacent market while selling its product [13]. This is an even more powerful mechanism in digitally fueled environments where network effects and high switching costs tend to create a barrier to competitors [2]. The strategy is typically followed in two stages: first, the aggressor enters a particular market segment, and then new products are introduced to further grow and surround the market [24]. The enveloper leverages these new platform features to capture the network effects that had safeguarded their incumbent and, in a surprising twist, have effectively prevented incumbent access to users. Other service providers in the neighbourhood are often able to provide disruptive functionality in these multi-platform packages, making dominant firms vulnerable to such attacks [2]. Additionally, envelopment may be a strategic tactic by platform owners to acquire their own complements' operational assets, such that they reap greater value and exert more control over market entry [23]. In segments such as global retailing, this is seen when "super-platforms" offer basic transaction capabilities alongside broad-based digital capabilities such as entertainment or social media, creating an impetus for smaller retailers or traditional players to either go under or become more competitive [13]. In the end, envelopment is not an incremental change towards parallel growth, but a radical approach to aggressive market expansion, enabling leaders to consolidate their leadership in several interdependent environments [25].

10. MULTI-HOMING AND SWITCHING COSTS

Multihoming is the behaviour of users or complementors that compete across multiple platforms and engage in multiple platforms instead of focusing on one favoured platform [25]. This is usually a response to a lack of horizontal or vertical differentiation in the platform, or when pricing fluctuates from day to day and from season to season (e.g., surge pricing, temporary pricing) [26]. After multihoming has set in, the competition is real and fierce; users can now simply change between platforms for each transaction, based on who is providing the top-quality matches at the moment [26]. Platform owners, on the other hand, work hard to create customer 'lock-in', which is the extent to which users' willingness to search and switch to another platform decreases [6]. One of the main factors of this lock-in is the size of switching costs, which are the financial, cognitive, or technical barriers from which users are unable to switch to a competitor service [26]. High switching costs serve as a kind of "wall" that makes it difficult for a separate competitor to enter the market and secure a significant share of the business, as the existing competitor would have to provide revolutionary functionality to accomplish this [2]. In some instances, strategic leaders intentionally manipulate the costs of these technologies, for example, by changing compatibility with other technologies or by offering special boundary resources that boost developer efficiency but can not be used by other platform interfaces [27]. For example, Google Play Services are used to link apps to Google's official services but are incompatible between platforms and make multi-homing by the developers much more difficult [28]. The transition from relational databases to more data-centric and machine-learning-oriented systems and ecosystems is now being exacerbated by data non-portability, of course, with the historical transactions, customer reviews, and behavioural analytics locked in the system, reinforcing "extractive equilibria"[29]. Platform sponsors can also adopt governance measures, such as exclusive dealing and specialised loyalty programs, such as Amazon Prime, which include high-value, unique services that are not offered anywhere else, in addition to the core transactions. For instance, Safaricom, in the past, had used exclusion clauses that barred the M-Pesa agents from serving other mobile money companies, effectively seeking to capture more value from its dominant position [26]. Low barriers to entry and low switching costs can create high levels of competition and concept copying, while high status complementors and large installed bases of the dominant platform can create strong network effects that discourage multihoming and cause "winner-takes-more" effects. In addition, with the growth of platforms, more search frictions can arise whereby people have to do more work to evaluate more choices, and if the friction outweighs the quality of the match, they might simply end up leaving the platform altogether. Finally, the relative power of multihoming and switching costs affects the relative bargaining power of each player in the ecosystem: if players have diversified channel strategies or have high absorptive capacity, they can resist extractive pressures; if they are single-homing, they are structurally constrained and strongly dependent on the platform's architectural control over their lives and value capture [9].

11. PRICING STRUCTURES AND SUBSIDIZATION

Pricing in multi-sided platforms (MSPs) is a fundamental change from "pipeline" business models and is a complex strategic decision that can influence the participation of interdependent groups of actors with complex and often asymmetric pricing structures [8]. Platforms can serve as a matchmaker between two or more different constituencies; hence, platform value is inherently tied to having a critical mass on both sides to create self-reinforcing network effects [2]. Platform owners often use a "divide and conquer" approach to break the initial 'chicken and egg' bind by paying to subsidise the most price-sensitive or 'quality-sensitive' side to create scale and market thickness. In the early days, Uber offered a minimum amount that drivers had to be paid before they would start driving for Uber, and Groupon gave away free listings to merchants to build supply for prospective customers [8]. The question of which side to benefit is determined by what each group brings to the other and whether they are visible and/or appealing to participants [30]. Platforms can then monetise their value via multi-component pricing, such as paying a membership or subscription fee, a transaction-based usage fee, or a percentage. The principle is that in the digital retail domain, the income stream becomes transactional commissions rather than sales margins, which gives the platform the ability to shift the risk of holding onto the inventory to third parties and concentrate on developing customer lock-in [31]. Some of the best platforms, including Amazon and Alibaba, use a blend of commission fees from third-party marketplaces and their own products and inventory, as well as private labels. Another important

monetisation strategy is the “above the line” ad model, which relies on selling “free” access to the platform to users, and the sale of their attention and behavioural data footprints to advertisers [32]. Freemium models expose the value of the product at a lower level, in exchange for a price for superior interactions and/or features. In certain applications such as physical interaction platforms, pricing policy can be classified as symmetric (all actors pay revenue), asymmetric (one actor pays revenue), or no pricing (funding is provided by third parties) [18]. Advanced ecosystems also make use of dynamic pricing models, like Uber's surge pricing, to dynamically match supply and demand, based on the marginal value. At the same time, a gradual transition toward usage-based billing and granular “Function-as-a-Service” (FaaS) models enables complementors with freedom and flexibility to scale their own innovations without being locked into long-term commitments. To encourage third-party developers, they usually employ revenue-sharing models and MSPs, such as Valve's Steam, offer revenue splits for developers by percentage, which decrease accordingly as sales numbers rise without losing ground to competitors [33]. As platforms become dominant, their pricing governance may move from supportive structural change to more aggressive redistributive modes that ultimately can lead to a squeeze on platform margins or higher marketing costs for the platform that can reduce complementor value capture [34]. In addition, intense competition in the ecosystem can lead to a price war, with vendors such as mobile payment companies having to accept rebates to only break even, in order to grow their ecosystem and gather cross-platform information [8]. It is further reinforced by the high switching costs and low data portability that enable dominant platforms to maintain extractive equilibria by preventing their partners from leaving the platform even as relative returns decrease [9]. Addressing the often conflicting interests of all stakeholders and ensuring a fair and transparent revenue-sharing mechanism is essential to successful pricing, which is the primary determinant in preventing “value co-destruction” and ensuring sustainability of the ecosystem in the long term [1].

12. DATA-DRIVEN ADVANTAGE AND ALGORITHMIC CONTROL

One of the most significant data-driven advantages of digital platforms is that they have what they refer to as “privileged” and “integrated” access to real-time user data that the individual participants do not [8]. This access allows for data network effects: the more data the platform accesses, the more the platform learns and becomes valuable for matching, personalisation, and prediction [23]. Platform sponsors can harness “learning rents” or returns from generating intelligence from distributed data contributions that are scalable and cannot be similarly achieved by individual participants, such as SMEs, without their involvement [9]. This represents a transition from ownership-based to architecture-based competitive advantage, where power can be gained from the “digital hand” of algorithmic control [35]. Algorithmically, platforms facilitate coordination among decentralised actors by internalising “who sees what, when, and why?” and steer users' attention through ranking and recommendation techniques; algorithmic performance monitoring realises this by automating an actor's monitoring of their performance [33]. However, when the data are produced without the platform's control, there is data extractivism: a situation in which platform sponsors take a massive advantage over the market by capturing an unfair share of value for themselves, and the rest of the market suffers [8]. Such asymmetries frequently become entrenched as “extractive equilibria” due to high switching costs, data non-portability, and the inability of participants to move their large volumes of historical transaction and performance data from their platform to an alternative platform [9].

13. TRUST, REPUTATION, AND RISK MANAGEMENT

The key axes of multi-sided platforms are trust, reputation, and risk management; the interactions are often between strangers who need the platform's governance to enable safe interactions [8]. To foster trust and counterbalance factors that can be problematic, including opportunism, fraud, and information asymmetry, platforms increasingly use elaborate reputation mechanisms such as star ratings, online reviews, and certification programs as tools of output control and quality assurance. These systems bring the following benefits: They reward quality submissions and foster a “trusted community” that spurs continued participation and may even lead to real money for the community [1]. Risk management is also a “choreographed dance” between formal and informal precautions, including algorithmic risk management used to spot manipulation of reviews, encryption of contact details to stop disintermediation, and thorough

vetting processes when users join the platform [26]. At the same time, the platform owners need to rely on this control without being closed and proactively solve the problem of the failure of the entire ecosystem, such as misinformation and polarisation, so as not to kill the value and destroy the trust of stakeholders in the long run, and maintain the institutional legitimacy of the platform [1]. In the end, trust and reputation become a competitive edge that is hard to be created by any other competitor independently of the company that has leveraged it to its advantage [26].

14. ECOSYSTEM EVOLUTION AND PLATFORM LIFECYCLE

Digital platform ecosystems are in a dynamic life cycle and typically evolve through four phases: birth, growth, maturity, and leadership, as the platform owner's role changes from designer to a core orchestrator of the ecosystem [13]. During the emergent phase, platforms prioritise addressing the "chicken and egg" dilemma and use "divide and conquer" subsidy mechanisms and supportive governance to build up a critical mass of participants [2]. The ecosystem evolves through a recursive co-evolution process in which technologies and governance models evolve and shape each other to create a balance between core stability and peripheral evolvability [12]. For incumbent firms, this shift may involve a strategic shift in product platforms from closed to open innovation platforms that enable distributed innovation through standardised interfaces and flexible boundary resources [12]. The nature of governance strategies usually evolves from supporting the larger population of complementors to becoming more selective and redistributive, where attention is directed and value is captured from complementors [11]. In the end, although digital technologies can help sponsors lengthen the platforms' lives with frequent updates, they will need to continually reassess such mechanisms to guard against ecosystem failures or the displacement of their platform by an alternative "super-platform" [15]. Managing such transitions calls for deliberate leadership as firms navigate technology-driven business change [36].

15. CONCLUSION

Multi-sided platforms (MSPs) have dramatically changed the logic of value creation in organisations, moving from an approach based on the linear production of products to a distributed approach involving integrators of resources. This study explains that success in multi-sided markets is not only scale but also a complex interaction of value co-creation and value appropriation. In theory, this work can help shift from "pipeline" logic to platform logic and show that competitive advantage is shifting away from ownership to the architecture. We have demonstrated how value can be created by managing network effects, both direct and indirect, and the design of technological boundary resources such as APIs, which allow third-party innovation. At the same time, value capture has shifted from commissions to the new practices of data extractivism and algorithmic control, whereby platform sponsors can capture "learning rents" from the data accumulated in the ecosystem. The managerial implications of our findings highlight the need for platform owners to be 'curators' and 'orchestrators' as opposed to classic 'controllers'. The practitioners' lesson is the quantity-quality trade-off: strategies based on large numbers in the early stages may be needed to break the 'chicken-and-egg' cycle, but sustainability is more likely to be achieved in the long-term through quality-driven strategies, and strong reputation systems to ensure trust does not deteriorate and cause the ecosystem to fail. Moreover, managers need to understand the life cycle dynamics of governance, as the governance supportive mechanisms that can be put in place during birth may require them to switch from supportive to selective and redistributive mechanisms as the platform gains dominance. Socially and ethically, this study highlights the growing conflicts between platform power and stakeholder well-being. Success for platforms in the sharing and circular economy initiatives needs to be measured based on how well they can orchestrate resource flows for sustainable results, and how equitably they distribute value to prevent "value co-destruction. Social media governance, however, needs to go beyond business-oriented indicators and include the quality of information and the strength of the democratic system. Social-media platforms have also become major channels for e-commerce growth, driven by advanced technologies [37]. Research should continue to explore the SME perspective, with a particular emphasis on how SMEs can be resilient to the extractive dynamics of dominant platforms. Furthermore, the potential for decentralised technologies, including blockchain, to challenge existing centralised platform architectures and create new, trustworthy, and transparent ecosystems is an exciting development. In the end, an MSP's health will rely on the platform sponsor's ability to capture its own monetisation strategy while ensuring the overall success of the platform's numerous participants.

DECLARATIONS

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Conflict of Interest: The authors declare no conflicts of interest.

Ethical Considerations: This is a conceptual review based on published literature; no human participants, personal data, or animal subjects were involved.

Data Availability: No new data were generated in this conceptual study.

REFERENCES

- [1] De Oliveira, D. T., & Cortimiglia, M. N. (2017). Value co-creation in web-based multisided platforms: A conceptual framework and implications for business model design. *Business Horizons*, 60(6), 747–758. <https://doi.org/10.1016/j.bushor.2017.07.002>
- [2] Sabourin, V. (2016). Multi-sided platforms (MSPs) value captation and monetisation strategies: A strategic management perspective. *Business Management and Strategy*, 7(1), 189. <https://doi.org/10.5296/bms.v7i1.9332>
- [3] Nasiri, A., Talebi, K., & Amini, M. R. (2026). Platform business model innovation: A systematic literature review. *Journal of Internet Commerce*. Advance online publication. <https://doi.org/10.1080/15332861.2026.2693480>
- [4] Trabucchi, D., Sanasi, S., Ghezzi, A., & Buganza, T. (2021). Idle asset hunters—The secret of multi-sided platforms. *Research-Technology Management*, 64(1), 33–42. <https://doi.org/10.1080/08956308.2021.1842677>
- [5] Helfat, C. E., Kaul, A., Ketchen, D. J., Jr., Barney, J. B., Chatain, O., & Singh, H. (2023). Renewing the resource-based view: New contexts, new concepts, and new methods. *Strategic Management Journal*, 44(6), 1357–1390. <https://doi.org/10.1002/smj.3500>
- [6] Hänninen, M., Mitronen, L., & Kwan, S. K. (2019). Multi-sided marketplaces and the transformation of retail: A service systems perspective. *Journal of Retailing and Consumer Services*, 49, 380–388. <https://doi.org/10.1016/j.jretconser.2019.04.015>
- [7] Bivona, E., & Cosenz, F. (2021). Designing a multi-sided platform business model assessment framework: A dynamic performance management perspective. *Systems Research and Behavioral Science*, 38(1), 93–107. <https://doi.org/10.1002/sres.2665>
- [8] Rangaswamy, A., Moch, N., Felten, C., Van Bruggen, G., Wieringa, J. E., & Wirtz, J. (2020). The role of marketing in digital business platforms. *Journal of Interactive Marketing*, 51(1), 72–90. <https://doi.org/10.1016/j.intmar.2020.04.006>
- [9] Wibisono, T. (2026). Data extractivism and strategic value appropriation: Rethinking firm advantage in AI-centric SME ecosystems. *Manexia: Journal of Business, Management, and Creative Economy*, 2(1), 19–36. <https://doi.org/10.66203/manexia.02103>
- [10] Schreieck, M., Wiesche, M., & Krcmar, H. (2021). Capabilities for value co-creation and value capture in emergent platform ecosystems: A longitudinal case study of SAP's cloud platform. *Journal of Information Technology*, 36(4), 365–390. <https://doi.org/10.1177/02683962211023780>
- [11] Rietveld, J., Ploog, J. N., & Nieborg, D. B. (2020). The coevolution of platform dominance and governance strategies: Effects on complementor performance outcomes. *Academy of Management Discoveries*, 6(3), 488–519. <https://doi.org/10.5465/amd.2019.0064>
- [12] Saadatmand, F., Lindgren, R., & Schultze, U. (2019). Configurations of platform organizations: Implications for complementor engagement. *Research Policy*, 48(8), 103770. <https://doi.org/10.1016/j.respol.2019.03.015>
- [13] Zhang, M. Y., & Williamson, P. (2021). The emergence of multiplatform ecosystems: Insights from China's mobile payments system in overcoming bottlenecks to reach the mass market. *Technological Forecasting and Social Change*, 173, 121128. <https://doi.org/10.1016/j.techfore.2021.121128>
- [14] Haki, K., Blaschke, M., Aier, S., Winter, R., & Tilson, D. (2024). Dynamic capabilities for transitioning from product platform ecosystem to innovation platform ecosystem. *European Journal of Information Systems*, 33(2), 181–199. <https://doi.org/10.1080/0960085X.2022.2136542>
- [15] Lew, Y. K., Kim, J., & Khan, Z. (2019). Technological adaptation to a platform and dependence: Value co-creation through partnerships. *Asian Journal of Technology Innovation*, 27(1), 71–89. <https://doi.org/10.1080/19761597.2019.1587303>

- [16] Blackburn, O., Ritala, P., & Keränen, J. (2023). Digital platforms for the circular economy: Exploring meta-organizational orchestration mechanisms. *Organization & Environment*, 36(2), 253–281. <https://doi.org/10.1177/10860266221130717>
- [17] Acs, Z. J., Song, A. K., Szerb, L., Audretsch, D. B., & Komlósi, É. (2021). The evolution of the global digital platform economy: 1971–2021. *Small Business Economics*, 57(4), 1629–1659. <https://doi.org/10.1007/s11187-021-00561-x>
- [18] Abdelkafi, N., Raasch, C., Roth, A., & Srinivasan, R. (2019). Multi-sided platforms. *Electronic Markets*, 29(4), 553–559. <https://doi.org/10.1007/s12525-019-00385-4>
- [19] Cennamo, C., & Karanovic, J. (2026). Are social media platforms a threat to democracy? An ecosystem governance perspective. *Journal of Management Studies*. Advance online publication. <https://doi.org/10.1111/joms.70044>
- [20] Gupta, R., Mejia, C., Sadreghazi, S., Sano, Y., Muchangos, L. S., Sekiguchi, T., Nakamura, H., & Kajikawa, Y. (2024). Traders as ecosystem orchestrators for sustainable foods supply chain transformation. *Business Strategy and the Environment*, 33(5), 4024–4038. <https://doi.org/10.1002/bse.3695>
- [21] Ferrigno, G., Martin, X., & Dagnino, G. B. (2024). Explaining the interplay of value creation and value appropriation in strategic alliances: A developmental perspective. *International Journal of Management Reviews*, 26(2), 232–253. <https://doi.org/10.1111/ijmr.12351>
- [22] Kazan, E., Tan, C.-W., Lim, E. T. K., Sørensen, C., & Damsgaard, J. (2018). Disentangling digital platform competition: The case of UK mobile payment platforms. *Journal of Management Information Systems*, 35(1), 180–219. <https://doi.org/10.1080/07421222.2018.1440772>
- [23] Chen, L., Tong, T. W., Tang, S., & Han, N. (2022). Governance and design of digital platforms: A review and future research directions on a meta-organization. *Journal of Management*, 48(1), 147–184. <https://doi.org/10.1177/01492063211045023>
- [24] Carlborg, P., Snyder, H., & Witell, L. (2024). How sustainable is the sharing business model? Toward a conceptual framework. *R&D Management*, 54(5), 1131–1144. <https://doi.org/10.1111/radm.12648>
- [25] Hänninen, M., Smedlund, A., & Mitronen, L. (2018). Digitalization in retailing: Multi-sided platforms as drivers of industry transformation. *Baltic Journal of Management*, 13(2), 152–168. <https://doi.org/10.1108/BJM-04-2017-0109>
- [26] Wirtz, J., So, K. K. F., Mody, M. A., Liu, S. Q., & Chun, H. H. (2019). Platforms in the peer-to-peer sharing economy. *Journal of Service Management*, 30(4), 452–483. <https://doi.org/10.1108/JOSM-11-2018-0369>
- [27] Teece, D. J., Pundziene, A., Heaton, S., & Vadi, M. (2022). Managing multi-sided platforms: Platform origins and go-to-market strategy. *California Management Review*, 64(4), 5–19. <https://doi.org/10.1177/00081256221109961>
- [28] Sanasi, S., Ghezzi, A., Cavallo, A., & Rangone, A. (2020). Making sense of the sharing economy: A business model innovation perspective. *Technology Analysis & Strategic Management*, 32(8), 895–909. <https://doi.org/10.1080/09537325.2020.1719058>
- [29] Lashitew, A. A., van Tulder, R., & Muche, L. (2022). Social value creation in institutional voids: A business model perspective. *Business & Society*, 61(8), 1992–2037. <https://doi.org/10.1177/0007650320982283>
- [30] Mukhopadhyay, S., & Bouwman, H. (2019). Orchestration and governance in digital platform ecosystems: A literature review and trends. *Digital Policy, Regulation and Governance*, 21(4), 329–351. <https://doi.org/10.1108/DPRG-11-2018-0067>
- [31] Gandia, R., & Parmentier, G. (2017). Optimizing value creation and value capture with a digital multi-sided business model. *Strategic Change*, 26(4), 323–331. <https://doi.org/10.1002/jsc.2134>
- [32] Vieira, V. A., Dalmoro, M., Aguiar, E. C., & Ferreira, M. C. (2024). Navigating the digital frontier of marketing: The intersection of identity, consumption, and market dynamics in online communities. *BAR—Brazilian Administration Review*, 21(Suppl. 1), e250026. <https://doi.org/10.1590/1807-7692bar2024250026>
- [33] Perez Mengual, M., Danzinger, F., & Roth, A. (2024). Physical interaction platforms: A taxonomy of spaces for interactive value creation. *Creativity and Innovation Management*, 33(2), 127–138. <https://doi.org/10.1111/caim.12557>
- [34] Fürstenau, D., Klein, S., Vogel, A., & Auschra, C. (2021). Multi-sided platform and data-driven care research: A longitudinal case study on business model innovation for improving care in complex neurological diseases. *Electronic Markets*, 31(4), 811–828. <https://doi.org/10.1007/s12525-021-00461-8>
- [35] Tura, N., Kutvonen, A., & Ritala, P. (2018). Platform design framework: Conceptualisation and application. *Technology Analysis & Strategic Management*, 30(8), 881–894. <https://doi.org/10.1080/09537325.2017.1390220>

- [36] Veeraiah, V., Naga Ganesh, C., Bhavagna, L., Pradeep, S., Pandey, J. K., & Gupta, A. (2026). Digital transformation and leadership: Managing transition to a tech-driven business with big data. In I. Woungang, S. K. Gupta, S. Dhurandher, & M. Arora (Eds.), *Proceedings of the NIELIT's International Conference on Communication, Electronics and Digital Technologies: NICEDT 2025, Volume 2* (pp. 359–371). Springer. https://doi.org/10.1007/978-981-96-9935-3_23
- [37] Shukla, S. S., Bajpai, S., Veeraiah, V., O, T. K., Pandey, J. K., & Nayudu, M. Y. (2024). Social media-driven e-commerce growth through advanced technologies. In *2024 IEEE 11th Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON)* (pp. 1–6). IEEE. <https://doi.org/10.1109/UPCON62832.2024.10983796>