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UCAISM as the Third Architecture
Beyond Smith and Marx

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Intelligent Capitalism

UCAISM as the Third Architecture Beyond Smith and Marx

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Abstract

Platform capitalism raises analytical, political, and moral questions that neither economics nor sociology alone fully resolves. This paper argues that platform rent persists because redress arrives too slowly relative to the speed of extraction — a mechanism formalized here as the Extraction Gap. A minimal formal model shows that sustainable rent falls once an AI system negotiates on an individual's behalf *ex ante*, rather than contesting terms afterward. Building on the technofeudalism and digital-empires literatures, the paper develops the User-Centric AI Individual Sovereignty Model (UCAISM), combining individual ownership of data and reputation with cooperative governance of the verifying infrastructure. The argument is grounded in Kantian autonomy, Rousseauian publicness, and a Rawlsian distributive test, and evaluated against four precedents: India's UPI, Brazil's Pix, Estonia's X-Road, and Finland's basic-income experiment. UCAISM is offered as a candidate institutional architecture, not a complete equilibrium theory.

Keywords: Platform Capitalism; Technofeudalism; Digital Political Economy; Extraction Gap; AI Fiduciary; UCAISM.

JEL Classification: D63, Z13, L86, P16, O33.

1. Introduction

Platform capitalism confronts economic theory with an uncomfortable paradox. It appears to validate the Smithian and Marxian traditions simultaneously while exposing the structural limits of each. Smith's insight that market coordination can aggregate dispersed knowledge remains powerful, yet platform markets show how network effects, switching costs, data accumulation, and reputation lock-in can make contestability structurally weak. Marx's concern that ownership of the means of production enables surplus appropriation also returns, but the relevant means now include data infrastructures, algorithmic matching, identity and reputation systems, and privileged access to demand.

The result is not simply "more monopoly" or "more extraction." It is a new architecture of coordination. Platforms generate real value by reducing search, matching, payment, trust, and dispute costs. The central problem is that the coordination layer becomes privately enclosed. Once access, reputation, price discovery, and behavioral data are organized through a proprietary gate, coordination value and extraction rent become difficult to separate.

This paper develops Intelligent Capitalism, realized through UCAISM, as a proposed Third Architecture beyond the Smithian and Marxian alternatives. It does not claim that platform coordination has no value. It claims that coordination value need not imply proprietary control over the coordination infrastructure. UCAISM therefore seeks to preserve Smith's coordination insight without platform rent and Marx's distribution insight without collective ownership or central planning.

The paper makes four contributions. First, it introduces the Extraction Gap as a temporal-structural concept. Second, it formalizes UCASM and UCAISM as architectural propositions. Third, it explains why IDPE requires a new economic

ontology. Fourth, it offers a 3+1 normative justification for UCAISM as a model of economic authorship, public value return, and executable institutional design.

2. Literature Review and Conceptual Positioning

2.1 Critical accounts of platform capitalism

The argument builds on four major critical literatures. Zuboff’s account of surveillance capitalism identifies behavioral surplus as the raw material of prediction and behavioral modification. Srnicek’s platform capitalism maps how platforms extract and accumulate data across multiple platform types. Varoufakis’s technofeudalism thesis highlights the persistence of rent-like income streams in cloud and platform environments. Bradford’s digital empires framework analyzes the regulatory contest among major jurisdictions and the extraterritorial force of European digital regulation.

The paper also engages the mainstream economics of platforms and automation, rather than treating platform value creation as a pure extraction story. Rochet and Tirole formalize the coordination benefits that two-sided platforms can generate for otherwise unmatched participants, and Parker, Van Alstyne, and Choudary describe the network-effect dynamics through which platform coordination scales; UCAISM treats these as a genuine account of the coordination value that must be separated from monopoly toll, not as a rival diagnosis to be dismissed. On the labor side, Acemoglu and Restrepo show that automation can displace labor income shares even where it raises measured productivity, a distributional mechanism analogous to the one this paper locates in data, attention, and intent. Read together, these literatures motivate the Extraction Gap without requiring that platform coordination be treated as illegitimate in itself.

UCAISM accepts much of this diagnosis but shifts the center of analysis. The core problem is not only what platforms extract; it is the mismatch between how fast extraction occurs and how slowly individuals can understand, contest, exit, or share in the value created. This is the Extraction Gap. Zuboff asks what is turned into behavioral surplus. The Extraction Gap asks why redress arrives too late to discipline the architecture of capture.

2.2 Differentiation from adjacent frameworks

UCAISM should also be distinguished from reformist and cooperative alternatives. Stakeholder capitalism modifies corporate purpose but leaves ownership, coordination, and information architecture largely intact. Data trusts and data cooperatives offer genuine partial remedies, especially at the collective layer, but they do not by themselves supply an individual AI fiduciary capable of executing market choices on behalf of the person. Platform cooperativism and the digital solidarity economy share UCAISM’s interest in institutional alternatives, but they remain primarily governance models rather than complete architectures of individual and collective AI-mediated exchange.

The distinctive claim of UCAISM is architectural. It combines a collective learning layer (UCASM) with an individual fiduciary execution layer (UCAISM). The former allows data to stay under user custody while learning travels; the latter allows the individual to negotiate, accept, reject, and price through an AI agent bound to the user rather than to a platform.

Framework	Ownership structure	Coordination mechanism	Distribution principle	Complete architecture?
Stakeholder capitalism	Unchanged	Unchanged	Voluntary stakeholder balancing	No
Data trusts / cooperatives	Partial collective data governance	Partial	Depends on governance design	No
Platform cooperativism / digital solidarity economy	Cooperative or shared	Partial	Cooperative distribution	Partial
UCAISM	Individual data sovereignty through Sovereign Vault	UCAI + ASDE/AIDE	Agora Dividend and fiduciary execution	Yes, as a proposed architecture

Table 1. Structural comparison: UCAISM and adjacent frameworks.

3. Prior Architectures and the Platform Failure Mode

3.1 Smith: coordination without a durable answer to enclosure

Smith’s first architecture rests on market coordination. Price signals aggregate dispersed information more efficiently than a central planner can. The vulnerability is not the coordination insight itself; it is the assumption that competitive entry will discipline rent. In digital markets, scale, data, reputation, identity, and switching costs can turn coordination into enclosure. The market remains, but the door to the market is owned by a platform.

The central lesson is therefore not that Smith was wrong about coordination. It is that coordination can be privatized. Direct exchange can become platform exchange when access to buyers, sellers, ratings, payment, and dispute resolution is mediated by a proprietary infrastructure.

3.2 Marx: distribution without a durable answer to knowledge

Marx’s second architecture identifies the structural connection between ownership and surplus appropriation. That diagnosis remains highly relevant when data, behavioral traces, and reputation systems become productive assets. Yet collective ownership and central planning face a different failure mode: the knowledge problem. Dispersed local knowledge cannot be fully centralized without loss, delay, or distortion.

UCAISM preserves the distribution question without adopting central planning. It asks how surplus generated by collective intelligence can return to generators while coordination still relies on decentralized signals, user preference, and fiduciary execution.

3.3 Platform capitalism as a distorted synthesis

Platform capitalism combines the strengths and failures of both prior architectures. It uses markets for coordination but encloses the coordination layer. It validates the Marxian concern about surplus appropriation but shifts the relevant means of production from factories alone to data, algorithms, reputation, and access. It is a distorted synthesis: Smithian coordination is privatized; Marxian extraction is dematerialized.

The conceptual task is not to abolish coordination or deny that platforms create value. The task is to separate coordination value from monopoly control over coordination infrastructure.

Dimension	Smith	Marx	Platform capitalism
Coordination mechanism	Market price signals	Central planning	Proprietary algorithmic coordination
Core strength	Dispersed knowledge and price discovery	Surplus appropriation becomes visible	Search, matching, payment, reputation, and trust are integrated
Failure mode	Vulnerable to monopoly when contestability fails	Vulnerable to information failure	Combines privatized coordination with dematerialized extraction
UCAISM response	Preserve coordination without owning the gate	Return surplus without central planning	Open the coordination layer and bind AI agents to users

Table 2. Prior architectures and the platform failure mode.

4. Formal Framework: UCASM, UCAISM, and Intelligent Capitalism

4.1 The three propositions

The framework is defined by three formal propositions:

- Proposition 1: UCASM = UCAI + ASDE. User-Centric AI Sharing Model = User-Centric AI + AI Sharing Direct Exchange.
- Proposition 2: UCAISM = UCAI + AIDE. User-Centric AI Individual Sovereignty Model = User-Centric AI + AI Individual Direct Exchange.
- Proposition 3: UCAISM = Intelligent Capitalism = The Third Architecture. Technical architecture, economic system, and historical position are treated as one integrated framework.

These propositions are definitional identities that specify architectural composition; they are not mathematical models in the formal-economics sense of an optimization problem, equilibrium concept, or estimable specification. Their purpose is to fix the vocabulary and component structure of the framework precisely enough that each element (UCAI, ASDE, AIDE) can later be operationalized, certified, and empirically tested, in the manner sketched in Section 9. Formal modeling of the equilibrium properties of AIDE-mediated markets, and econometric testing of the Extraction Gap, are identified here as the framework’s principal open research agenda rather than as completed contributions of this paper. Appendix A develops a first, minimal formal model of the Extraction Gap and of AIDE’s effect on sustainable extraction rent, as an initial step on that agenda.

4.2 UCAI: the fiduciary foundation

UCAI designates an AI system whose optimization target is the sovereign interest of the individual user rather than platform revenue. The key distinction is fiduciary architecture. A UCAI agent may search, recommend, bargain, and execute, but its loyalty is bound to the person it represents. If it optimizes against the individual for platform revenue, it fails as UCAI.

This does not require the claim that a fully mature UCAI already exists. It requires the more modest and defensible claim that AI fiduciary duties, transparency obligations, auditability, and purpose-bound optimization can be specified and certified in stages.

4.3 ASDE and the collective dimension

ASDE enables collective intelligence without centralizing individual raw data. Through federated learning and reciprocity protocols, participants can contribute to shared model improvement while preserving data custody. Its normative function is the Agora Dividend: the return of surplus generated by collective intelligence to the generators of that surplus.

This is not collective ownership in the Marxian sense. It is a rule of publicness: value jointly produced through a shared protocol should not be captured exclusively by a private gatekeeper.

4.4 AIDE and the individual dimension

AIDE executes individual sovereignty at the level of market transactions. It allows the person’s authorized AI agent to search, compare, negotiate, accept, reject, and set constraints under fiduciary obligations. It does not eliminate all platforms. It structurally weakens the platform’s default position as the intermediary that controls access, attention, reputation, and pricing.

AIDE therefore closes the Extraction Gap at the transaction layer: it shifts contestation from delayed redress after extraction to ex ante representation at the point where the exchange is shaped.

4.5 UCAISM as a complete economic ideology

An economic ideology is complete only if it specifies ownership, coordination, distribution, motivation, extraction control, and the agent of coordination. UCAISM’s distinctive claim is that the coordination agent changes: neither market-as-human-institution nor state-as-human-institution remains sufficient in the IDPE. The new coordination agent is an AI fiduciary bound to the user.

Dimension	Capitalism	Communism	Socialism	UCAISM
Ownership structure	Private capital	Common ownership	Collective / state	Individual data sovereignty / Sovereign Vault
Coordination mechanism	Market price signals	State central planning	Mixed market + state	UCAI fiduciary protocol / AI agent
Distribution principle	Returns to capital	According to need	Contribution + need	Value generation / Agora Dividend
Motivational logic	Profit maximization	Equality	Social welfare	Sovereignty maximization
Extraction structure	Competition limits rent conditionally	Designed to remove owner extraction	Partially mitigates extraction	Architecturally constrained through AIDE
Coordination agent	Human institution: market	Human institution: state	Human institution: mixed	AI fiduciary: UCAI

Table 3. UCAISM as a complete economic ideology.

5. The Ontological Frontier: Why a New -ism Is Necessary

5.1 Offline observation and the limits of prior -isms

Economic theories are bounded by the world their founders can observe. Smith observed physical production, tangible goods, face-to-face markets, and commercial exchange. Marx observed factories, wage labor, machines, railways, and industrial ownership. Socialist political economy emerged from the same offline world. Their categories were powerful because they fit the economy they could see.

The IDPE changes the object of observation. The offline and online are no longer separate domains. A single ride, purchase, message, search, or delivery can generate physical labor, data exhaust, behavioral prediction, dynamic pricing, reputational signals, and future-intent inference at the same time. Prior -isms can describe the physical labor. They cannot fully theorize the data, attention, and intent layers because those layers did not exist as economic realities when the theories were formed.

5.2 IDPE: Integration of Digital and Physical Economies

IDPE means the Integration of Digital and Physical Economies. It is not merely “online plus offline.” It is a condition in which physical action continuously produces digital value and digital systems continuously shape physical action. This is why the term is analytically preferable to narrower terms such as phygital commerce or omnichannel integration.

In IDPE, platforms do not merely host transactions. They observe, predict, rank, price, and nudge transactions. The economic environment becomes a programmable coordination layer.

5.3 Three new value categories

IDPE reveals three value categories that are not adequately captured by the land-capital-labor triad: data, attention, and intent.

- Data as a means of production: data is not merely a record. It becomes an input into prediction, coordination, pricing, and automation. Sovereign Vault shifts custody and usage conditions back toward the individual.
- Attention as a form of labor: attention powers advertising, recommendation, and behavioral-prediction systems. AIDE shifts the optimization target from platform engagement to the person's attentional interest.
- Intent as a form of decision capital: intent is the directionality of future action. Intent-Kernel and Dignity Index protect the user's capacity to deliberate, refuse, and choose before platform optimization captures the decision space.

5.4 The ontological proposition

- f(Offline world) -> Capitalism / Communism / Socialism.
- f(Offline + Online world) -> UCAISM = Intelligent Capitalism.

A new value form requires a new economic architecture. This is the ontological basis for the claim that UCAISM is not simply a policy program, but a new -ism for the IDPE.

Dimension	Prior -isms	UCAISM in the IDPE
World observed	Physical labor, tangible assets, face-to-face exchange	Data labor + physical labor; intangible assets; algorithmic exchange
Value sources	Land, capital, labor	Data, attention, intent, plus land, capital, and labor
Means of production	Factories, land, machinery	Sovereign Vault, data infrastructure, algorithms, reputation systems
Extraction mechanisms	Wage suppression, rent, capital appropriation	Behavioral surplus, algorithmic pricing, attention capture, intent shaping
Coordination technology	Human institutions: market, state, planning	AI fiduciary across digital and physical layers

Table 4. Ontological frontier: what prior -isms observe and what UCAISM adds.

6. Normative Foundations: A 3+1 Justification

The normative case for UCAISM is not based on efficiency alone. It has a 3+1 structure: three core principles and one supplementary distributive test.

6.1 Kantian freedom: economic authorship

The Kantian argument concerns authorship. The individual should not be treated merely as a means to another's objective function. In platform capitalism, users often choose only within menus designed by systems whose objective functions are not their own. UCAISM defines freedom not as the presence of many options, but as the capacity to author the conditions of one's economic participation.

The principle of freedom is therefore: individuals must be able to set the conditions of their data, reputation, attention, intent, and exchange. Sovereign Vault, AIDE, Intent-Kernel, and Dignity Index are the architectural counterparts of this principle.

6.2 Rousseauian publicness: the return of jointly created value

The Rousseauian argument concerns publicness. Data, reputation, trust, network effects, and collective intelligence are not produced by the platform alone. They emerge from many participants acting within a shared order. If a shared order produces value, that value should not be unilaterally captured by a private gatekeeper.

The principle of publicness is therefore: jointly generated value should return to those who helped generate it. The Agora Dividend expresses this principle without requiring collective ownership.

6.3 Institutional economics: execution through transaction-cost reversal

The institutional-economic argument concerns execution. Rights that are expensive to exercise remain largely theoretical. Platform capitalism works partly because platforms own the low-cost layer of matching, payment, reputation, data custody, and dispute handling. Individuals face high costs to contest, exit, or bargain.

The principle of execution is therefore: freedom and publicness require the transaction-cost structure itself to be changed. UCAISM lowers the costs of data custody, market search, negotiation, reputation portability, and collective intelligence generation.

6.4 Rawlsian supplementation: distributive justification

Rawls should not replace Rousseau as the foundation of publicness. Rather, Rawls supplies a supplementary distributive test. If jointly generated value is returned through an Agora Dividend, the distribution must be justifiable to the least advantaged participants in the system.

The 3+1 structure is therefore: Kant provides freedom, Rousseau provides publicness, institutional economics provides execution, and Rawls provides the distributive test.

Layer	Source	Principle	Role in UCAISM
1	Kant	Principle of freedom	Economic authorship: the person is not a resource for another
2	Rousseau	Principle of publicness	objective function Jointly generated value should not be captured by private gatekeepers alone
3	Institutional economics	Principle of execution	Rights require a transaction-cost structure that makes them usable
+1	Rawls	Distributive test	Public value return must be justifiable to the least advantaged

Table 5. The 3+1 normative structure of UCAISM.

7. Empirical Precedents: Component Evidence, Not Completed Implementation

UCAISM as a complete integrated system has not yet been implemented. The relevant empirical question is more modest: have its component conditions already operated at scale? The evidence suggests that they have. The following cases should be read as partial precedents for open coordination, low-cost infrastructure, distributed data exchange, and unconditional value return, not as proof that the full architecture already exists.

7.1 India UPI: open-protocol coordination at scale

India’s Unified Payments Interface (UPI) demonstrates that open-protocol coordination can reach national scale. Official NPCI product statistics report 23.2 billion UPI transactions in May 2026 alone, while Indian public data reported roughly 172 billion transactions in 2024. This scale does not prove UCAISM, but it shows that payment coordination need not be organized through a single proprietary gate.

UPI’s limitation is equally important. It does not by itself create a Sovereign Vault, an AI fiduciary, or an Agora Dividend. It demonstrates the open-coordination component.

7.2 Brazil Pix: low-cost public-interest coordination

Brazil’s Pix, launched by Banco Central do Brasil in 2020, shows how public-interest instant-payment infrastructure can reduce coordination costs. The central bank reported that Pix reached nearly 170 million users by its fifth year and that transactions totaled BRL 11 trillion in 2024. BIS analysis also reports average merchant costs of about 0.22 percent for Pix payments, compared with about 2.2 percent for credit cards in Brazil.

Pix is not UCAISM. It does not supply an AI fiduciary or full individual data custody. It does, however, weaken the claim that high intermediary tolls are the natural price of coordination.

7.3 Estonia X-Road: distributed data exchange

Estonia’s X-Road demonstrates that data exchange can be organized through a distributed interoperability layer rather than a central database. Official e-Estonia materials describe X-Road as an interoperability service that saves Estonia substantial administrative time annually; X-Road and related documentation emphasize secure, standardized exchange among distributed systems.

For UCAISM, X-Road is best described as a partial analogue of the Sovereign Vault principle: it shows that interoperability and distributed custody can coexist, while stopping short of full individual ownership over all generated data.

7.4 Finland’s basic-income experiment: motivation under unconditional transfer

Finland’s basic-income experiment (2017-2018) provided EUR 560 per month to 2,000 randomly selected unemployed persons. Final results reported small employment effects, better perceived economic security, and improved mental wellbeing. Government and Kela communications describe roughly six additional employment days during the reference period.

The experiment is not a direct precedent for the Agora Dividend, because its funding was redistributive rather than generative. Its relevance is narrower but useful: it weakens the objection that unconditional transfers necessarily erode motivation.

Precedent	UCAISM component	What it demonstrates	Not yet implemented
India UPI	ASDE / open coordination	National-scale open payment coordination; 23.2B monthly transactions in May 2026	Data custody; AIDE; Agora Dividend
Brazil Pix	ASDE + low-cost coordination	Public-interest payment rail; 0.22% merchant cost benchmark; nearly 170M users by year five	Full Sovereign Vault; AIDE; explicit Agora Dividend
Estonia X-Road	Sovereign Vault analogue	Distributed interoperability and data exchange without a single super-database	AI fiduciary; individual vault layer; Agora Dividend
Finland basic income	Agora Dividend proxy	Unconditional transfer did not destroy motivation and improved wellbeing	Generative funding; UCASM linkage; AIDE

Table 6. Empirical precedents and their limits.

8. Objections and Responses

8.1 This is regulated capitalism, not a new architecture

This objection misidentifies the level of intervention. Regulation modifies conduct within an existing structure. UCAISM changes the default intermediary by placing AIDE between the individual and the market. The platform’s capacity for rent extraction is therefore structurally weakened rather than merely regulated after the fact.

8.2 Collective action will not materialize against entrenched networks

The objection treats platform exit as a Prisoner’s Dilemma in which defection dominates. But UPI and Pix suggest a different structure. With institutional support, common standards, and interoperable rails, open protocols can create an Assurance Game. The issue is not heroic exit by isolated users; it is the creation of enough trust and critical mass that participation becomes self-reinforcing.

After critical mass, each new participant increases network value, lowers perceived risk, strengthens merchant and institutional adoption, and draws additional participants. The strategic problem shifts from exit courage to assurance structure.

8.3 UCAISM is a technical specification, not an ideology

A technical specification can implement an ideology without exhausting it. UCAISM specifies ownership, coordination, distribution, motivation, extraction control, and coordination agency. That is why it is presented as an economic architecture, not as a standalone application or compliance regime.

8.4 UCAI does not yet exist at the required level

This objection is partly correct. Fully specified UCAI remains to be built. The argument does not depend on current existence; it depends on architectural possibility and staged implementation. AI fiduciary certification, transparency, auditability, and purpose-bound optimization can be specified progressively. Apple’s ATT and the EU AI Act show that system-level obligations can alter the conditions under which digital systems operate, even when they do not yet amount to UCAI.

8.5 The Extraction Gap may be welfare-improving coordination surplus

This is the strongest objection. Rochet and Tirole show that platforms can generate real welfare gains by coordinating two-sided markets. UCAISM accepts that premise. The response is to distinguish coordination value from monopoly toll. UPI, Pix, and X-Road show that key layers of coordination can operate through open, low-cost, or distributed infrastructure. The problem is not coordination. The problem is proprietary ownership of the coordination layer.

9. Implementation Conditions and Sequencing

UCAISM is not a single product launch. It is a path-dependent institutional transition. North's institutional economics implies that sequence matters. Infrastructure must precede fiduciary obligation, fiduciary obligation must precede large-scale individual execution, and executable sovereignty must precede durable distribution.

- Step 1: Open-protocol coordination infrastructure. UPI and Pix show the role of open rails and public-interest protocols in lowering coordination tolls.
- Step 2: Sovereign Vault deployment. Distributed and auditable data-custody systems move control of data conditions toward individuals.
- Step 3: UCAI certification standards. AI agents must be certified for fiduciary duty, transparency, auditability, and non-optimization against the user's interests.
- Step 4: AIDE activation. Fiduciary agents execute search, negotiation, acceptance, rejection, and pricing constraints on behalf of individuals.
- Step 5: Agora Dividend distribution. Surplus generated through collective intelligence returns to contributors as jointly created value.

This sequence matters. Infrastructure without fiduciary standards can reproduce platform capture. Fiduciary standards without open infrastructure cannot reach scale. Distribution without executable sovereignty remains a promise rather than an institutional condition.

10. Conclusion

This paper has argued that Intelligent Capitalism, formalized through $UCASM = UCAI + ASDE$ and $UCAISM = UCAI + AIDE$, constitutes a proposed Third Architecture beyond Smith and Marx. It preserves Smith's coordination insight without allowing the coordination layer to become a private gate. It preserves Marx's distribution question without relying on collective ownership or central planning. In this sense, UCAISM is best read as an *Aufhebung*: preservation and overcoming, not eclectic compromise.

The paper's contribution is conceptual, formal, ontological, and normative. Conceptually, the Extraction Gap explains why platform capture remains effective even when regulation exists. Formally, UCASM and UCAISM specify collective and individual layers of user-centric AI exchange. Ontologically, IDPE explains why data, attention, and intent require new categories. Normatively, the 3+1 structure anchors UCAISM in freedom, publicness, execution, and distributive justification.

The empirical precedents do not prove that UCAISM has arrived. They show something narrower and more important: its components are not imaginary. Open coordination, low-cost public rails, distributed data exchange, and unconditional transfer effects have all operated at scale. The remaining task is integration under a user-centric AI fiduciary architecture.

Three limitations should be stated plainly. First, the framework's core architecture is presented at the level of definitional formalization; Appendix A provides a first, minimal formal model of the Extraction Gap and of how an AI fiduciary changes sustainable extraction rent, but a full equilibrium characterization of AIDE-mediated markets under competing fiduciary providers is left for future work. Second, the empirical discussion in Section 7 establishes component plausibility, not causal identification; none of the four cases was designed to test UCAISM, and each is used only to show that a structural precondition has operated at scale elsewhere. Third, the paper's normative architecture inherits the standard difficulties of any Kantian-Rousseauian synthesis, including the question of how fiduciary AI agents should adjudicate conflicts between an individual's stated preferences and their long-run interests; this question is acknowledged but not resolved here.

IDPE has changed the conditions under which economic life is conducted. It has not changed the human interest in conducting that life with authorship and dignity. The final claim of Intelligent Capitalism is simple: the individual should stand before the market not as a resource to be optimized, but as an author of economic life.

The Four Formal Propositions

- UCASM = UCAI + ASDE.
- UCAISM = UCAI + AIDE.
- UCAISM = Intelligent Capitalism = The Third Architecture.
- $f(\text{Offline} + \text{Online world}) \rightarrow \text{UCAISM}$.

Appendix A. A Minimal Formal Model of the Extraction Gap

This appendix formalizes the informal claim, developed in Sections 2 and 4, that platform extraction rent is bounded not by the mere availability of redress but by how quickly redress becomes credible. It is offered as a first, minimal treatment rather than a complete equilibrium model; its scope and limits are stated in A.5.

A.1 Setup

Consider a single platform-mediated transaction market with two parties: a platform P and an individual i . In each period, a match generates verifiable surplus $S > 0$. The platform posts a take rate $\theta \in [0, 1]$, retaining θS and passing $(1-\theta)S$ to the individual. The individual can contest a take rate she judges excessive through a redress channel (dispute resolution, regulator, or litigation); contestation succeeds with probability $p \in (0,1)$ and, if successful, restores a share $L(\theta)$ of the excess extracted, where L is increasing and $L(0) = 0$. Redress arrives with delay $\tau \geq 0$ periods, and both parties discount future payoffs at rate $\delta \in (0,1)$. Contesting costs the individual $c > 0$.

A.2 The individual's contestation decision

The individual contests if and only if the discounted expected benefit of contestation exceeds its cost: $\delta^\tau \cdot p \cdot L(\theta) \geq c$. Define $\varphi(\tau)$ as the smallest take rate at which this condition binds: $\varphi(\tau) = L^{-1}(c / (\delta^\tau p))$. Because $\delta < 1$, δ^τ is strictly decreasing in τ , so the right-hand side is strictly increasing in τ , and therefore $\varphi(\tau)$ is strictly increasing in τ (given L increasing): $\partial\varphi/\partial\tau > 0$.

A.3 The platform's optimal extraction rent

The platform sets θ to maximize expected profit θS , subject to $\theta \leq \varphi(\tau)$: setting θ above $\varphi(\tau)$ triggers contestation, which the platform prefers to avoid whenever the expected penalty from a successful contest exceeds the marginal rent gained from breaching $\varphi(\tau)$. Under this standard assumption, the platform's optimal take rate is $\theta^*(\tau) = \varphi(\tau)$.

Proposition 1 (Extraction Gap comparative statics). The platform's sustainable take rate $\theta^*(\tau)$ is strictly increasing in the redress delay τ : $\partial\theta^*(\tau)/\partial\tau > 0$.

Proof. Immediate from $\theta^*(\tau) = \varphi(\tau) = L^{-1}(c/(\delta^\tau p))$ and $\partial\varphi/\partial\tau > 0$ shown above. ■

This formalizes the paper's central informal claim: platform rent is bounded not by the mere existence of redress, but by how quickly redress becomes credible. The Extraction Gap, defined informally in Section 2 as the asymmetry between the real-time speed of value capture and the delayed speed of individual redress, corresponds formally to τ itself; Proposition 1 shows why a positive Extraction Gap is sufficient, on its own, to sustain positive extraction rent even when contestation is available in principle.

A.4 The effect of an AI fiduciary (AIDE)

AIDE changes the timing structure of the game rather than merely its outcome. Instead of contesting θ after the fact, an AIDE agent negotiates or screens the terms of exchange ex ante, on the individual's behalf, before the transaction is executed. Formally, this is equivalent to setting the effective delay to $\tau_{\text{AIDE}} \approx 0$: the individual's fiduciary-represented bargaining position is exercised at the same time as the platform sets θ , rather than after S has already been captured.

Substituting $\tau = 0$ into $\varphi(\tau)$ gives the AIDE-mediated ceiling $\theta_{\text{AIDE}} = L^{-1}(c/p)$, which is strictly lower than $\theta^*(\tau)$ for any $\tau > 0$, since φ is strictly increasing in τ . Under AIDE, the sustainable take rate falls to $\theta_{\text{AIDE}} < \theta^*(\tau)$, and the platform's

foregone extraction per transaction, $(\theta^*(\tau) - \theta_{AIDE})S$, is exactly the quantity that Section 4 describes informally as the transaction-layer closure of the Extraction Gap.

A.5 Scope and limits of the model

This model is deliberately minimal. It treats p , c , δ , and $L(\cdot)$ as exogenous and identical across transactions; it abstracts from platform heterogeneity, multihoming, and the network effects central to two-sided market theory (Rochet and Tirole 2003); and it does not derive θ_{AIDE} from an explicit bargaining protocol (for example, generalized Nash bargaining) between the fiduciary agent and the platform. Extending the model to an explicit bargaining game, to heterogeneous redress technologies across jurisdictions, and to dynamic entry by competing AIDE providers is the natural next step and is left for future work. The purpose of the present model is narrower: to show that the qualitative claim motivating Sections 2 and 4 — that closing the temporal gap between extraction and redress structurally lowers sustainable rent — follows from a small number of explicit, falsifiable assumptions rather than from definitional stipulation alone.

Notes

1. The Extraction Gap is introduced to distinguish the temporal-structural dimension of platform value capture from Zuboff's focus on behavioral surplus and behavioral modification. Zuboff identifies what is extracted; the Extraction Gap identifies why individual redress is structurally delayed.
2. The platform commission range of 15-30 percent is used as an indicative cross-sector range rather than a legal finding. The point is not that every platform charges the same rate, but that coordination infrastructures can sustain above-marginal-cost tolls when access and reputation are enclosed.
3. *Aufhebung* is used in the philosophical sense of sublation: preservation and overcoming. UCAISM preserves Smithian coordination and Marxian distribution concerns while seeking to overcome monopoly enclosure and central planning failure.

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