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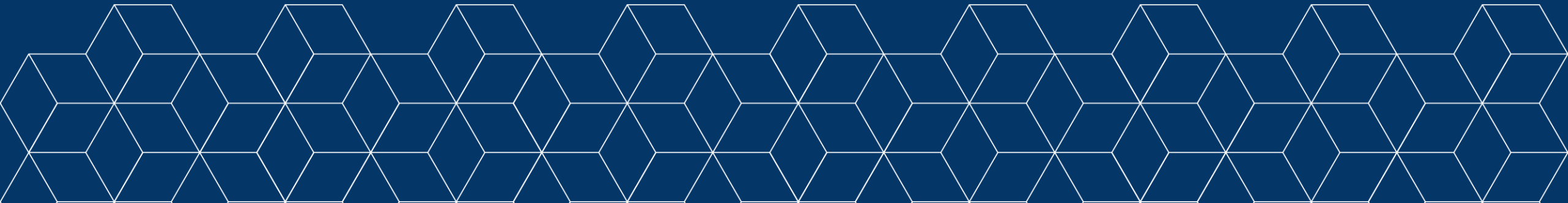
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*Ethnic self-organization, informal logistics,
and algorithmic management:
hybrid forms of platform work
among migrant riders.*

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WAGE REGIMES, TARIFFS AND ECONOMIC GROWTH

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Identity of the Digital Platform: Intermediary and Infrastructure

- **Dual Identity:** A digital intermediary and a productive infrastructure with its own managerial plan and digital assets.
- **Platform Stack:** A layered model enabling scalability and differentiation
- **Platform Stack Layers:**
 - **Technological Infrastructure** (cloud, servers, networks)
The lowest layer, that allows power and connectivity necessary to make everything else work. Without this layer, the platform does not exist.
 - **Core Functions** (algorithms, matching mechanism)
The layer that hosts the fundamental business logic. It consists of the algorithms, rules, and processes that define what the platform does and how it does it (e.g., the algorithm that connects a driver to a passenger in a ride-sharing app).
 - **Data Management & AI** (algorithmic management)
This layer is built on top of the core functions and the infrastructure. It manages the data generated by the platform (collection, storage, analysis, control of workforce) and uses Machine Learning/AI to optimize operations, predict trends, and personalize experiences (Algorithmic Management)
 - **Open Ecosystem** (APIs for external integration).
The farthest layer. It exposes the platform's functionalities (from data to core functions) through APIs (Application Programming Interface). This allows external developers, partners, and sometimes even competitors to build on top of platform, extending its value and creating a alive ecosystem.

Identity of the Digital Platform: Intermediary and Infrastructure

- **Examples:**

Uber adopts (multi-cloud strategy: Google, Oracle, AWS), Glovo (partner APIs – embedded restaurant website), AI for personalization and workforce monitoring).

- **Key Feature:**

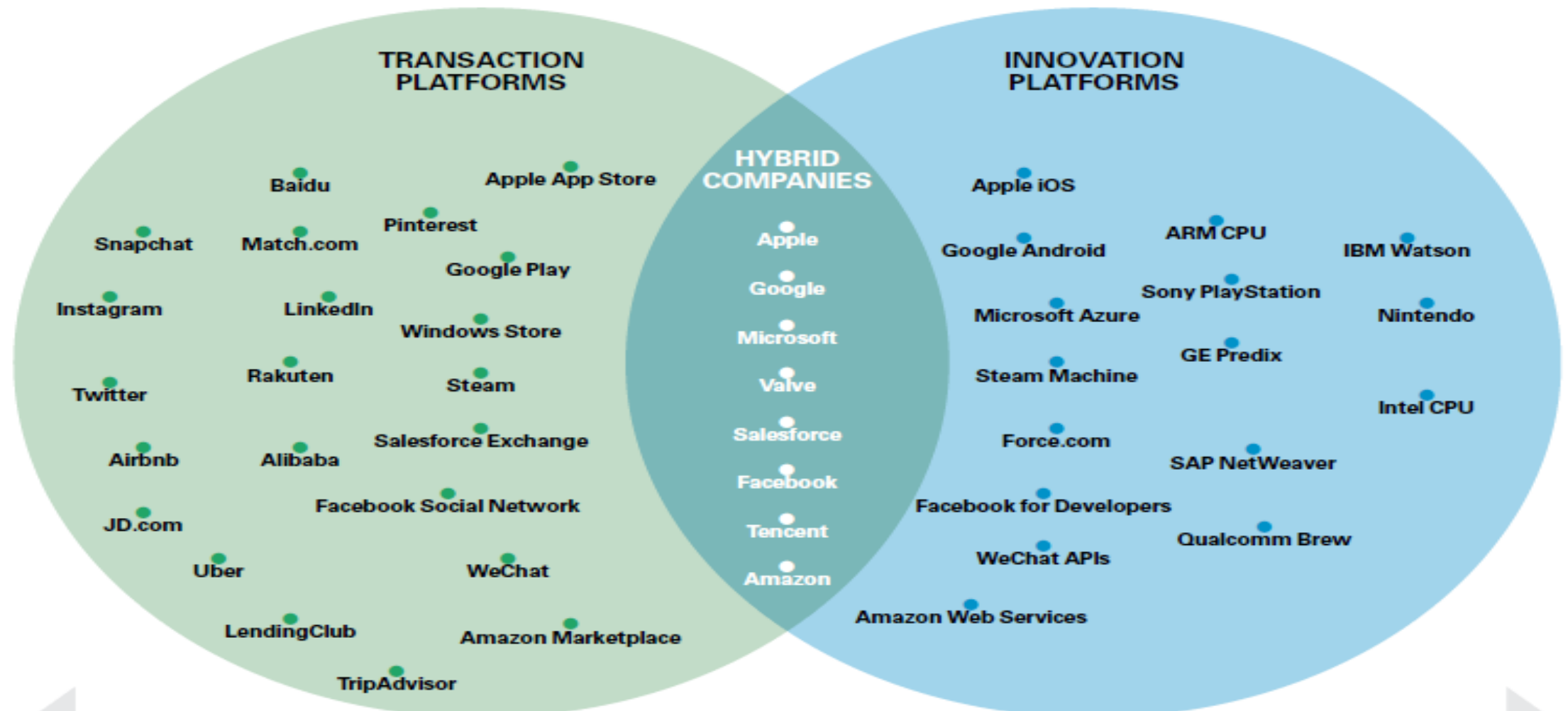
Scalability, modularity, and the direct integration of differentiated markets – with workforce as one side of these markets.

- **Implication:**

This dual identity makes regulation and relations with local markets and social actors highly complex - For strategic reasons, the platform deliberately obscures its infrastructural identity.

BASIC PLATFORM TYPES

In the quest for competitive advantage, companies are combining transaction and innovation platforms into a hybrid model.



Transactions

The platform serves as an intermediary for direct exchange or transactions, subject to network effects.

Innovations

The platform serves as a technological foundation upon which other firms develop complementary innovations.

Evoluzioni e integrazioni tra sistemi

4. API Ecosystem Layer
(The Gateway)
Open APIs for external integration

3. Data Intelligence Layer
(The Brain)
Data Management & AI

2. Core Logic Layer
(The Engine)
Algorithms & Matching

1. Infrastructure Layer
(The Foundation)
Servers, Networks, Cloud

Portal platform

A software platform used to create websites and web applications. Since the 1990s, portals have been widely used and have become an important digital resource.

Vortal platform

Vertical or niche web portals (short for "vertical portals") focus on specialized topics or on specific groups of users. They offer tools such as search engines, discussion lists, and specialized directories related to particular themes.

Algorithmic Management

Technological system that defines working conditions and manages rider activities through massive data collection (e.g., order allocation, shift scheduling).

Control Mechanisms

Algorithmic Management Functions in Platform Work

- **Reenforce:** Imposes operational rules and social standards.
- **Recommend:** Suggests optimal decisions to maximize efficiency.
- **Record:** Monitors and records worker activity through datafication.
- **Rating - Evaluate:** Assesses performance via rating
- **Replace:** Penalizes or substitutes underperforming riders.
- **Ranking - Incentivize:** Motivates through bonus structures and assignment priority, ranking systems.

Implications

- Continuous standardization & monitoring (GPS, scores).
- Reduced autonomy, aligned with employer planning.
- New challenges for industrial relations and worker protections.

Platform Capitalism and Migrant Labor

Regulatory responses in Spain and Italy have try to reshape platform firms, with increased reliance on socially fragile groups (migrants, residence permit holders) – **“the systematic large-scale activation of surplus labor”**

These workers are often less able to claim professional rights and thus more exposed to precarious conditions.

Comparative evidence highlights strong national differences in contractual arrangements and status recognition.

Estimated Number of Riders

| Platform | Country | Estimated Number of Riders (at least one task in the last month) | Percentage with Residence Permit | Type of Contract | Percentage Intermediaries |
|-----------|---------|--|----------------------------------|---|---------------------------|
| Glovo | Italy | ~15,000 | ~60% | self-employed worker | ~5-10% |
| Glovo | Spain | ~25,000 | ~75% | self-employed worker (under legal challenge) | ~5-10% |
| Deliveroo | Italy | ~13,000 | ~50% | self-employed worker | ~5-10% |
| Just Eat | Italy | ~4,000 | ~65% | Dependent part-time (fixed-term or permanent) | ~5% |
| Just Eat | Spain | ~18,000 | ~80% | Dependent (Law Rider 2021) | ~5% |
| Uber Eats | Spain | ~8,000 | ~70% | Dependent (Law Rider 2021) | ~5% |

Source: INAPP Report, 2025 IR 64

Informal Infrastructures and Collective Practices a fragmented patchwork

- Informal Infrastructures and Collective Practices
- Beneath apparent individualization of gig work, forms of collective self-organization emerge (Graham et al., 2017; Veen et al., 2020).
- Migrant riders create informal ethnic networks enabling:
 - Exchange of accounts, shifts, orders, **Work shift planning**.
 - Sharing of tools (phones, SIM cards, bicycles, delivery bags).
 - Oral transmission of instructions and access codes.
- Local migrant-owned shops (minimarkets, phone centers, gas stations) function as *"informal hubs"*, providing logistics, safety, and solidarity.
- International evidence (North America, Southeast Asia) shows hybrid governance systems: algorithmic management intertwined with community-based regulation (Woodcock & Graham, 2019; Vann Doorn et al., 2024).
- Risk: without institutionalized worker representation, these practices may drift toward digital gangmastering (*caporalato digitale*) (Altenried, 2022).

Findings

- Platform capitalism intersects with migrant networks that autonomously organize within regulatory gaps.
- Regulatory voids arise because platforms do not recognize themselves as employer infrastructures.
- Consequences of this regulatory absence: Lack of fixed work hours and physical collection centers, Weak industrial relations
- Migrants' self-organization emerges as a critical mechanism to coordinate work, ensure mutual support, and create hybrid logistics.
- Highlights the interplay between digital governance and community-based labor practices in shaping contemporary platform economies.
- Capacity to Respond to the Relentless Assignment and Realization of Tasks through Ethical Mutuality and Account Sharing
- In the absence of renewed forms of industrial relations, the system seems to self-represent and self-organize by mediating the logic of platforms through ethno-migratory dynamics, with the attendant risk of a form of 'digital gangmastering'—that is, a reconfiguration of traditional labor exploitation practices in the digital sphere."

Platform Capitalism

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graph TD; A[Platform Capitalism] --> B[Regulatory Gaps / Non-recognition as Employer]; B --> C[Migrant Networks]; C --> D[Hybrid Logistics & Self-Organization];
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**Regulatory Gaps /
Non-recognition as
Employer**

Migrant Networks

- Informal coordination
- Resource sharing
- Mutual support

**Hybrid Logistics &
Self-Organization**

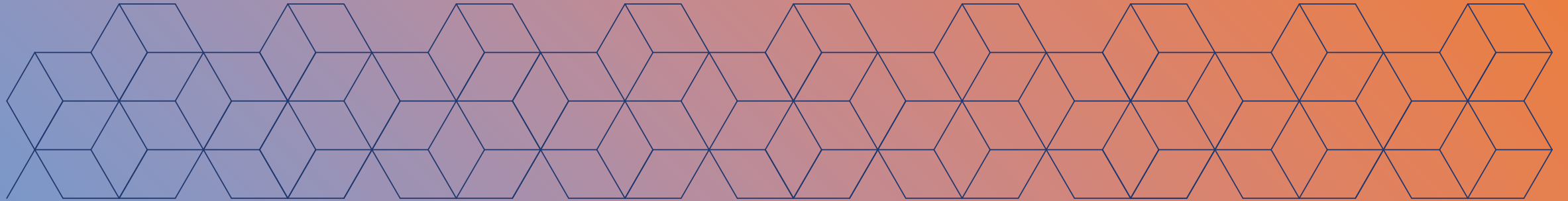
Migrant Self-Organization in Platform Economies in Streek Thelen Path dependency Theory



Conclusions

On the one hand, atomizing forces, increased by competitive mechanisms and difficulties in collective organization; on the other hand, small spaces—often ethnic-based—where social ties are rebuilt.

- However, these signals need a larger critical mass, broader research efforts, and trade union action on a large scale.



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