

A dirt path winds through a dense forest of tall, thin trees. A rustic wooden fence runs along the path, which is flanked by lush green foliage and undergrowth. The scene is captured in a natural, slightly overcast light, creating a serene and somewhat somber atmosphere.

Toward a MaaS Curriculum for Mobility Managers

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Why MaaS?

Tremendous Opportunity

- Best Metaphor
- Scalability
- Universality

Tremendous Risk

- *“A platform-less product will always be replaced by an equivalent platform-ized product”* — Steven Yegge

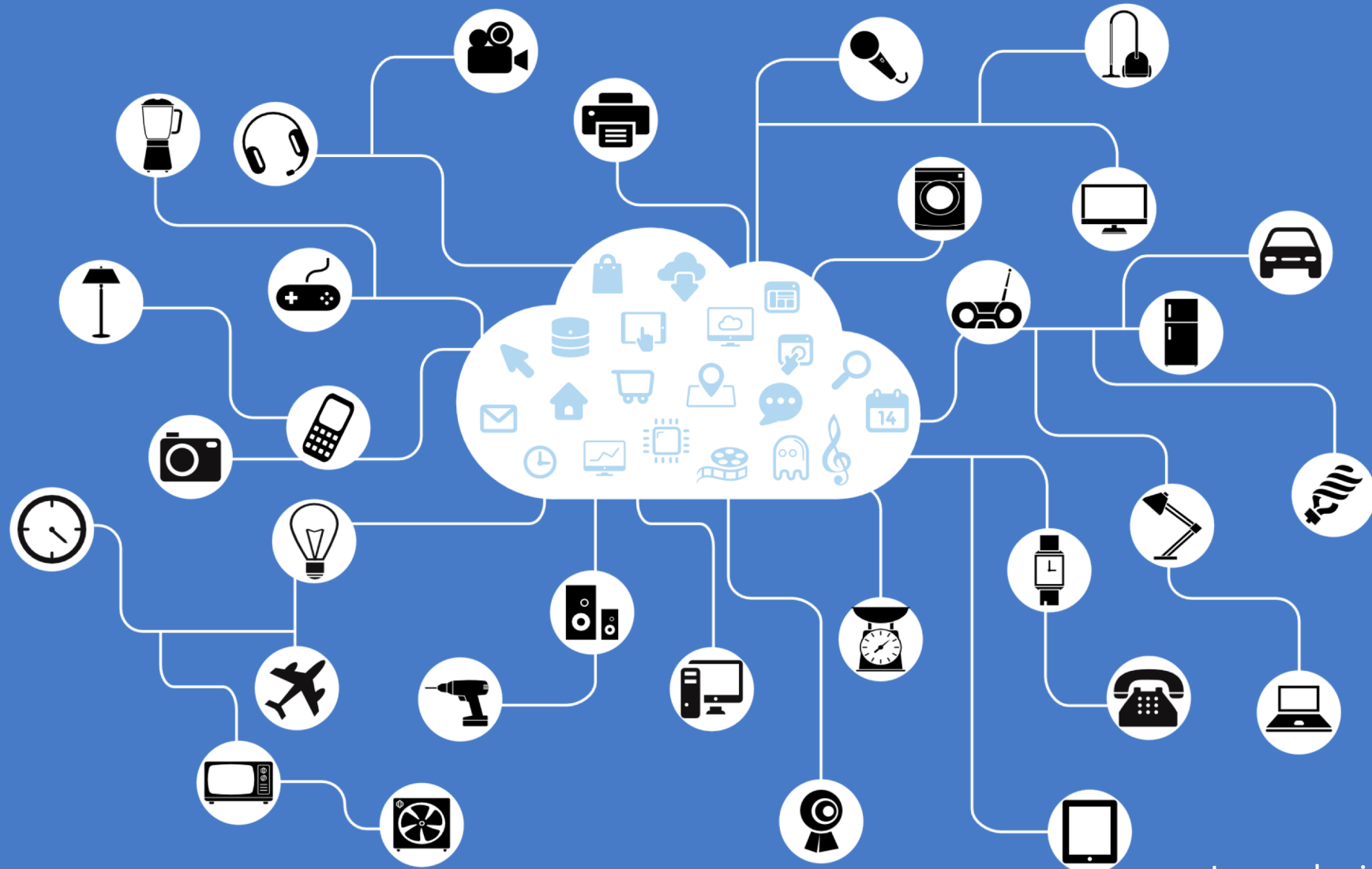
The Premise

- The tenets of Mobility as a Service should rise to be the central organizing principles guiding technology strategies across the entire public transport sector
- You can't organize effectively around what you don't understand

Core Element — The Platform



Core Element – The Platform



The Platform

- Technology that allows other things to be built upon it by other independent actors.
- Examples:
 - Facebook & Farmville
 - Amazon Web Services
- A sufficiently popular and scalable platform can result in an *ecosystem*

Platform Ingredient 1: **The API**

- Application Programming Interface
- AKA machine-to-machine communication
- The richer the API, the more *accessible* a system is
- No API = No ecosystem
- Example: GTFS real time
- What's your API?

Key dependencies

- Open Data Formats
- Terms of Use

Platform Ingredient 2: **Markets**

- Mobility management has been a response to market failure
- Markets are the technology for massive scalability
- One possible MaaS definition: *low-friction mobility marketplace*

3 Dimensions

- Macro
- Micro
- Meta

Market Dimension 1: **Macro**

- How do platforms work in the broader economy?
- Why are they receiving unparalleled investment while failing to become profitable?
- One possible answer: Platforms lean heavily towards winner-take-all scenarios & conflicts of interest
- Data as a the “new bacon” — opaque business models
- System tool: Anti-trust law
- On the history of anti-trust law: *Amazon’s Antitrust Paradox* by Lina M. Khan

Market Dimension 2: **Micro**

- How do we create an effective mobility marketplace?
- Who should operate the hub?
- Beware the “invisible hand” — markets are perfectly designed to achieve the outcomes they deliver
 - Best cost for consumer
 - Sufficient opportunities for profitability
 - System efficiency
 - Ability for new players to enter market

Market Dimension 3: **Meta**

- How do we create the market conditions to create the technology tools we need create and sustain MaaS markets?
- Risks
 - End-to-end (low accessibility) vendor business models
 - Low agency capacity to develop, procure, or integrate
 - Blurring of technology vendor/transportation operator lines
- Opportunities
 - New procurement models (pilots, P3s)
 - Open data
 - Open data formats
 - Open source software

How Big Can We Make This?

- Congestion mitigation
- Reclaiming of valuable urban space
- Reduced environmental impacts
- Improved health outcomes

“Choice”
riders

“Captive”
riders

- Equity
- Inclusion
- Human dignity
- Mobility as social determinant of health

Thank You



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