

The Digital Turn in Tourism

Historicizing digitalisation in tourism and the rise of 'platforms'

Università degli Studi di Trieste - Dipartimento di Studi Umanistici

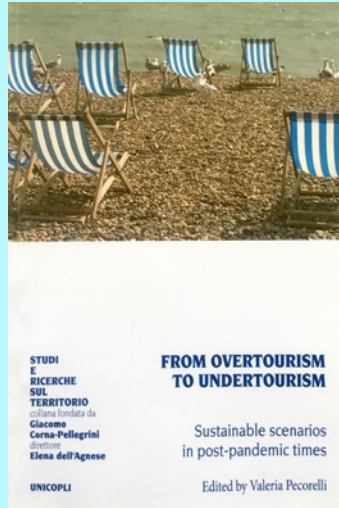
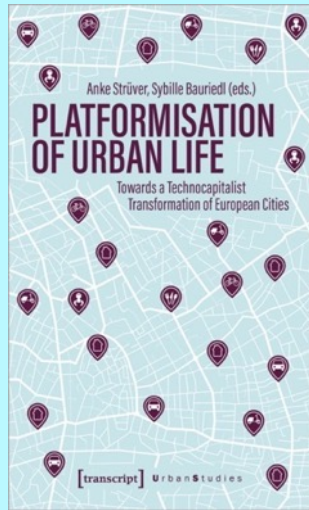
Geografia del Turismo

4 May 2023

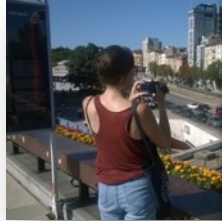
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The socio-spatial impacts of tourism-related platforms



www.sharing-spaces-caring-places.com



Cities say short-term holiday lettings market is contributing to soaring long-term rents

Lecture outline

1. Historicizing and conceptualizing the “**digital**” in tourism
 2. **Platform economies** in tourism
 3. **Airbnb** and its spatial impacts of the platform on different scales:
 - Airbnb **controversies and externalities**
 - **Case study of Airbnb in Sofia, Bulgaria**
 - The COVID-19 pandemic and future scenarios
 4. How to research the digital?
-

Conceptualizing and understanding the “digital” as:

- ▶ material (*ontics*)
- ▶ logics
- ▶ aesthetics
- ▶ discourse

The digital as 'material' (ontics)

“Digital technologies” refer to both the software and hardware that operate together whilst using digital coding.

Source: Deborah Lupton 2017, p. 7

- Hardware: physical computer devices such as PC's, tablets, smartphones and all the physical parts that make up such devices
- Software: computer coding programs that provide instructions for how computers should operate
- Code/coding: binary structures, of 0s and 1s, which can be stored, transferred, or manipulated at the level of numbers, or “digits”

The digital as ‘material’ (ontics)

Photos of:

A digger at a cobalt/copper mine in Kawama, Congo, Washington Post 2016

Google's data center campus in Eemshaven, Netherlands

E-waste. Source: Financial Times

“Less than 40% of all e-waste in the EU is recycled, the rest is unsorted. Recycling practices vary among EU countries. In 2017, Croatia recycled 81% of all electronic and electrical waste, while in Malta, the figure was 21%.”

“In 2017, the world generated 44.7 million metric tonnes of e-waste and only 20% was recycled properly.”
EU is trying to tackle e-waste in its move towards a more circular economy.

European Parliament, 2021

Conceptualizing the “digital” in tourism

The digital as logics

As digital technologies are adopted and embedded in everyday practices, work and leisure, they develop routines, order, and configure and structure everyday spaces, objects, practices etc.

- ▶ Automated Self-check-in
- ▶ Automated Baggage-Handling Systems
- ▶ Baggage transfer sorted by barcode

Digitalisation of security

Security and surveillance at airports rely on sophisticated databases and pattern-analysis programs.

Digital border control

Biometrics concern the measure of life, measuring the uniqueness of the 'bio' (body) and its identity.

Tourist bodies continuously interact with digital technologies in order to travel between one place and the other. In the process, these technologies do not only produce embodied data but also rely on big data storage servers.

Conceptualizing the “digital” in tourism

The digital as aesthetics

Digital technologies shape how objects, places, cultures, people are understood, experienced and valued.

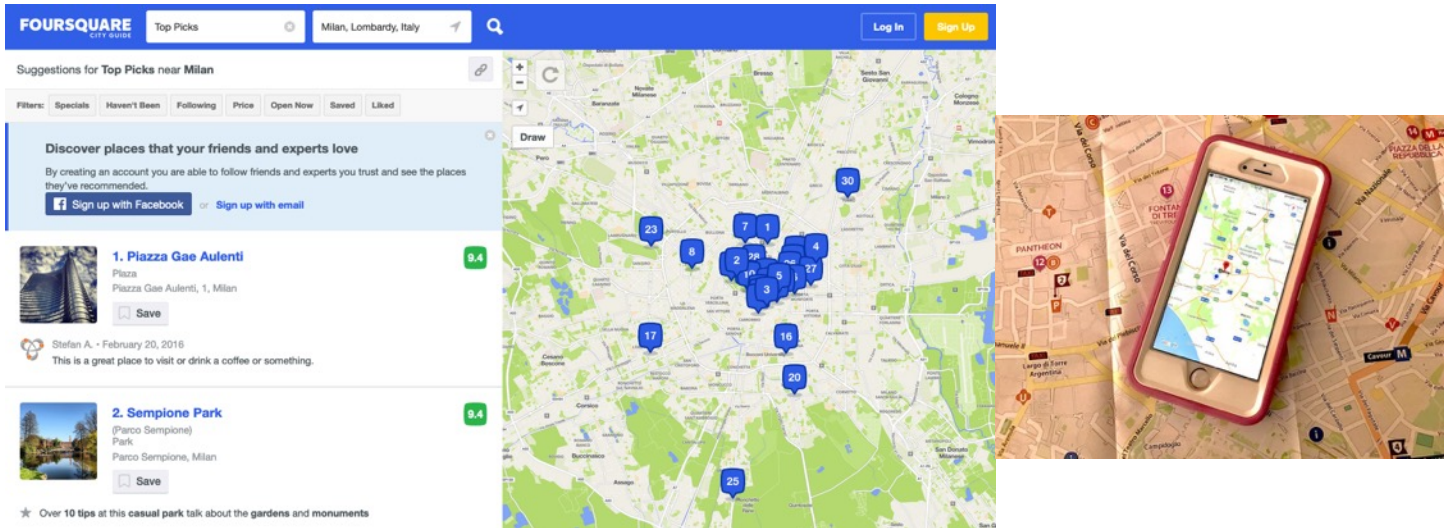
Turistus Digitalis

Social media has converted personal photography into one of the most popular means of online communication, self-expression, and identity formation, also in tourism.

Ek, Styvén & Foster, 2018 in Sigala 2019, p. 250

Software and code woven into tourist sites and experiences

Geocoded content and algorithms shape consumption patterns



Conceptualizing the “digital” in tourism

The digital as discourse

A group of statements about the digital that are taken-for-granted and have an effect on the world:

“The term ‘digital’ can easily be deployed vaguely, as a kind of discursive label or blanket that is thrown over a series of quite different things. In doing so, this label obfuscate more than it reveals about what are highly heterogeneous sets of objects, practices and processes”

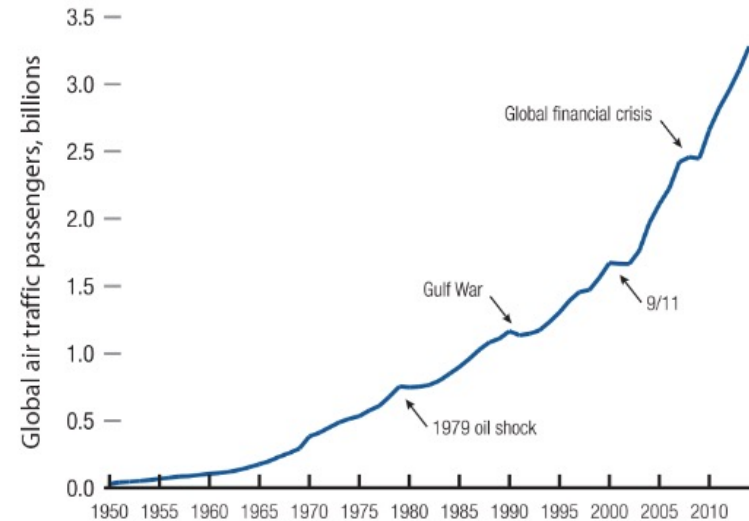


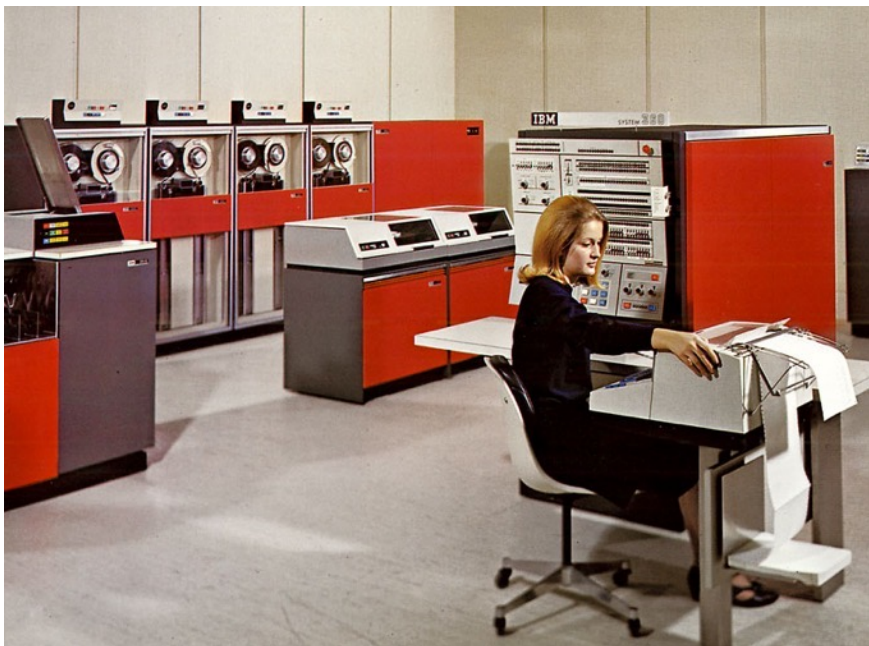
Historicizing the “digital” in tourism

*Between 1950 and 1970, the dawn of the jet age, global air passenger **traffic increased by over 10% per year** as rapid technological improvements brought down the cost of jet travel by an average of over 5% a year.*

In the early 1950s, airlines relied on mostly manual systems to manage reservations.

Figure 1: Global air passenger traffic trend, 1950-2014
(IATA Forecast for 2014)





Third generation computer

The IBM® System/360

Source: IBM.com, 1964 – 1975/8

AMERICAN AIRLINES ELECTRONIC RESERVATIONS PROCESSING SYSTEM

How push-buttons-to-computers speed air travel reservations...

1. Passenger requests a seat reservation by telephone or in person from one of 1,125 American Airlines agent positions serving 42 cities.

2. Agent finds out which seats are available on all flights for the desired day by pressing buttons that take on her own desk console.

3. ... which is born over long distance lines through the Computing Center in the New York area to search magnetic memory as to seats already reserved, others still available.

4. Seat availability flashed back to agent from Computing Center. Customer has complete and up-to-the-minute choice from all seats open on all flights for destination and day desired.

5. Passenger selects most suitable flight for himself. Agent pushes "off" button.

6. ... and thus instructs the Computing Center to reserve seats.

7. Computer confirms seats by automatically printing out an agent's printer of course - flight number, date, number of passengers, departure point and departure and arrival times.

8. Agent is free to transmit additional information to computer's memory - listing or fee covers her (and the passenger's) name, telephone number and any other information such as car rental at passenger's destination, etc.

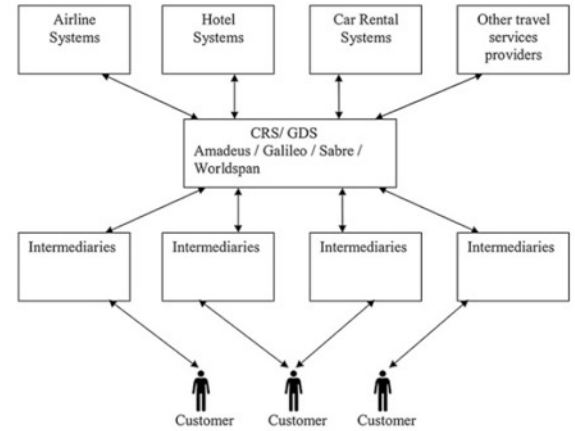
9. Computer automatically checks and confirms this additional data for completeness, and stores it in memory as part of the passenger's flight until complete, changed or cancelled.

Central Processing Unit

In addition to handling the passenger's reservation, this new IBM system also:

- Answers requests for space from other airlines.
- Advises agents to remind passengers to pick up tickets.
- Maintains and processes passengers waiting lists for fully booked flights.
- Supplies fare quotations.
- Supplies information on arrival and departure times.
- Reminds agents to advise scheduled passengers of any flight changes.

Computer Reservation System, tourism, Figure 1 Structure of computer reservation system



Date 1964 ca. Credit Line Courtesy of the IBM Corporate Archive
Copyright Owner © International Business Machines Corporation (IBM)

Source: Naqvi & Jia 2014

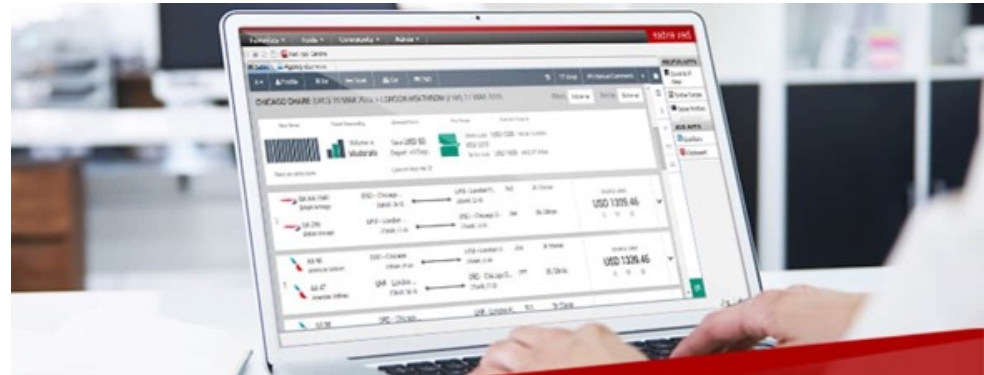


Image: 1970s Travel Agencies sell through SABRE, source: SABRE

Image: the Sabre system in 2020

Developments in Information and Communication Technology (ICT)

Personal Computers

1980s

Commercial Internet

1990s

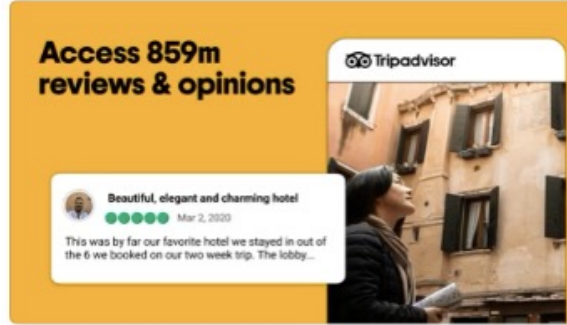
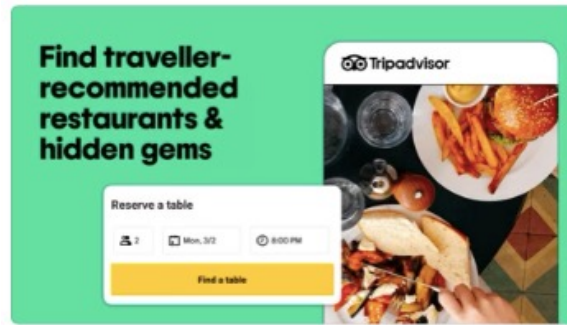
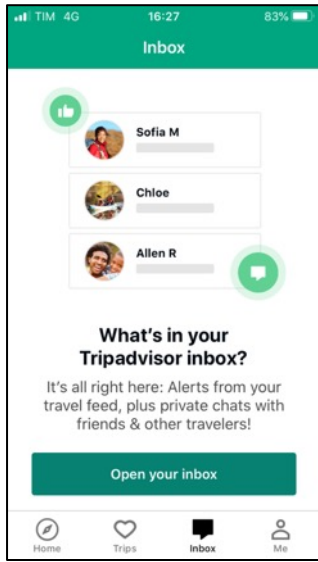
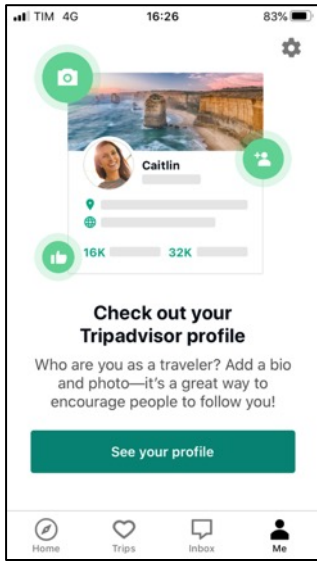
World Wide Web

1990s

HTML (HyperText Markup Language) Webpages

Web 1.0

- one-directional provision of information to consumers
- no interaction or response to the website or each other



Web 2.0

- dynamic or user-generated content
- allows for the exchange of information between users
- shifted the locus of control” in the creation and uptake of information

Social Networking Services and User Generated Content (UGC)

Mobile Internet

access to the internet (almost) anywhere & at any time

Platforms

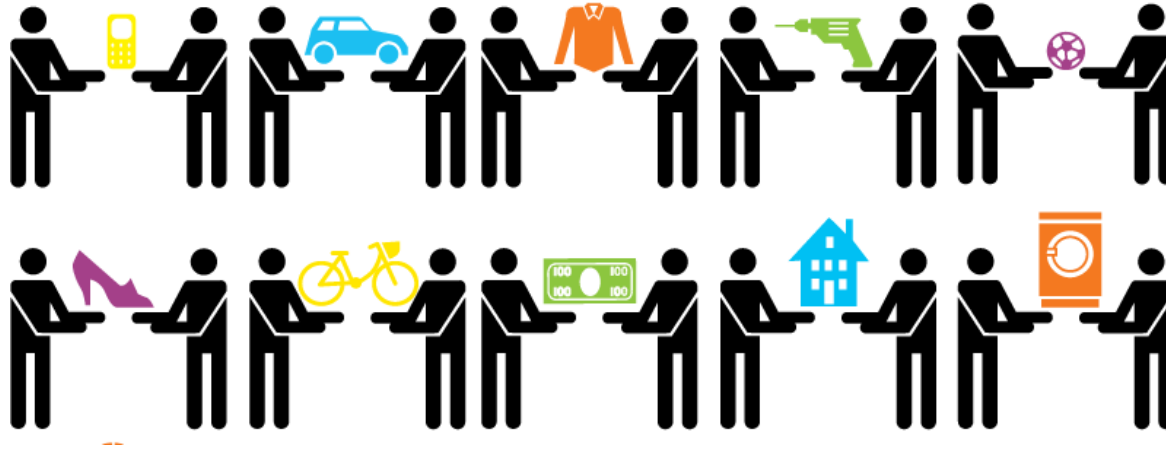
The computational meaning of a 'platform' is 'a programmable infrastructure upon which other software can be built and run', in public discourse the term 'platform' is increasingly used to describe companies that offer web 2.0 services and 'afford an opportunity to communicate, interact or sell'.

(Gillespie 2017, Helmond 2015)

Cloud

computer networks allowing for storage of and access to programs and data without the user owning/controlling the infrastructure

Platforms are commonly seen as intermediaries between supply and demand of a product or a service, between individuals



Platforms as “two- or multi-sided markets”

Understood as a business which brings together two or more sets of users.

The idea of platforms as “multi-sided markets” suggests an **economic configuration** in which platforms facilitate the connection between different groups of end users or customers.

For a website (or, software) to be termed a platform, it “needs to provide an interface that allows for its (re)programming: an **API**” (**Application Programming Interface**):

- allow for data exchange between applications
- allows for platform companies expand their presence in other (social) spaces

Source: Helmond 2015

Platforms mediate between accommodation owners/holders and guests (rooms, homes etc.)

Hotels, motels, hostels, b&b owners rent out rooms and services to travellers (business to consumers)

Data and the commodification of data

- ★ Behavioral data (interactions w/ platform, between users)
- ★ Geolocation information (IP address, home address etc.)
- ★ Personal data (name, education, birth date, language etc.)
- ★ Visual data (photos, videos etc.)
- ★ Reviews, ratings
- ★ Other data...

Algorithms

“Software is fundamentally composed of algorithms – sets of defined steps structured to process instructions/data to produce an output – with all digital technologies thus constituting ‘algorithm machines’”

Kitchin 2017, p. 14

“The regime of visibility associated with Web 2.0 connects to the notion of empowerment, as it has greatly expanded the social field of becoming recognized as a subject with a voice.

Bucher, 2012, 1165

“Becoming visible or being granted visibility [in search results and social media feeds] is a highly contested game of power.”

Bucher, 2012, p. 1165

Platforms do not only facilitate exchange they also shape the dynamics that depend on them.

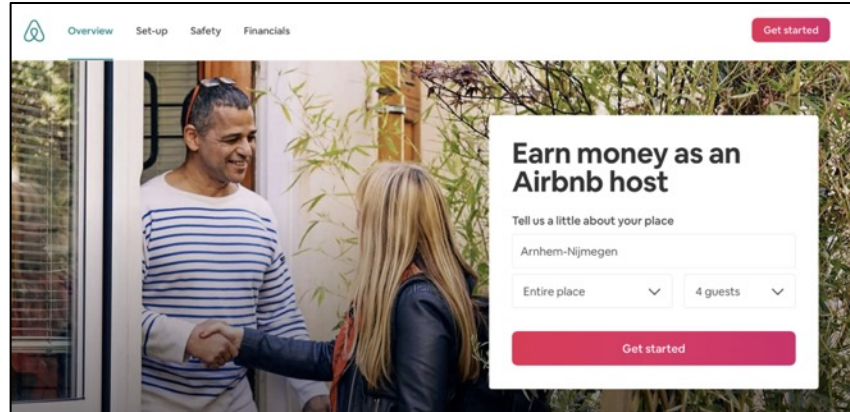
Sharing Economy

“consumers granting each other **temporary** access to under-utilized physical assets, possibly for money”

Frenken & Schor 2017, p. 4–5



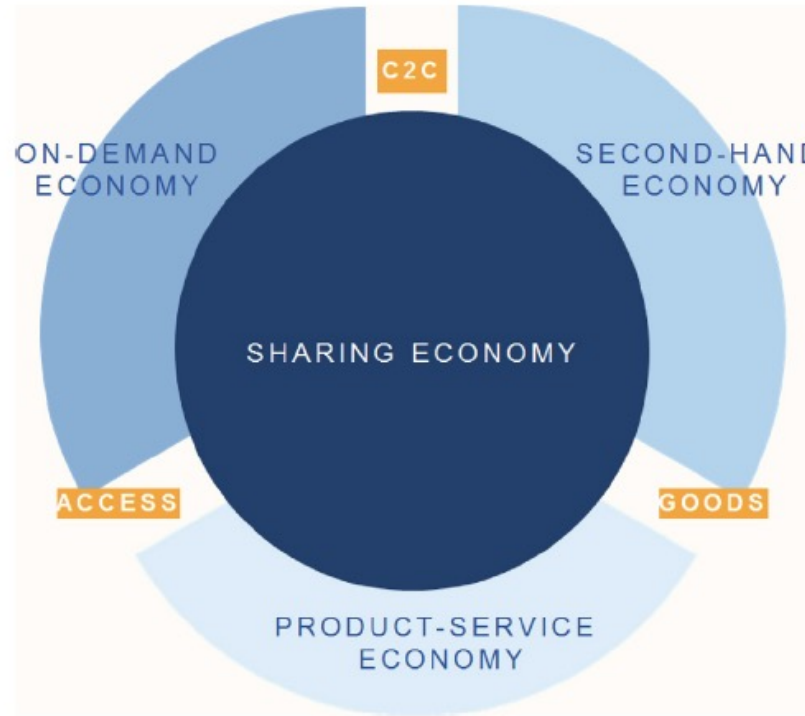
BlaBlaCar (ridesharing) ad. Source: BlaBlaCar ©



Airbnb website. Source: Airbnb©

Sharing or selling?

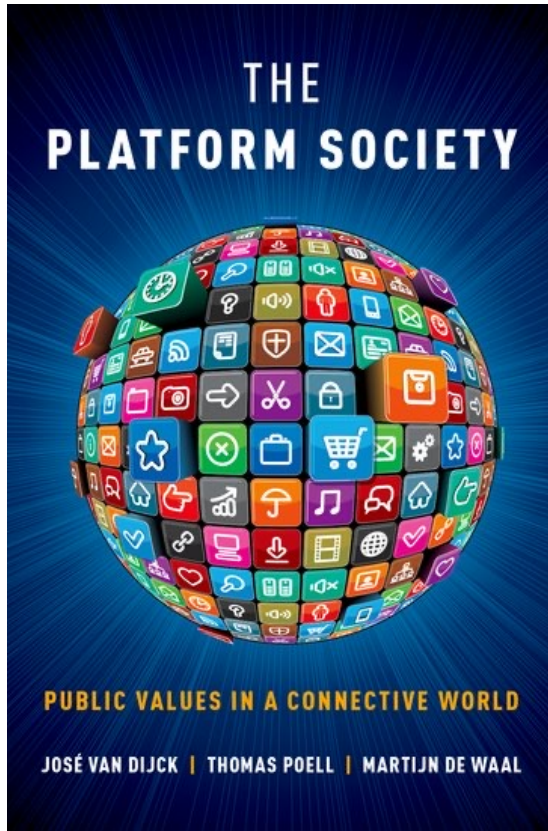
- Platforms as 'Labor-Intermediaries'
- Offering/purchasing personal services (driving (Uber), cooking, cleaning (Taskrabbit), delivering (Just Eat), assembling, childcare, gardening)



- Consumers selling or gifting goods to each other.
- Granting each other *permanent* access to (un)used goods

Renting goods from a company rather than from another consumer

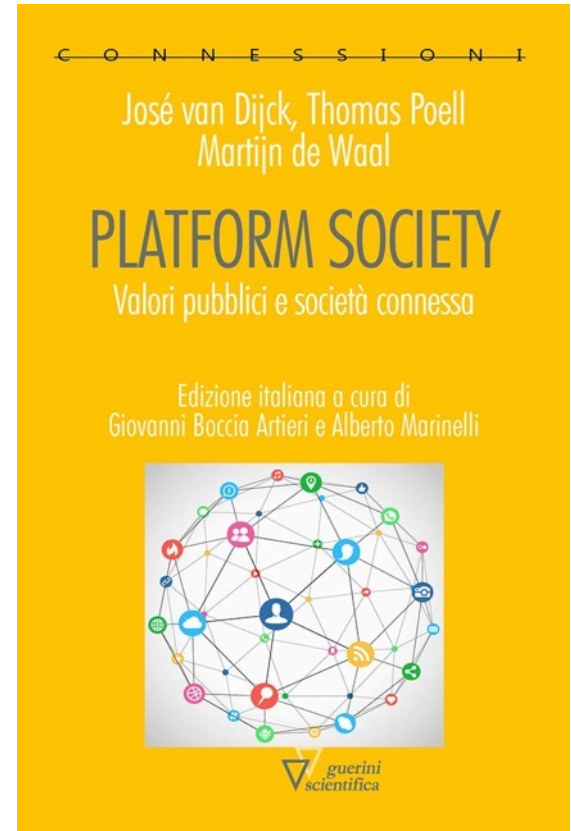
Fig. 1. Sharing economy and related forms of platform economy (from Frenken et al., 2015).



The **Platform Society** is a “society within which societal, social and economic ‘traffic’ is shaped and directed through online platforms”

What public interests have been unsettled by platforms and what are the consequences?

In a platform society, how can public goods and public interests be maintained?



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