

Educational Module

Behind Digital Platforms

Thematic Unit 3 — Platform infrastructures and their effects: what you don't expect



Platforms Shape Our World

Digital platforms take root in territories and produce new forms and configurations of space.

From Airbnb or Booking, which accelerate the planetary mobility of tourist flows, to urban transport platforms such as Uber; from metropolitan logistics (Amazon, food delivery) to data interconnection and exchange (social networks, Google), digital platforms play a primary role in shaping urban and global flows.



Digital Infrastructures Are Material

Artificial Intelligence, like platforms, can be understood as an infrastructure of thought (like a network for communication and transmission of information and knowledge). These digital infrastructures do not appear to be material objects. Unlike a highway, digital infrastructures operate thanks to the interconnection of many components: data centers (CLOUD) for data; transoceanic cables for the functioning of the Internet; smartphones and apps; satellites. They function thanks to continuous interaction with users.



**Data Centers
(CLOUD)**



Transoceanic Cables



Smartphones & Apps



Satellites

I doubt any of you can imagine a life without social media, Netflix, or ordering food online! Platforms are useful, efficient, and entertaining. There is no doubt about that.

Infrastructure: a complex of capital goods which, although not directly used in the production process, provide a series of indispensable services for the functioning of the economic system. (Definition from [Treccani.it](https://www.treccani.it))



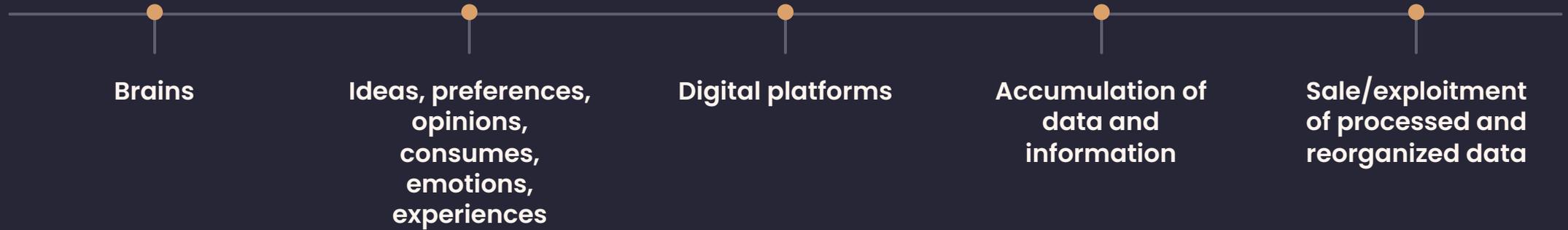
Where Did the Model Come From?

We already clarified (in UT1) that the commodity production method of a platform – that is, data extraction – is conceptually analogous to oil platforms. Instead of extracting oil from underground, platforms extract data from our brains.

With supply chain infrastructure, the production of goods imposed the network form on the assembly line, connecting across the globe places of design, raw material extraction, assembly, and sale.

Today, platform capitalism simply adapts the supply chain model to make the best use of its newest production centers: our brains, with our ideas, emotions, and experiences. Reflect on this question: for what purpose were supply chains developed?

In Short



The main goal is to allow the economic system to search around the contemporary world for the efficient and low-cost production conditions that existed in England during the first Industrial Revolution.

The possibility of relocating production in order to reproduce the working conditions of 19th-century England (and London in particular) during the Industrial Revolution: direct relationships, absence of unions, no insurance coverage for illness/injury, prohibition of strikes, etc. (with the necessary differences, a productive revolution like the one we are experiencing today).

From Low Wages to Zero Wages

Working conditions were similar to those of modern "data workers." Today they have changed further, since we produce data not with low wages, but with wages equal to zero. A condition that one scholar has defined as modern "**serfdom.**"

Territorial and Democratic Impacts

It seems appropriate at this point to briefly investigate whether, in the territories shaped by the infrastructures of platform capitalism, there are changes in urban and democratic spaces, involving a renegotiation of the rights of the people who live in those spaces.

Let us try to understand how the possibility of a profound impact on democratic rights emerged. Let us explore this possibility by analyzing some practical examples.



CASE STUDY

Airbnb

A \$2.2 billion platform founded in 2007 from an idea by two recent graduates: Brian Chesky and Joe Gebbia.

The two were struggling to pay the rent for their apartment in San Francisco and were looking for a way to make ends meet and "make it big."

In November 2007, a large design fair was scheduled in the city. Finding a bed was almost impossible and prices were extremely high.

They promoted it under the name "Airbed and Breakfast."



"Sleep with Locals Rather Than in a Hotel"

Its initial style was quite different from the company we know today, as can already be inferred from the slogan: "**Sleep with locals rather than in a hotel.**"

Open the sofa bed in the living room and take a photo.

In what sense "sleep with locals"? Wasn't it a platform that directly connects people renting apartments with others looking for short-term rentals? Yes, but not exclusively.

At the beginning, the idea was to offer those who had an "unproductive" room in their home the opportunity to make it profitable by registering on their platform (which is why it was easier that it be a room rather than an entire apartment).

A Wonderful Idea

It really seems like a wonderful idea! On one hand, those who needed some extra money could rent their living room to tourists at affordable prices.

On the other hand, tourists could interact with locals, spend time with them, and have a more engaging and authentic experience than they would have had staying in a regular hotel.

Living in contact with a local resident is not the same as staying in contact with hotel workers.

The possibility of building relationships, discussing, maybe sharing a meal, is very appealing – it would allow us to immerse ourselves fully in the local culture and social fabric.



The Sharing Economy

The Oxford Dictionary defines it as: "An economic system in which goods or services are shared between private individuals, free of charge or for a fee, through the Internet. Thanks to the sharing economy, one can easily rent out something one owns: one's car, apartment, bicycle, or even Wi-Fi network when not in use."

The basic logic guiding Airbnb was therefore that of the "Sharing Economy."

That is exactly what Chesky and Gebbia did in their first experiment.

From Sharing to Structuring



"I Have"

I have unused space



"You Need"

I offer it to someone who needs temporary accommodation



Evolution

Less sharing, more structuring

In short, a fantastic idea to earn some extra money! Soon, however, the company and its business evolved significantly.

Within a few years, the offer of individual rooms decreased, while listings for entire apartments increased. Less sharing, more structuring.

Well, nothing wrong with that: "I'm going away for a week and I leave my house to a tourist, so I even cover my vacation expenses – great, right?" Let's take a closer look.



The Transformation of Cities

In a short time, most listings shifted from "Rooms with locals" to entire apartments. Why?

- 📄 In a capitalist economy, no space that can yield "a lot" will be left to yield "enough."

Once a city is connected to tourism flows, trade fairs, or major events, real estate investors — so-called **corporate hosts** — begin buying numerous apartments.

The Economics of Displacement

Residents (families or students, as in Bologna) are not offered renewal of their leases when contracts expire.

The reasons are obviously economic.

The Key Question

Over 30 days, can a landlord earn more from a family paying monthly rent or from a series of tourists staying for a few days?

Think About It

Put more simply: Do you spend more money on a normal weekday afternoon during the school year, or during that summer weekend when you go on vacation by the sea?

As a result, much of the housing stock in major cities worldwide is transformed into short-term accommodation facilities.

These are no longer temporarily empty houses (sharing a good), but houses intentionally emptied to host tourists (selling a service).

Beyond the Sharing Economy

Persisting in defining Airbnb as an example of the sharing economy is incorrect because it represents a path of liberalization that modifies the democratic structure of society, amplifying economic polarization (the gap between those who have a lot and those who have very little).

Why does the democratic structure change in practice?

Expulsion

Because residents are expelled from cities.

Unaffordable Rent

Because more and more people struggle to pay rent.

Insufficient Salaries

Because salaries are no longer sufficient for housing.

Exclusion

Because some members of society are or feel excluded, for example from exercising the right to vote and stand for election at the municipal level.

In general, prices will rise until they reach (and perhaps exceed) the financial capacity of tourists.

The Cascading Consequences

1

Touristification

Touristification of the city, tertiarization of labor, precarization of the economy (more riders, cleaners, restaurant workers, temporary service workers – which creates jobs but at the same time reduces contractual protections and wages).

2

Resident Flight

The flight of residents from city centers.

3

Environmental Impact

Increased commuter traffic pollution, increased electricity consumption, land consumption, greater demand for parking, etc.

CASE STUDY

Facebook (FB) and its offspring

The First Social Network in History

In 2003, a 19-year-old Harvard student named Mark Zuckerberg opened a website called "Facemash," where users were shown pairs of photos of female students and asked: "**Which one is hotter?**"



The Beginnings

Soon, the idea of taking yearbook photos and posting them online spread rapidly across other US universities.

Investors liked the idea, and in 2004 "**The Facebook**" was launched, later becoming simply "**Facebook**."

"FB Is a Wonderful Place"



Free Information

Free information, sharing, loved by everyone for its ability to shorten distances while increasing interaction.



Find & Connect

You can find distant friends, colleagues, your favorite politicians, and exchange information and opinions directly with them — provided they agree.

Does this description seem fitting?

"Yes and No..."

One could say many things.

At best: "It's a place for Boomers."

1

Genocide Support

It has been used to support genocides

2

Democratic Manipulation

Manipulate representative democracies with bots and microtargeting (thanks to big data)



The Rohingya genocide

The Rohingya are a Muslim minority in Myanmar, not recognized by the state. Although born and raised in Myanmar, they are considered illegal immigrants.

Since 2017 they have officially been victims of a genocidal policy by the Myanmar government.



But weren't we talking about Facebook?

What does the father of social networks have to do with genocide?

The Myanmar government used fake Facebook profiles in order to:

- Identify and register Rohingya and their supporters
- Spread fake news to legitimize the genocidal campaign against them

Even in Western countries, fake news pages are a major problem within the same social network.

Without censorship

A false news story spread within a democracy affects millions of people's ability to judge and understand reality. A devastating impact on democratic structures that must compete with increasing polarization of public opinion induced by false news.

The more one browses, the more one is reached by "targeted" content, and the more opinions polarize and simplify.

Certainly, the emotional impact cannot be compared to the horror of genocide carried out by a militarized state.

But has FB learned its lesson and censored fake news pages?

"One could say 'yes and no.'" It has worked to censor certain content and allow others.

📄 (Translation of article headline:) "Thousands of fake Facebook accounts closed by Meta were prepared to polarize voters ahead of 2024."

But it is not necessary to refer to genocide to demonstrate the consequences of the distorted use of data collected by a social network — capable of manipulating democracy itself.



FAKE
NEWS

Cambridge Analytica and Microtargeting

What was Cambridge Analytica?

Cambridge Analytica was a subsidiary of the British company SCL Group, founded to develop political communication strategies for electoral purposes.

SCL's Specialization

SCL specialized in big data and data mining.

How It Worked

Through collecting enormous quantities of data using Facebook, it was able to create behavioral and psychological models reflecting different types of online users.



The Scandal

From Elections to Exposure

2016 — The Turning Point

The turning point came in 2016, when it worked on the presidential campaign of Donald Trump (first term).

Brexit & Beyond

It also played a prominent role in the Brexit campaign and in many other less famous cases.

March 2018 — Scandal Breaks

Following the scandal that broke in March 2018, the company declared closure on May 2, 2018.

Is FB one of many digital platforms used to fuel fake news and manipulate political opinions and media? It is possible, since FB is also a "place" where politicians interact.

FB and US Presidents (I)

FB was founded shortly before Obama's 2008 election.

Social media were loved by politicians, media, and tech companies.

The Early Promise

Politicians campaigned heavily online. In 2007 Obama used MySpace. On his page there was a button asking supporters to invite him to their city.

Social media were used to enable direct interaction between citizens and politicians without intermediaries – a new and more direct form of communication.

Social media democratize society and increase popular participation.

2012 — Deepening Engagement

In 2012, through the Square app, Obama supporters collected very small donations that created a sense of active participation and encouraged engagement.

The idea was that social media would increase participation in political life.



FB and US Presidents (II)

After 2012, however, many problems emerged, especially regarding privacy.

Many concerns were raised about the subsequent election (Donald Trump's first term).

In particular, the activity of Cambridge Analytica was denounced.

- ❏ Attacks on Democrats in 2016 were carried out by Russia, as confirmed by the US Department of Justice, which attributed them directly to Russian intelligence.

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