Università degli Studi di Ferrara

DIPARTIMENTO DI ECONOMIA E MANAGEMENT

Capitale e lavoro nell'era digitale

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Value in platform capitalism: where is the (surplus) value created and where is it going?

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Why are platforms so important?

They are paradigms of a new model of organization (accumulation) and valorization, which incorporate the main characteristics of bio-cognitive capitalism.

Even the labour performance changes and takes on new peculiarities, although we are often accustomed to connect to the platforms mainly manual labour (riders, Amazon, logistics in general).

But, this view is too partial.

In platform capitalism all forms of work (from semi-slavery to consulting) are present together, and each of these forms is synergistic with the others.

According to Srnicek (2017), platforms embody **four characteristics.**

1. they are ***intermediary digital infrastructures*** that enable different user groups – 'customers, advertisers, service providers, producers, suppliers, and even physical objects' – to interact. Some platforms further empower users 'with a series of tools that enable [them] to build their own products, services, and marketplaces': learning by doing, using, interacting → *learning dynamic economy of scale*

2. they rely and thrive on ***network effects*** *(connectivity)*. The more users a platform accumulates, the more potential it has to milk and generate value from its users and their activities on the platform. This explains why platform businesses enjoy rapid, exponential growth and unprecedented capital accumulation over a relatively short period of time: → *network dynamic economy of scale*

3. they use ***cross-subsidisation***. By offering free products and services, a particular platform could accumulate more users and, therefore, more activities on its network *(cumulativeness).* Economic gains and losses are balanced out as the platform corporation taps on its multiple arms of business.

4. They deploy the strategy of ***constant user engagement*** through attractive presentations of themselves and their offerings. This is done with the end purpose of extracting (more) data from its users.

According to the literature (Srnicek, 2017, Smith, 2017, Vecchi, 2017, Tarleton, 2017, Ciccarelli, 2018), we can identify **six main types of platform**:

- **Advertising platforms** like Google and Facebook, extracting information from their users to resell their profiles in the form of advertising spaces.

- **Cloud platforms** such as Amazon Web Services, which create hardware and software for digital-dependent markets and lease them to businesses of all kinds, creating monopolies on knowledge.

- **Industrial platforms** like General Electric or Siemens, building hardware and software at lower production costs, manufacturing and transforming goods into services (Industry 4.0).

- **Product platforms** like Spotify, which generates profits by relying on other platforms that transform a commodity like music in a service, and earn through share of subscription paid to subscribers to the aforementioned service.

- **Work platforms** such as Uber, Airbnb, Deliveroo or Foodora, which organize the workforce through an algorithm and connect customers and businesses by drawing profit through the reduction of labour costs.

- **Logistic platforms** like Amazon, that govern trade and the displacement of goods.

Before discussing the **origin of (plus)value** in platform capitalism, two points need to be underlined:

1. The redefinition of boundaries between supply and demand and between consumption and production

2. The possible hybridization between the human element and the machinic element

1. The redefinition of boundaries between supply and demand and between consumption and production

The hybridization between supply and demand is one of the novelties (among others) of the new process of valorization that characterizes bio-cognitive capitalism. The figure of the *prosumer* (Toffler, 1984) is the most classical exemplification and leads to the reconsideration of the dichotomy, of Marxian origin, between use-value and exchange-value.

This implies that more and more faculties of life are put to value and that the basis of accumulation tends to expand to include activities that until recently were considered "unproductive" (from the point of view of capitalist valorization): social cooperation, social reproduction, consumption, leisure time, training, welfare, ….

1. The possible hybridization between the human element and the machinic element

Platform capitalism is part of the new possible technological paradigm created by the development of bio-genetics (creation of artificial living material), machine learning algorithms, artificial intelligence, robotic nano-technologies, manipulation and storage of huge amounts of data (big data).

We're witnessing the "becoming machine of human" ad, at the same time, the "becoming human of the machine".

The separation between "concrete labour" and "abstract labour" is put in discussion.

Network value

As argued by Martin Kenney and John Zysman (2016), among others, "*the algorithmic revolution and cloud computing are the foundations of the platform economy. But computing power is only the beginning of the story. That computing power is converted into economic tools using algorithms operating on the raw material of data*."

In the emerging digital platform economy, data as the final output, which is then realized on the global communication and advertising markets, originates a "network value" as the result of a continuous and dynamic process of interaction between human and linguistic labour and digitalized infrastructures (the platforms) (Fumagalli 2018).

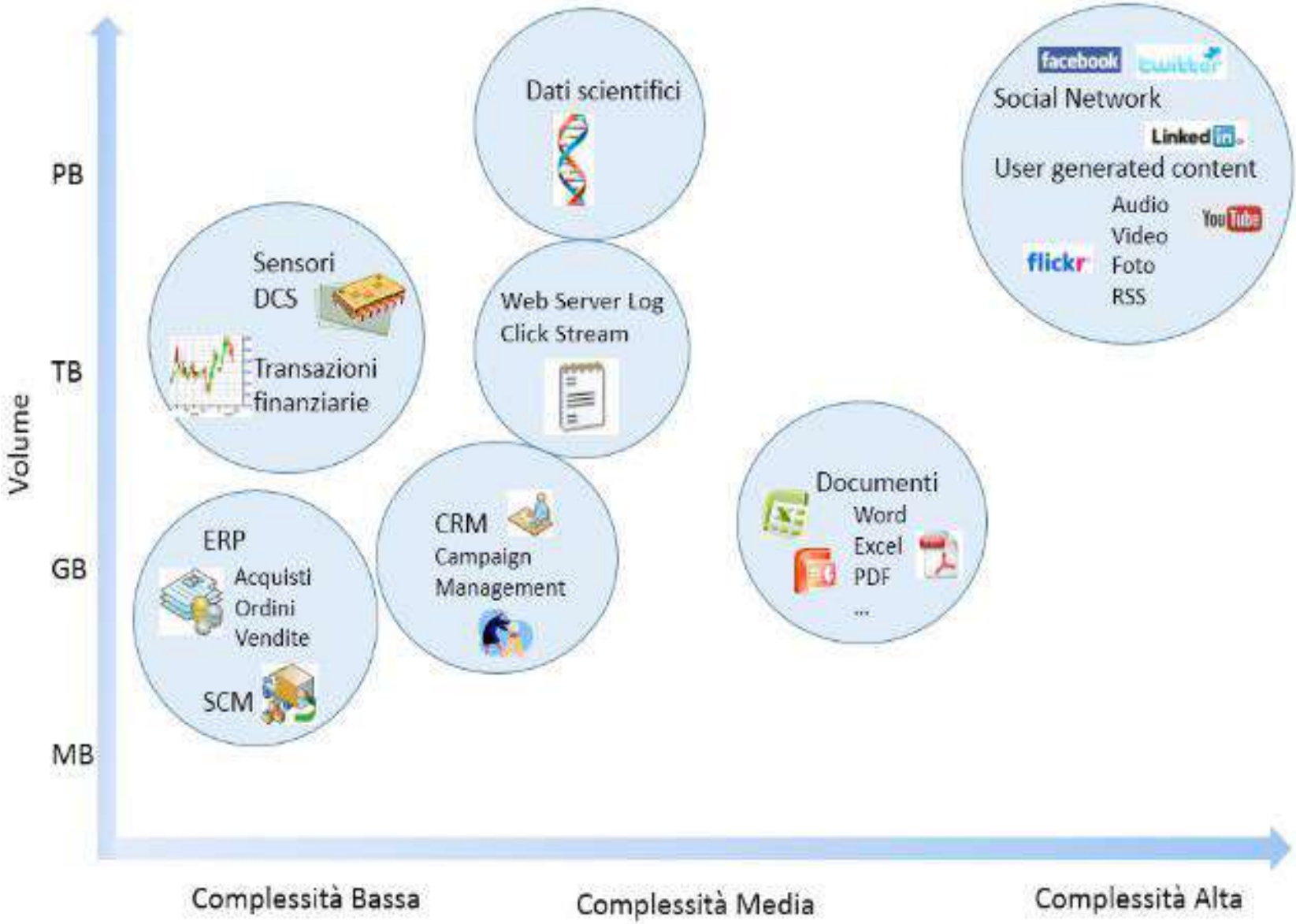
Platforms collect data in order to be processed. They are a productive input in an immaterial production cycle, whose output (advertising, relationships, induction to consume, …) produce an exchange value (“network value”), on the basis of the appropriate algorithmic technology (the same platform). However, this process is far from being homogeneous and precise.

The example of Google translator is paradigmatic of the valorisation process underlying platform capitalism and big data manipulation. On the one hand, the algorithm is able to integrate through a given procedure all the information and suggestion freely provided by the social cooperation (general intellect) that the translation service needs; on the other hand, the increasing accuracy of the service is one of the possible reasons for the leadership of Google in the web space (Carr, 2008)

Big data measures

These are eminently four measures (also called the four Vs):

a. **Volume** (V1). It is the easiest measure to understand because it concerns the accumulation of data.
b. **Velocity** (V2): Refers to the need to minimize data analysis times, often performed in real time or almost (competitive variable).
c. **Variety** (V3): is one of the most important characteristics, as it introduces some elements of value and complexity that can affect the network value generated (structured v/s unstructured data).
d. **Veracity** (V4): indicates the degree of accuracy and reliability of the data. It is a necessary condition (even if not sufficient) to be able to extract value from the data


Volume
PB
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Dati scientifici
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User generated content
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ERP
Acquisti
Ordini
Vendite
SCM
Documenti
Word
Excel
PDF
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Complessità Bassa
Complessità Media
Complessità Alta

Table 1. Possible variants of big data: Davemport taxonomy.

Type of Data	Source of Data	Sector	Function
Big volume	Online	Financial Services	Marketing
Unstructured	Video	Health	Logistics
Continuous flows	Sensors	Manufacturing	Human Resources
Multiple Formats	Genomics	Tourism/Transport	Finance

Source: Davemport, 2014

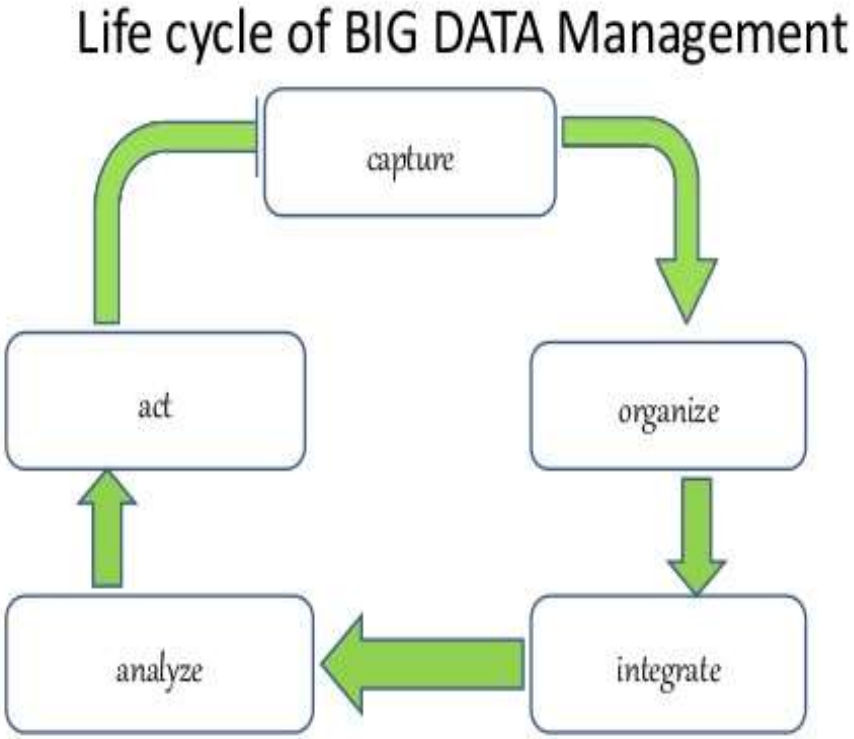
Business intelligence is a corporate function that aims to extract value from data in order to perform various production purposes.

"*The set of business processes to collect data and analyse strategic information, the technology used to implement these processes and the information obtained as a result of these processes*" [Davemport, 2014, p. 17]

The data, in itself and for itself, is characterized by **use-value**, such as the labour-force or the common (singular) (Vercellone, Giuliani, Brancaccio, Vattimo, 2017, Fumagalli, 2017). As a productive input in an immaterial production context, it is transformed into an **exchange value**, within production contexts capable of using the appropriate algorithmic technology.

The Business Intelligence system therefore involves:
- the collection of data on the company's assets
- their cleaning, validation and integration
- subsequent processing, aggregation and analysis
- the fundamental use of this amount of information in strategic and valorisation processes

In this way, a real life cycle and valorization of the big data system is structured, which can be described in the following figure, on the basis of a succession of operations that begin with the "capture/appropriation of data", their "organization", "integration", "analysis", "action".



In the vast majority of cases, especially with regard to unstruc-tured data (about 80% of the total), these data are presented as a value of use, produced and socialized by users/consumers in the performance of the acts of cooperation and relationship that are carried out daily. It is not by chance that we speak of capture, or rather of more or less forced or voluntary expropriation.

It is worth dwelling on the two operations of "organizing" and "integrating". These are two operations that only in recent years have been able to reach a certain degree of sophistication, thanks to the technological evolution of the algorithms of the 2nd generation (**machine learning**). The organization and integration of the data is at the base of the production of the network value. It is the productive aspect of exchange value, while the "analysis" and the "action" represent its commercialization, that is the monetary realization on the final markets.

We can say that if today human relations, social cooperation, the production of collective intelligence, social reproduction (Morini, 2015) are expressions of the common as a mode of production (Negri, 2016, Vercelloni et alii, 2017, Fumagalli, 2017), at the present time they are the basis of the **communism of capital** (Marazzi, 2010), or the ability of capital to subsume and capture those that are the instances of life of human beings.

This statement requires further investigation.

Digital labour vs digital work → Abstract labour vs Concrete work

Labour time vs life time → Productive labour vs unproductive labour

Reproduction vs production → Social reproduction vs social production

Real subsumption (relative plusvalue)

vs

formal subsumption (absolute plusvalue)

The contemporary debate inside the neo-autonomist Marxism:

Extraction and dispossession (D. Harvey, S. Mezzadra, V. Gago, A. Negri, C. Vercellone) → **formal subsumtion**

Impression (F. Chicchi, E. Leonardi, S. Lucarelli)→ **no subsumption**

Financial Subsumption (R. Bellofiore) → **real subsumption**

Life subsumption (A. Fumagalli) → **new type**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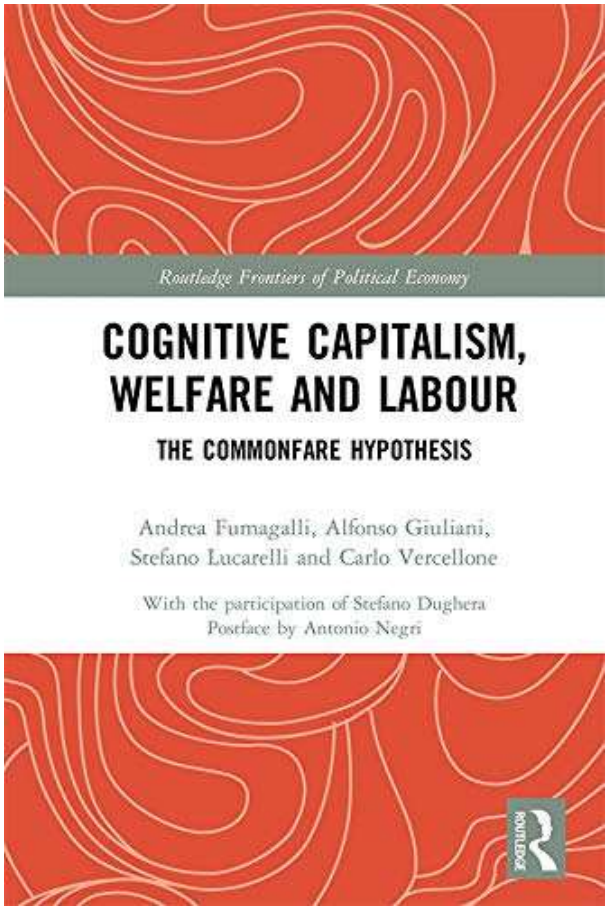
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With the participation of Stefano Dughera
Postface by Antonio Negri

"Emancipate yourselves from mental slavery; none but ourselves can free our minds".

Bob Marley, Redemption Song

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