IT for Change Socializing Data Value

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Tech giants, mostly coming from the US but also China, have monopolized continuously expanding and crucial data sources. They turn these data sources into intangible assets and, thus, extract (intellectual) rents. The result is a process where the whole world produces data that leads to a redistribution of value in the form of data-driven intellectual rents garnered by those tech giants.

At the geoeconomic level, a new layer in the international division of labour is emerging. It splits the world between raw data providers and a handful of tech giants that became data-driven intellectual monopolies. Peripheral countries (and even Europe) are net providers of raw data and pay for digital intelligence.

US tech giants' data advantage is complemented by their concentration of the required infrastructure to transport, store and process data and the most powerful algorithms to analyse those datasets. These algorithms also rely on knowledge produced by other organizations but that is appropriated and monetized by tech giants. Overall, the digital economy is standing on data and knowledge extractivism.

Controlling data not only limits others from using and, therefore, from learning from data insights. Machine learning algorithms learn as they process data, which means the development of a new method for invention that is transforming how innovations take place. Within machine learning, deep learning and neural networks have the potential to speed up the process of innovation using algorithms to locate the most promising new combinations of the existing elements of knowledge. These artificial intelligence approaches are changing the innovation process itself, with digital intelligence offering potentially unlimited applications. The monetization of digital intelligence turns data into an intangible asset. As big data are increasingly gathered and processed, machine learning techniques self-improve algorithms, thus continuously augmenting data management proficiency. Digital intelligence gives direction to sales, acquisitions and innovation. Hence, as this general-purpose method of invention is concentrated in a few hands, the potential for further innovating will be further monopolized.

In this context, what is to be done? Data privacy acts, which have spread in several parts of the world, although are aimed at limiting tech giants' power, further contribute to knowledge privatization by fostering individual property over data. Considering that every Google or Amazon search, every Facebook or YouTube post and so on contribute to improving the algorithms used, thus, to improve the services we all receive, and since digital services-in particular those in the hands of big tech companiestend to be natural monopolies, a more decisive move could be to make those services global public/commons goods.

Several questions emerge from this proposal, who and how will these global public/common goods be governed? How could we assure that economic and political surveillance will not take place as it does in the current data governance structures both of the US and China? How could such a global transformation be enforced? If global public goods result unfeasible, what other initiatives could be fostered to create data for the people and not for private or partisan gains?