The Dual Role of Data

Research question:

Should data be owned? Data is a primary resource, asset, and product in the data economy. Numerous firms are investing in collecting, organizing and analyzing data, and in generating products, services and technologies which rely on such data, giving rise to data capitalism. In an era of machine learning, data has become an indispensable input in developing data-driven innovation. Advocates of making data proprietary argue that the digital revolution depends on the creation of property rights in data much like the industrial revolution made intellectual property rights necessitous. The current discourse on data ownership thus treats data as a commodity, focusing on its critical role for economic growth and innovation.

This discourse has overlooked, however, another role of data, as a means of governance – "governance-by-data." Data does not only reflect human behavior, but also shape it. China's Social Credit System is a classic example. This system which is using big data to predict the trustworthiness of Chinese citizens, shaping behavior by opening opportunities to trustworthy individuals, and sanctioning those with lower rankings. But systems used in liberal democracies also collect and analyze data to predict trustworthiness for financial purposes; social networks rate their users' credibility to address fake news; and law enforcement agents increasingly rely on risk assessments for predictive policing purposes. In this governmental capacity, the lockage of data presents serious challenges to democratic notions of accountability and the Rule of Law. The law may affect data lockage, not simply by property laws, but also by privacy and liability rules. Indeed, the GDPR in the EU as well as the aftermath of the recent Cambridge Analytica scandal in the US already encourage data collectors to impose strong limitations on the transfer and use of personal data.

Research objectives:

This research seek to gain a better understanding of the dual role of data, and develop policies for facilitating access to ensure better oversight and preserve the Rule of Law. Understanding the dual role of data as a resource in data-driven innovation and also as a governance proxy supports the prioritization of a flexible legal framework of *access to data* over an impenetrable regime of data ownership. To subject governing authorities to adequate checks and balances, it is necessary to allow limited, supervised access to the raw data, which is being used as input in machine learning. Such access is essential to unveil possible inaccuracies, errors as well as potential biases and abuses of power which are embedded in the data.

Methodology:

Legal and theoretical analysis. The paper analyzes the various justifications for creating proprietary rights in data and explores the boundaries of intellectual property in the data economy. The paper further discusses the dual role of data, demonstrating its emerging role as means for governing human behavior. Following an analysis of the different barriers to access, the paper suggests several strategies for removing these barriers to ensure sufficient oversight and at the same time protect the economic interests of the different stakeholders.

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