Mapping the relational amidst consent permissions in personal data stores: constructing (and valuing) the (data) future(s)

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This paper will present a detailed comparative analysis between the emerging consent permission architectures in Web3 nascent Personal Data Stores (PDS) and more common consent permission architectures (sometimes referred to as "choice architectures") across two online and two 'offline' public and private data sharing contexts (e.g. cookie consent forms and participant informed consent forms used in scientific research). This paper will present this comparative analysis in terms of how the potential societal and economic benefits of the intended data use are presented in consent permissions, supplemented with the broader range of potential societal and economic benefits that literature has demonstrated (which may be unanticipated at the time of seeking consent or intentionally obfuscated).

Given the emphasis placed on individual-level control and transparency in PDS, this paper will attempt a theorisation of the role of consent in three parts: (i) as an act of informational self-determination, intrinsic to foundational articulations of privacy (Cohen 2012); (ii) expanded to also incorporate decision-making that is cognisant of the relational qualities of data (Viljoen 2021) and its potential societal value (Coyle & Manley 2021); and, (iii) as an instrumental value in and of itself which could be qualified and / or quantified within new ideas about macro-measurement in the digital economy such as GDP-B (Brynjolfsson et al 2019).

Literature overview

Choice architecture literature has explored how individuals navigate data sharing using the privacy paradox concept (Adjerid et al 2018; Thaler et al 2010) but its a limited conceptual device to explore the more nuanced dynamics at play in data sharing and these studies are typically narrow in terms of their articulation of societal benefits as 'externalities' as in Acquisti et al (2016). By reviewing the key informational privacy texts in terms of their articulation of informational self-determination and autonomy (Cohen 2012) alongside emergent theorisations of the relational aspects of data (Viljoen 2021; Coyle 2022) this study will aim to produce a more intricate account of how consent at the level of the individual has very real consequences for societal value and private gain.

This account will be informed by a review of current empirical methods of data valuation as well meticulous account of the vast and wide-ranging value and insights generated from data as it flows through the wider data economy ecosystem (Christl &

Spiekermann 2016). For example, psychographic insights generated from the rhythms of keyboard strokes which are then used to inform systems for profiling.

An additional aspect of the theoretical backdrop will be developed by close attention to the concept of performativity in terms of: (i) the reality-making properties of models (Coyle 2021; Thompson & Smith 2019) - including their reality-limiting potential (Hong 2022); (ii) the materialisations arising from data valuation methods (Orlikowski & Scott 2014); (iii) the generation of categories which come to enact a performative outcome on what is in and out of our scope of perception (Alejandro 2021).

This paper will use this mapping of the wide-ranging presentations of data value across various contexts within the 'data economy', and the articulation of various aspects of data and performativity, to revisit the consent permission architectures in PDS. Since PDS are being built with the explicit intention to give users' greater control over the purposes to which their data will be put, this paper would like to explore the opportunities for these mechanisms to be considered as an instrumental value that could be captured in emerging thinking about societal macro-measurement (Brynjolfsson et al 2019).

Proposed methodology

The research design for this study will comprise a review of relevant literature of consent permissions and a select number of empirical cases of consent permissions already in use. This will be incorporated into the larger case study of the consent permissions being developed one specific personal data store: Inrupt, built by Solid technology (Hamilton 2020). Access to Inrupt is currently being sought with data collection planned for June/July 2023. The researcher joined two developer calls with the Solid platform network in 2022 as background research.

Potential contribution

Expand understanding of new technological innovations in data governance that foreground the value and application of data rather than its protection; expand a way to conceive of the role of the individual in creating the performative macro-measurements that new ideas about income/wealth/value that societal needs are mandating.

The author is actively seeking collaborators.

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