

# On the Importance of Human-Centricity and Data



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## Preface

*This primer on human-centricity represents the first output of the Empowered Data Societies Project, which is due to be piloted in Helsinki in 2021. Together with a multistakeholder project community that includes business, academics, civil society organizations and government representatives, the project seeks to explore a new human-centric model (from public and private perspectives) for improving data availability to empower communities and societies. Importantly, human-centricity can serve as a useful route towards increased innovation and business-facing opportunities.*

## Introduction

Human-centricity is a game changer in terms of unleashing the latent potential in data to empower societies. A human-centric shift in viewpoint is a simple, yet profound, change in thinking. It offers ground-breaking consequences for the availability, usability and quality of data for any person or organization, public or private. Far from being in conflict with the aims of business, human-centricity can drive new paradigms and ideas for innovation, capitalizing on the possibilities that better data availability can unleash for societies.

## What is human-centricity?

Human-centricity represents a new paradigm for thinking about how to manage data and its potential. Human-centricity means focussing on something variously called (self-)sovereignty, self-determination, self-governance, autonomy, agency or the like, in terms of the people involved with the generation of data.<sup>1</sup> These concepts derive from the internationally-recognized concepts of human rights. A human-centric approach is one that makes central the following: that people have the right to determine, without any kind of coercion or compulsion, what happens to them.<sup>2</sup> In the digital age, it can be compellingly argued that the data generated about us (including our social existence and our community at large) is deeply connected with the lived personhood of any and every human being.<sup>3</sup> Consequently, new “digital human rights” are emerging and the human-centric paradigm is predicated on these rights.

One way to describe what the new approach of human-centricity means is to contrast it with the currently prevalent “organization-centric” thinking. The human-centric paradigm seeks to understand data in terms of the people involved in its generation rather than the organization (company, government agency, etc.) responsible for its capture. Given technological advances, our ability to store and process vast amounts of data and the evolution of artificial intelligence, business models increasingly see personal data as a raw material suitable for collection, refinement and application for broader use. Regulators have responded accordingly and implemented controls that are viewed only through this organization-centric perspective.

Organization-centric approaches turn data into resources for companies (business), control what organizations can and cannot do with data (regulation) and aim to enable the most efficient possible data utilization for data-controlling organizations (technology) — without fully taking into account the interests of people of society. In contrast, a human-centric approach looks at data as it relates to people about whom that data exists — while still accounting for the interests of business. Human-centric business models (be they B2C, B2B, or B2G) take people’s and societies’ interests as a guiding principle; regulation is designed in a way that assumes and guarantees that data about people is being used for their and their communities’ benefit, and technology prioritizes humane values (including social and ecological ones).<sup>4</sup>

## Why does it matter?

The current paradigm of data seems to dictate that we must choose between data protection or data use, between benefitting people or benefitting businesses and other organizations, and between minimizing harm or maximizing benefit. The human-centric paradigm seeks, and is uniquely able, to combine equitably these three pairs of considerations that seem initially to be mutually exclusive.

1. Maximizing personal data usage and protection. By placing the human at the centre and allowing them to choose or agree to the purposes to which data is put, data becomes available for those purposes in a way that respects people’s privacy. In this way, compliance with data protection rules does not need to be a liability and the data available can be used to its potential.

2. Maximizing benefits to people *and* organizations. Human-centric does not mean anti-business; people and organizations benefit from a more equitable and balanced relationship between different parties – people feel empowered to gain value and improve the quality of their and their communities’ lives while businesses enjoy the justified trust of their customers as well as the resulting bottom-line profits.
3. Minimizing harm (risk management) *and* maximizing benefit (opportunity creation) for societies collectively. Human-centric approaches benefit more than just individual people and businesses, but also help societies ensure collective safeguards against potential data misuse and enable more opportunities for different sectors and groups of society. Human-centric approaches can help ensure that everyone counts and to mitigate the risks of data exclusion and digital divides of vulnerable populations as well as to ensure that data is inclusive and representative.

What if we didn’t have to choose one over the other in these cases after all? What if we could have it all?

## How to adopt a human-centric approach to data governance

For anyone trying to understand and implement a human-centric approach to data governance, it is soon obvious that any such attempts prompt many related questions. Issues of digital identity, enforcement of legal rights, cultural relativity of values, variance and incompatibility in technologies, legacy mindsets about data at different levels, difficulty of any cross-organizational and cross-border collaboration, contradictory valuation models, and so on, quickly cascade and form a picture of a complex and dynamic system where everything affects everything else. This fact, however, should inspire, highlighting the possibility of system change, rather than act as a deterrent.

Several sets of principles connected with human-centricity have already been proposed.<sup>5</sup> As a preliminary suggestion, here are five interrelated features (listed in no particular order) that we view as important to successful human-centric approaches to data.

1. **Human as the logical point of integration.** Connected with issues of digital identity management principles, breaking down siloes within and between data-holding organizations, quality and richness of data as enabled by combinations of data sets about the person, and the idea of accountability to individual people as stakeholders in the use of the data they are involved in generating, this feature is at the core of any human-centric approach to data.
2. **Empowerment with data.** Connected with the fundamental ideas of people’s agency regarding and control over the data they are involved in creating, this feature signals a mental shift from data protection only, where people are seen as passive targets of external protection, to a more holistic view of people as active beings with the will and the capacity to improve their lives with data. It also means that all people can have a real choice between good alternatives

instead of having to default to products and services that are ubiquitous and too convenient to resist despite concerns over data handling.

3. **Ecosystems approach.** Using systems thinking, taking a whole ecosystem approach enables and incentivizes interoperability on multiple levels of technology, policy and valuation models because it builds on stakeholder theory. This holistic approach also enables and implies two important further benefits:
  - A necessary degree of agnosticism<sup>6</sup> regarding specific technologies, jurisdictions, business models, sectors of society
  - It lowers the barriers to entry to the respective ecosystem for organizations of all shapes and sizes in terms of access to the data they wish to access
4. **Pluralism.** A commitment to pluralism enables the cross-cultural and global applicability of human-centric approaches to data, as well as multiple autonomous, but interoperable frameworks with differing policies.<sup>7</sup>
5. **Proportionality and equity.** This refers to the design of ecosystems where actors are apportioned appropriate levels of responsibility and freedom on one hand, and risks and opportunities on the other.

In addition to these features, there are a number of axes on which different conceptualizations and implementations of human-centricity can take different positions. Some of the important ones are described in the box below as questions with two extreme answers for illustration and scope to position in between.<sup>8</sup>

- How is “human” understood, as *an independent individual or a relational and collective being*?
- How is the relationship between the person and data primarily conceived, as based on *rights over or ownership of*?
- What kind of agency is considered primary, *economic participation in the market or civic participation in society*?
- What kind of control should people be exercising, *direct* (e.g. individual personal data management) or *mediated* (e.g. via representative data institutions)?
- How should data ecosystems be organized, *in a fully decentralized/distributed fashion or centrally governed with enforcement mechanisms*?
- What should be the direction of governance legitimacy: *bottom up or top down*?
- How should people primarily benefit from the use of data, by being *directly compensated monetarily or indirectly provided with additional value* (like seamlessness of user experience)?

## Conclusion

As we think about human-centricity, it becomes apparent that a shift in thinking has far-reaching consequences that require further exploration depending on the context in question. Furthermore, human-centricity can prove a useful approach to drive systemic approaches to real-life use cases where equitable answers are sometimes less than obvious. The Empowered Data Societies project, for which this document serves as a foundational piece, seeks to use human-centricity as an approach to solve some of societies' most intractable problems.

We look forward to exploring how data societies can be empowered when we take a consciously human-centric approach to the potential of data availability in future work.

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## Endnotes

1. Human-centricity is at times criticized for unsavoury anthropocentrism, humanocentrism, human exceptionalism or human supremacy. While some flavours of human-centricity are susceptible to these criticisms, it's important to note that, by definition, these terms are not equivalent. Flavours of human-centricity exist that can accommodate the interdependence of people and the rest of the ecology of the earth and to incorporate, e.g. climate action as a goal and a consideration. The relationship between human-centricity and the various modes of posthumanism, however, remains to be explored.
2. More specifically, how they are to be influenced externally (autonomy), and how they want to interact in the digital world (agency).
3. Differing philosophical and other positions exist regarding the exact nature of the connection between personal data and the personhood of a unique individual: we can conceive of personal data associated with ourselves as representations, intrinsic part(s), or extensions of ourselves, or connected to us in some other fashion. This paper does not, however, seek to explore this particular set of issues.
4. Another dimension on which human-centricity can be illustrated is in terms of trust. It's become a commonplace to call for more trust in people towards data-handling organizations. A human-centric paradigm flips the setting and asks for organizations to be more deserving of people's trust, or trustworthy, rather than asking people simply to trust more or more easily.
5. E.g. MyData declaration (<https://mydata.org/declaration>), Me2B Alliance principles (<https://me2ba.org/principles/>), Don Norman's Fundamental Principles of Human-Centered Design and Application (<https://jnd.org/the-four-fundamental-principles-ofhuman-centered-design/>), University of Glasgow research on "Human Data Interaction" (<https://gtr.ukri.org/projects/?ref=EP/R045178/1>).
6. This is not, however, to be understood as complete agnosticism. Certain technologies, regulations, and business models will be considered incompatible with any human-centric framework due to contradictions they have with basic human rights, digital or otherwise.
7. The human-centric paradigm is often associated with terms such as trust, transparency, privacy and openness. It's important to note here that none of the terms mentioned in this point is conceptualized as unequivocally good by any definition (moral or otherwise). The human-centric paradigm is about allowing for choice: choice for individual people and groups as well as for data-handling organizations insofar as they prioritize humans and their well-being. That choice is precisely about whom to trust and with what, how much transparency is beneficial, what to keep private and what not, what to share openly and what not. It's not that more trust etc. is automatically better, rather it's about enabling people (individually and collectively) to choose what's best for them.
8. Multiple contributors to this paper raised questions regarding the polarizing presentation of the different "flavours" that human-centricity can have in axes with two extremes. The authors acknowledge these questions as valid and wish to underscore their desire to provoke thought, not restrict it, with this presentation and their desire to illustrate various interpretations currently afield regarding what a human-centric approach can look like.