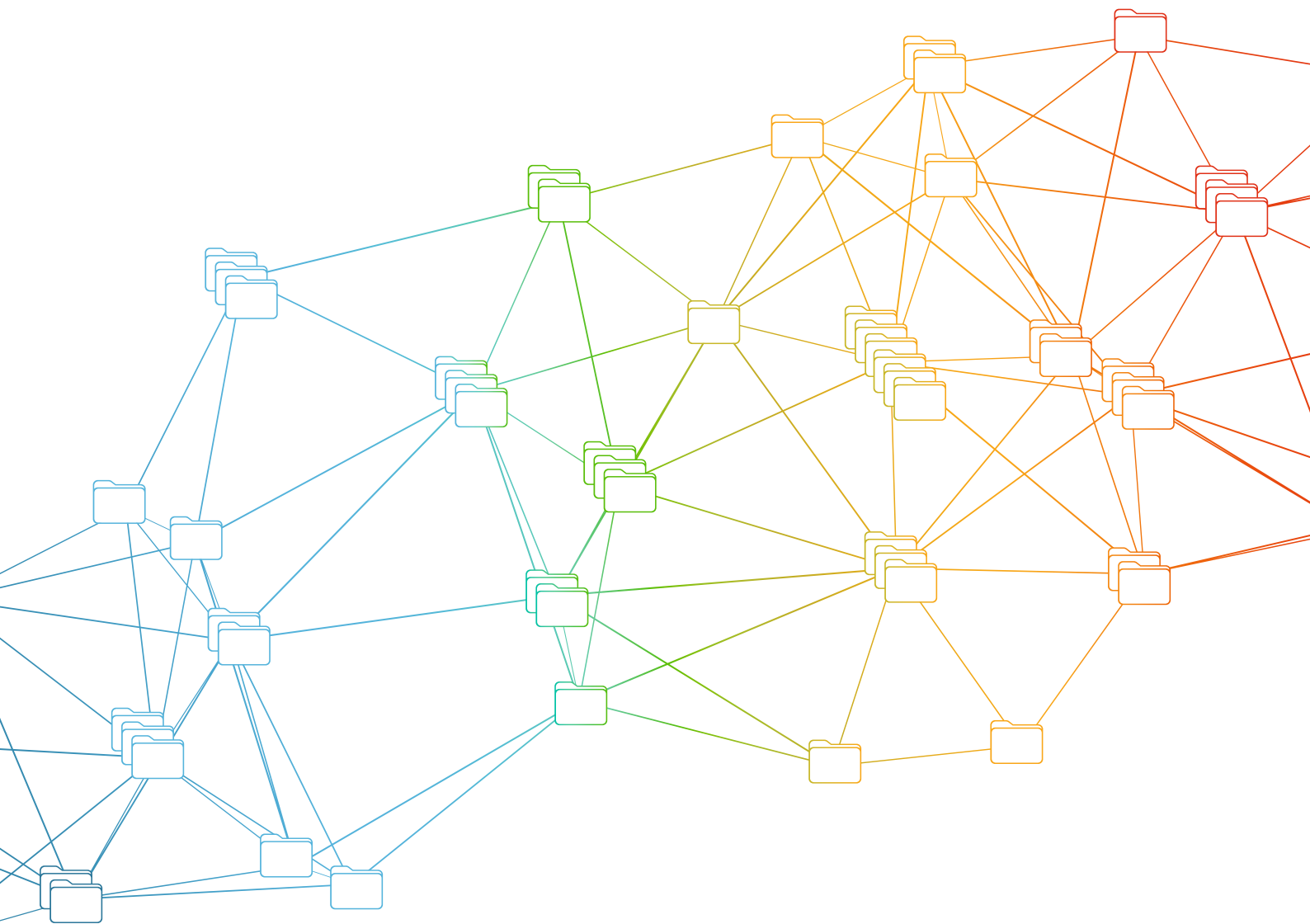


Automated Decision-Making Systems in the Public Sector

An Impact Assessment Tool for Public Authorities

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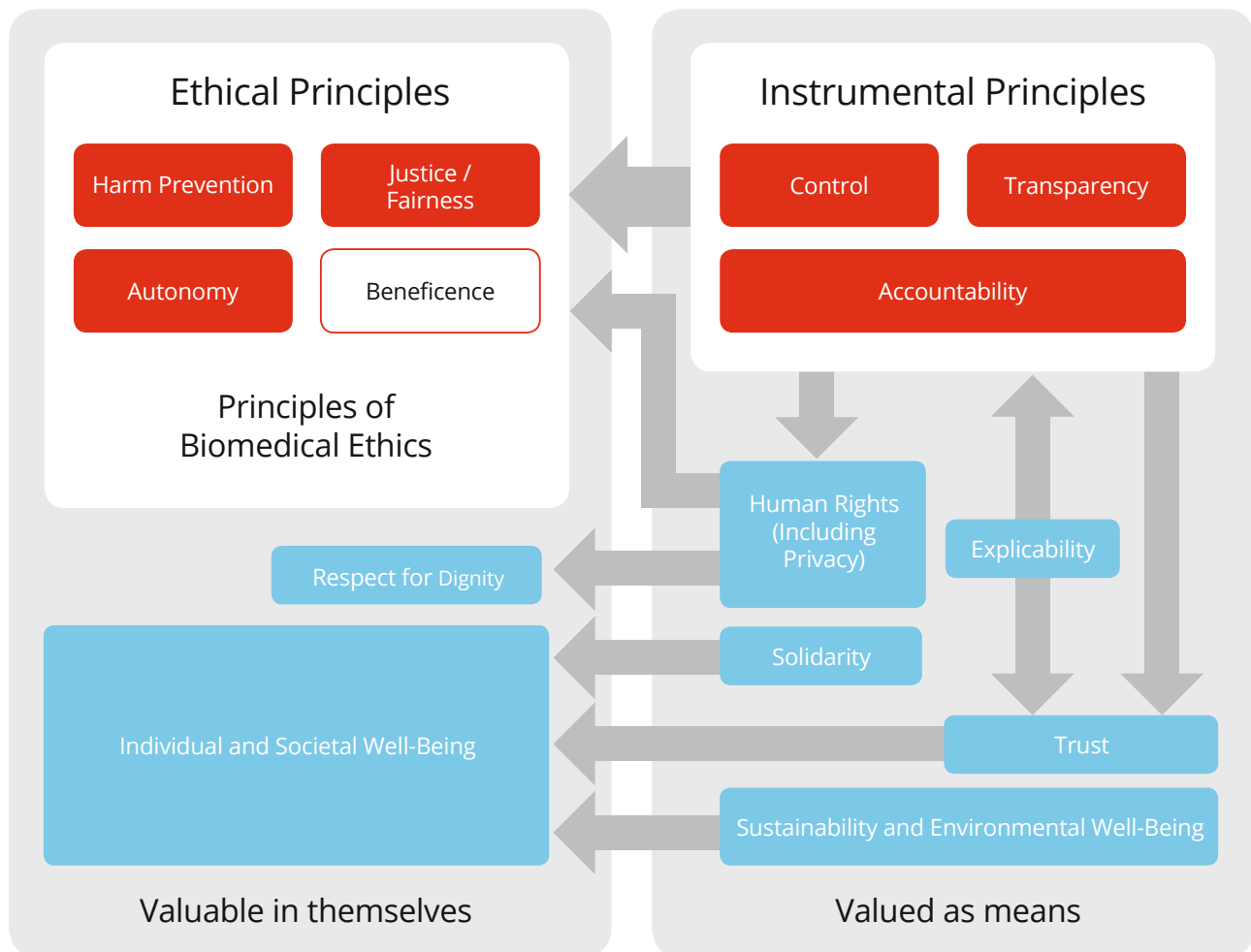


Fig. 1, the most important principles and values in ethical guidelines on AI (illustration by authors). In red, the principles considered in this framework; in blue, values and principles appearing in other guidelines. The arrow means “is required for”. For simplicity, we include environmental well-being as a means to enable humans to flourish. Arguably, respect for the environment can also be regarded as a moral end in itself, quite apart from its impact on people. This is controversial.

the most widely used framework of ethical principles, those of biomedical ethics.¹¹

will refer to control, transparency, and accountability as “instrumental principles”.¹²

Further principles found in many guidelines can be classified as belonging to three macro-categories: control, transparency, and accountability. Here, we

The analysis of eighteen other documents about the use of ADM in the public sector¹³ reveals further ethical and instrumental principles compatible with this structure.

11 Tom L. Beauchamp and James F. Childress, *Principles of Biomedical Ethics*, 6. ed. (New York: Oxford University Press, 2008).

12 Michele Loi, Christoph Heitz, and Markus Christen, “A Comparative Assessment and Synthesis of Twenty Ethics Codes on AI and Big Data,” in 2020 7th Swiss Conference on Data Science (SDS), 2020, 41–46, <https://doi.org/10.1109/SDS49233.2020.00015>; Michele Loi, “People Analytics Must Benefit the People. An Ethical Analysis of Data-Driven Algorithmic Systems in Human Resources Management” (AlgorithmWatch, March 2, 2020), https://algorithmwatch.org/wp-content/uploads/2020/03/AlgorithmWatch_AutoHR_Study_Ethics_Loi_2020.pdf. A similar value framework, including three of the four principles from the EU Ethics Guidelines (non-maleficence or harm prevention, justice and impartiality [fairness], and freedom and autonomy) plus beneficence, plus the three key procedural requirements of control, transparency, and accountability are used in the AlgorithmWatch report on the ethics of human analytics and algorithms in HR.

13 Braun Binder, et. al., *Einsatz Künstlicher Intelligenz in der Verwaltung*, 65–66.