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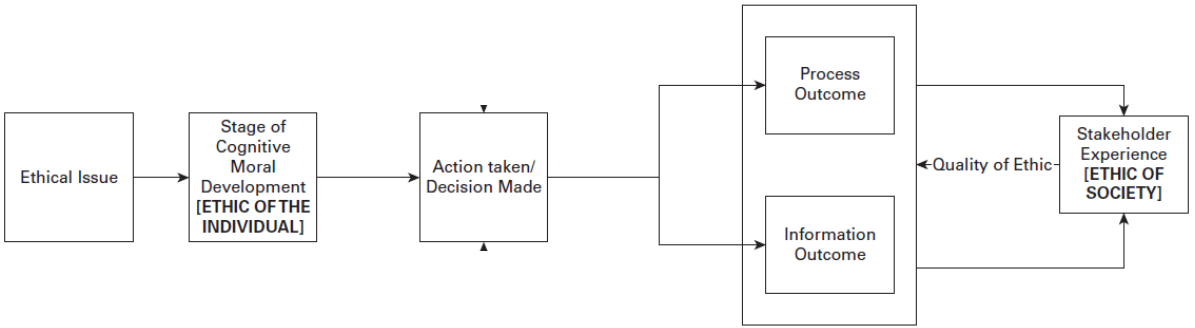
5. Algorithmic Accountability

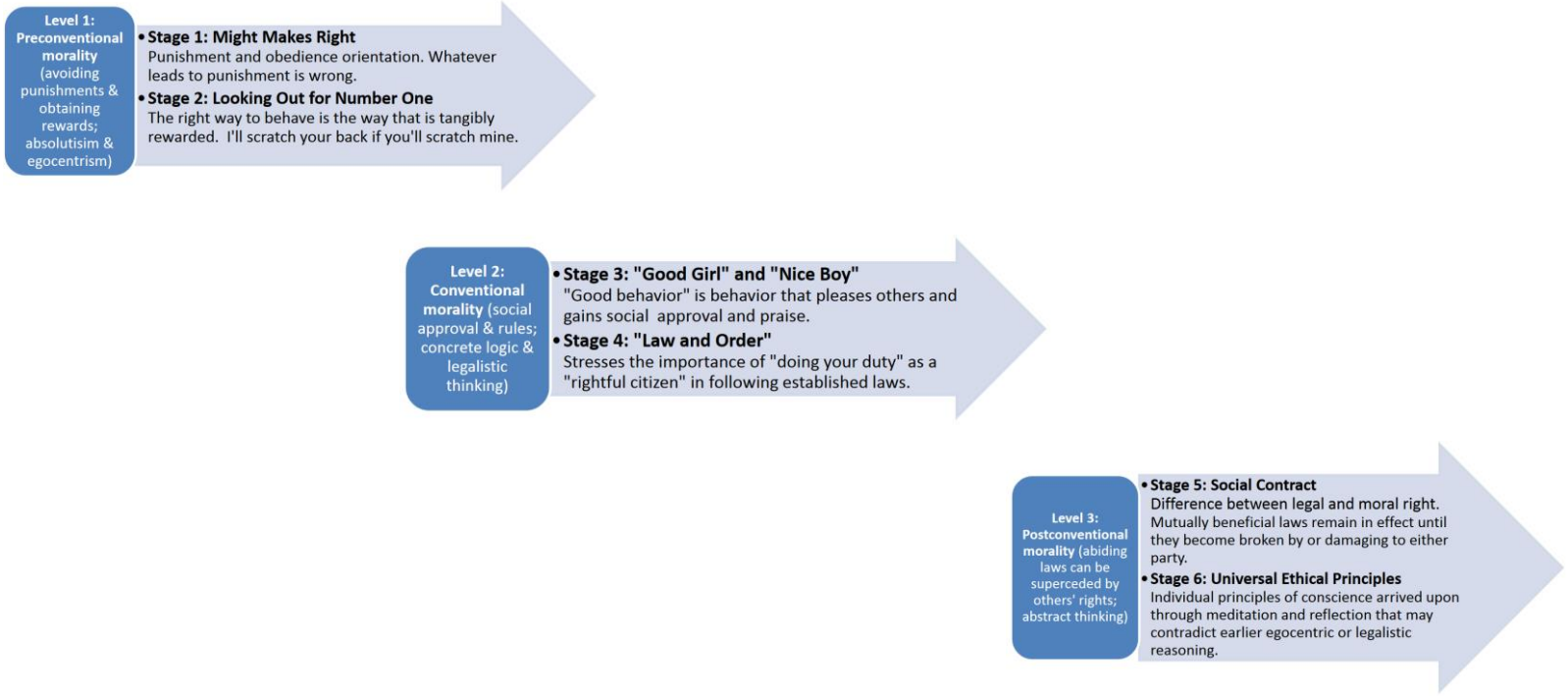
5.1 Individual ethical decision-making

A framework for ethical decision-making in organizations



Source: O'Keefe/O'Brien (2018): Ethical data and information management

Micro-level ethics: Kohlberg's Stage Theory of Moral Development



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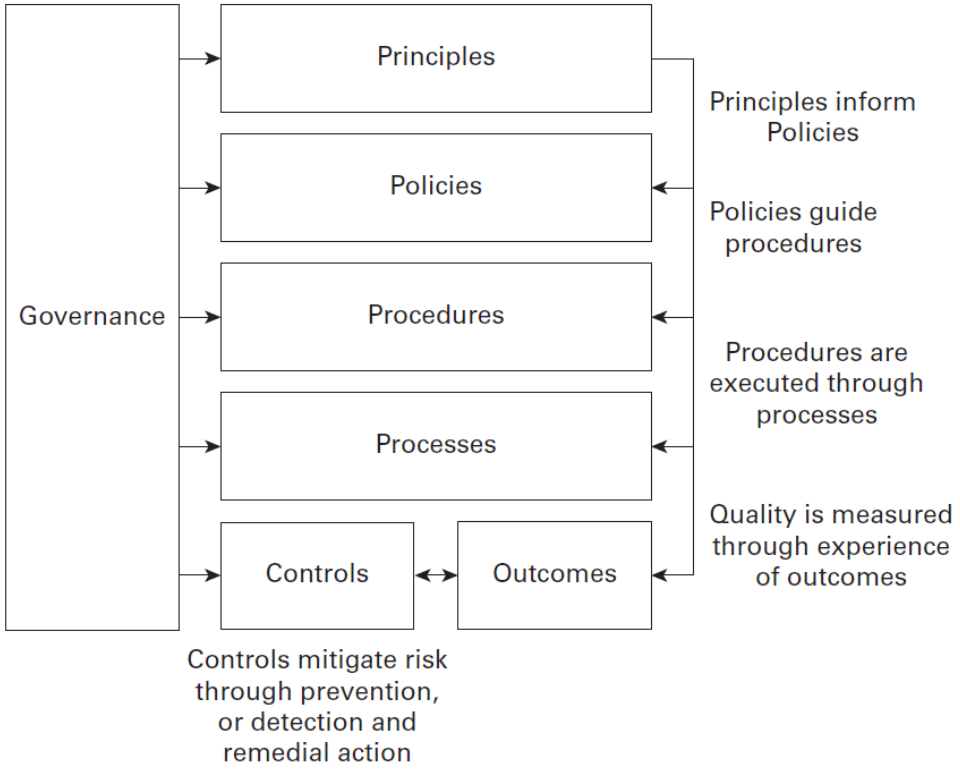
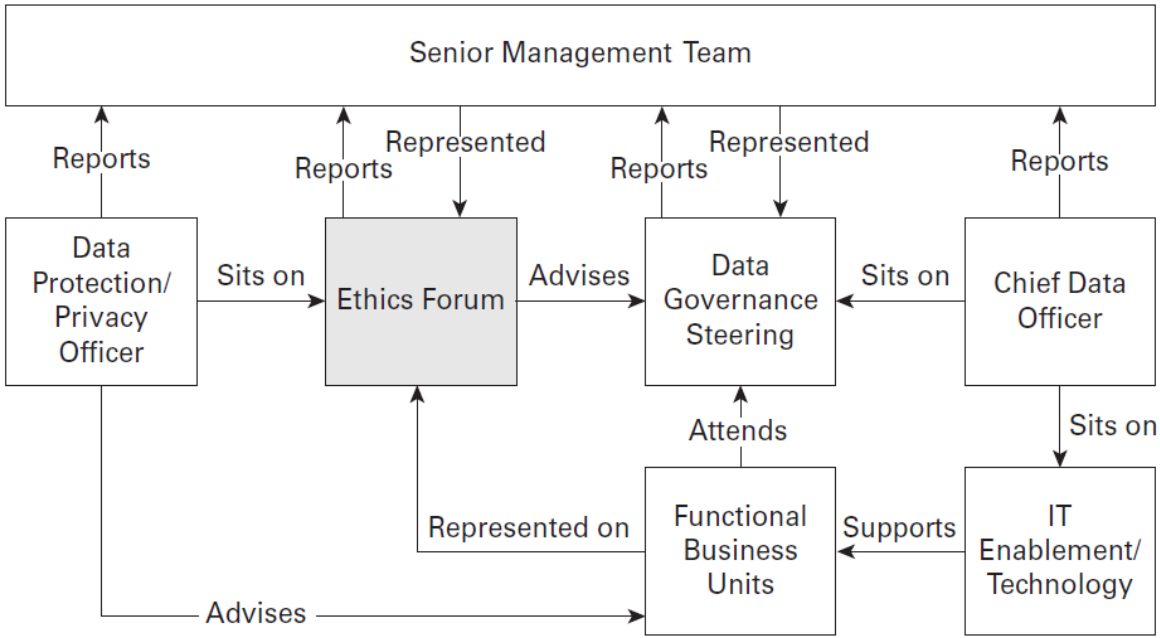
5.2 Fundamentals of Data Governance

Basic distinctions



Source: O'Keefe/O'Brien (2018): Ethical data and information management

An example of a governance structure



Source: O'Keefe/O'Brien (2018): Ethical data and information management

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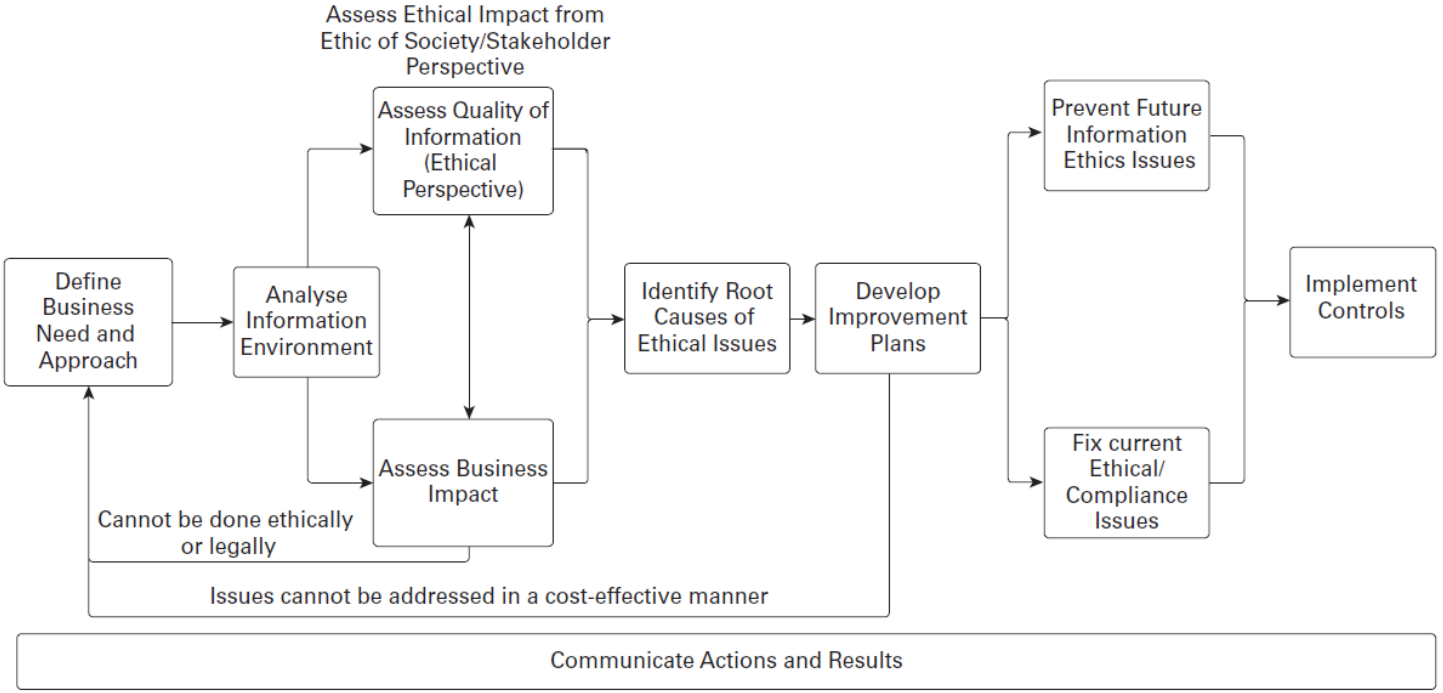
5.3 Ethical Data Management

A guiding framework for ethical data management



Source: O'Keefe/O'Brien (2018): Ethical data and information management

The four dimensions of ethical impact assessment

Sustainability

- What are stakeholder expectations? Have stakeholders been directly consulted?
- What are the environmental, social and financial implications?
- How can trade-offs between environmental, social and financial aspects be minimized?
- If minimizing trade-offs appears unattainable as single entity, has the organization considered engaging in collective action through multi-stakeholder initiatives?

Technology

- What is the technology architecture?
- What are the data flows?
- How novel is the processing?
- What are the technical requirements and processes?
- What technology risks have been identified?

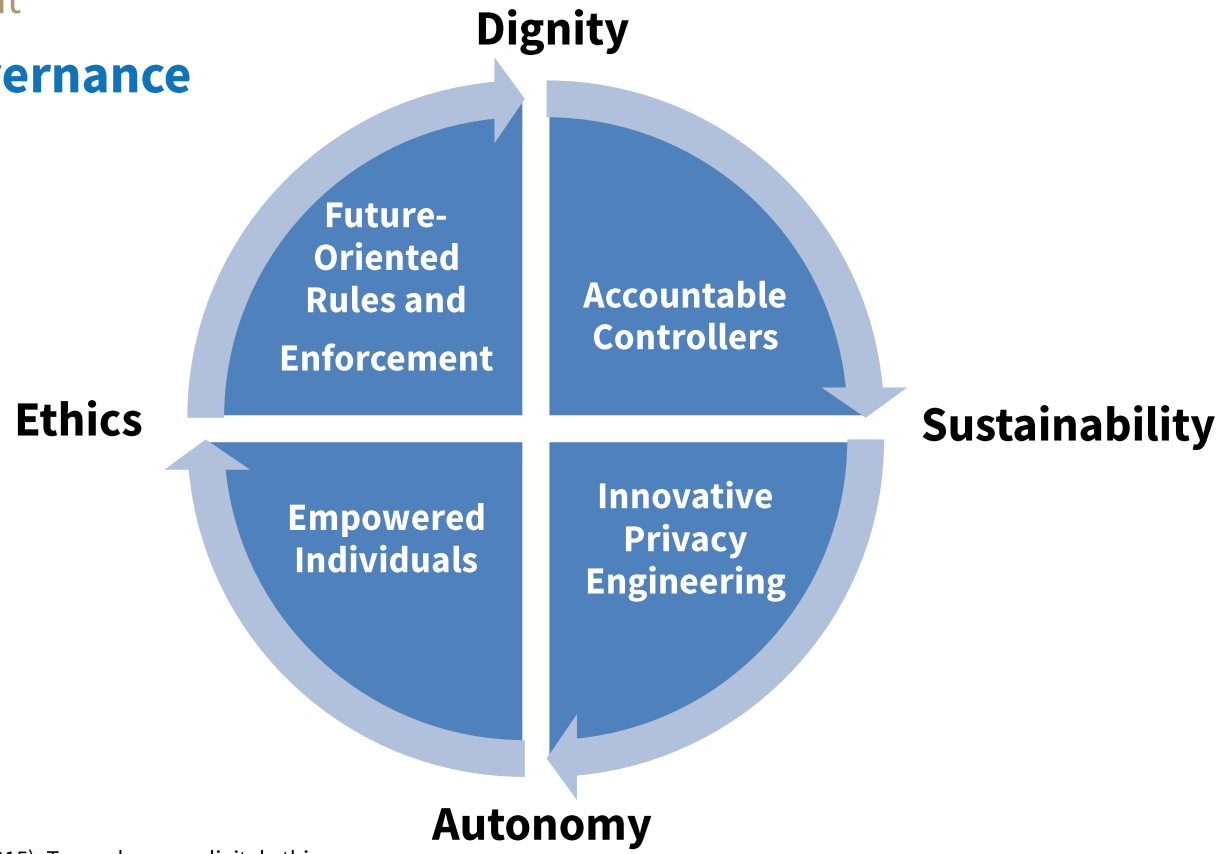
Legality

- What regulatory rules might apply?
- What guidance is available from relevant regulators?
- What internal governance structures and rules apply?

Morality

- Is it supporting or enhancing human dignity?
- Does it preserve the autonomy of the person?
- Is the processing necessary and proportionate?
- Is the organization proactively engaging with affected stakeholders? Do adversely affected individuals or groups have the possibility to voice their concerns?

Responsible data governance



Source: adapted from European Data Protection Supervisor (2015): Towards a new digital ethics.