Ethics and Trustworthiness of Algorithmic Decision-making Systems in The Public Sector

Tam Nguyen, Regina Connolly

1 BACKGROUND:

Increased use of ADS in public sector

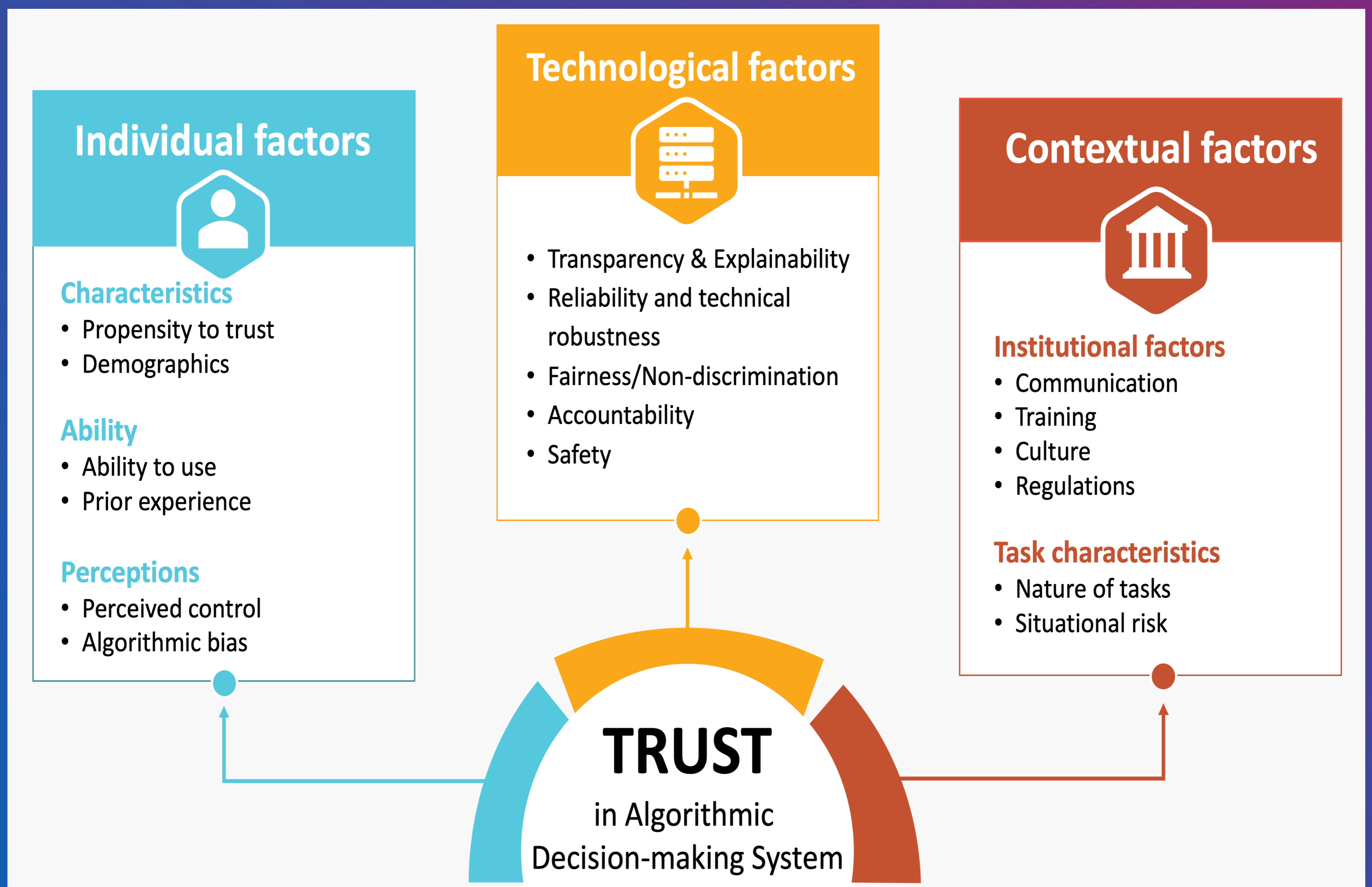**Low Trust** in ADS

RESEARCH AIM:
Investigate **Ethical & Trust-related Factors** that affect the adoption of ADS in various public sector contexts.

2 METHODOLOGY:

- Large-scale survey on public trust in ADS, with 344 participants from 15 countries
- In-depth interviews
- Case study

References:
Cabiddu, F. *et al.* (2022) 'Why do users trust algorithms? A review and conceptualization of initial trust and trust over time', *European Management Journal.*
EU High-Level Expert Group on Artificial Intelligence (2019) *Ethical guidelines for Trustworthy AI.*
Castelluccia, C. and Métayer, D. Le (2019) *Understanding algorithmic decision-making: Opportunities and challenges*, European Parliamentary Research Service.

Individual factors

Characteristics
- Propensity to trust
- Demographics

Ability
- Ability to use
- Prior experience

Perceptions
- Perceived control
- Algorithmic bias

Technological factors

- Transparency & Explainability
- Reliability and technical robustness
- Fairness/Non-discrimination
- Accountability
- Safety

Contextual factors

Institutional factors
- Communication
- Training
- Culture
- Regulations

Task characteristics
- Nature of tasks
- Situational risk

TRUST
in Algorithmic Decision-making System