# Ethical Adoption of Artificial Intelligence in Cybersecurity within the Irish Civil Service
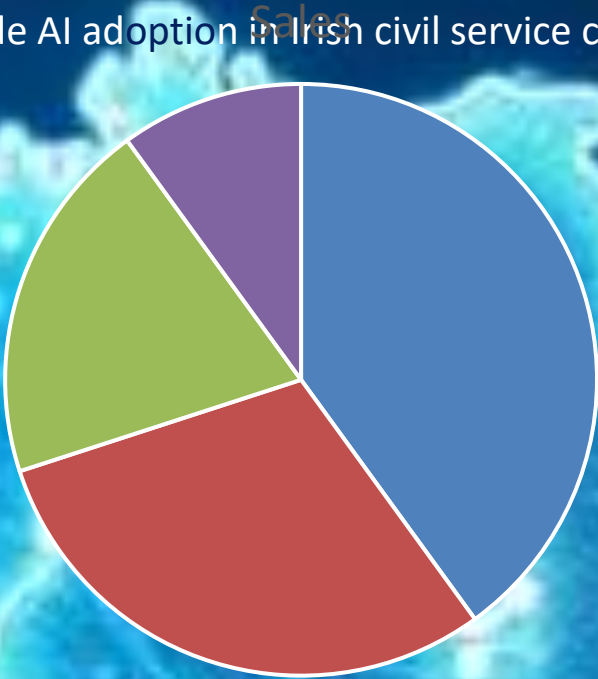
## Bridging Innovation and Governance Using Rogers' Diffusion of Innovation Theory

**Overview**
This study examines AI integration barriers in Irish civil service's cybersecurity practices

**Adoption barriers**
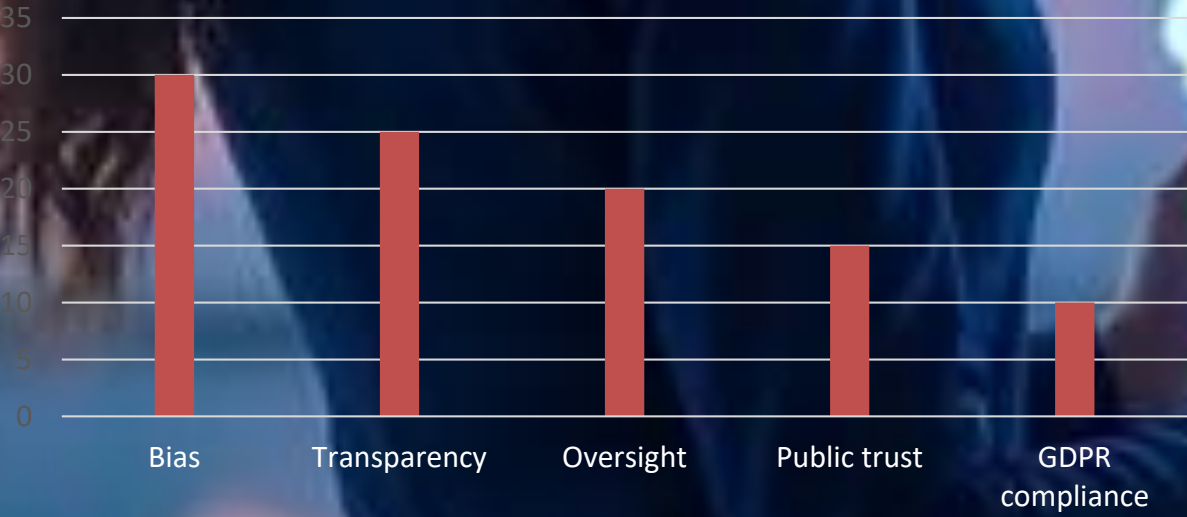Technical, regulatory, financial and cultural barriers impede AI adoption in Irish civil service cybersecurity

**Research focus**
The study investigates obstacles to AI adoption and proposes governance strategies for ethical integration

**Findings**
Major ethical challenges dentified algorithmic biases, and transparency in AI- decision making along with data privacy



Bar chart axis labels: 35, 30, 25, 20, 15, 10, 5, 0 — categories: Bias, Transparency, Oversight, Public trust, GDPR compliance
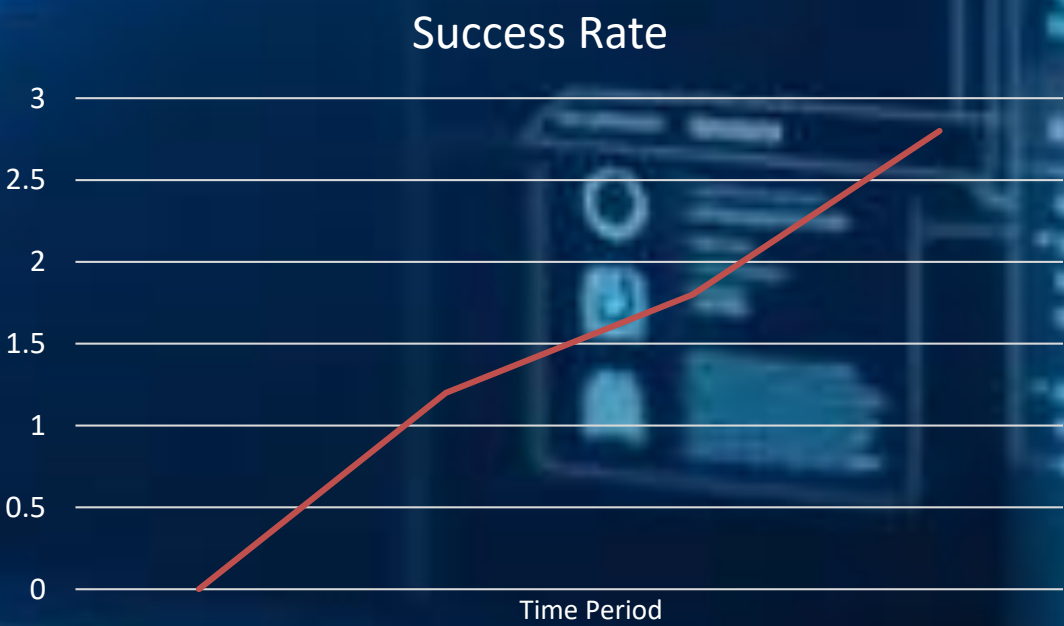
**Strategies**
Implement ethical oversight committees to foster accountability in AI apps in the civil service
Promote awareness and training programs to equip professionals with AI understandings and skill...

**Implementations**
Pilot projects can demonstrate the feasibility of AI in cybersecurity with measurable outcomes

Success Rate
3
2.5
2
1.5
1
0.5
0
Time Period

**Conclusion**
Adoption of AI in Irish civil service cybersecurity requires overcoming barriers, addressing ethical challenges and implementing effective governance frameworks that prioritise transparency and accountability.