Customer Engagement with AI-Powered Chatbots in Retail Banking

Background and Research Question

Dominant Models
- Technology acceptance models (TAM, UTAUT) dominate AI-enabled service research.
- Focus on adoption and intention to use.
- Emphasise functional efficiency (usefulness, ease of use).

Limitations in High-Risk Contexts
- AI systems are autonomous, adaptive, and opaque.
- In retail banking, customers evaluate AI beyond efficiency.
- Relational perceptions (especially trust and transparency).

Key Research Gap
- Relational factors influence adoption, but little is known about their role in post-adoption engagement.
- Constructs studied in isolation, not jointly.

Research Needed
- Shift focus from adoption → sustained engagement.
- Examine how multiple perceptions jointly shape engagement with AI-powered chatbots.

Research Question

Which customer perceptions of AI chatbots shape engagement in retail banking?

Methods

Survey
- n = 30 users; measures: engagement, trust, satisfaction, empathy, personalisation; multiple regression.

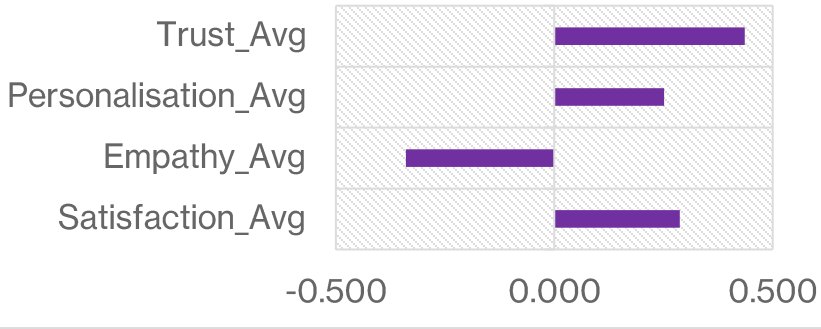
Sentiment Analysis
- ~19,000 U.S. banking reviews; logistic regression + XGBoost & BERT comparators.

Design
- Triangulated quantitative approach combining perceptual and behavioural evidence.

Key Findings

- Trust strongest predictor of engagement.
- Satisfaction & personalisation weaker positive effects.
- Empathy negatively associated.
- Negative sentiment driven by functional failures which can erode trust over time.

Relative Strength of Engagement Drivers



Implications

Theory: Extends chatbot research from adoption to engagement; positions trust as central.
Practice: Prioritise functional reliability and trust, not artificial empathy.