UX RESEARCH

Identity Disclosure in Service Chatbots

Trust · Customer Retention · UX Design

SUBJECT

User Experience Design

DURATION

6 minutes · 6 slides

DATE

June 2026

Why Identity Disclosure Matters

Problem · Research question · Relevance

CENTRAL RESEARCH QUESTION

What role does disclosing a chatbot's non-human identity play in trust and customer retention?

— Service chats: users increasingly interact with chatbots instead of humans

— AI hospitality market projected to reach $3.2B by 2025

— Trust and positive experiences are essential for churn prevention

— Transparency about machine identity becomes a key UX design factor

Theoretical Background

Trust as a driver of customer retention

Funke et al. (2023)

THEORETICAL FOUNDATION · OUR STUDY BUILDS ON

	DISCLOSED AI	CONCEALED AI
Good outcome	Solid trust	Trust ↓
Bad outcome	Trust ↓	**Lowest trust**

Key takeaways

>80%

preferred disclosed AI

— Disclosure × outcome jointly shape **trust**

— **Concealed AI** + bad outcome → lowest trust

— Our vignette study extends Funke's 2×2 design

Methodological Approach

Online vignette study · n = 37 · randomized order

> Prior work: disclosed vs. concealed AI — we split disclosure to test how explicit it should be.

A Radically transparent

AI stated explicitly in chat

B Subtle disclosure

"AI powered" label only · not in chat

C Human disguise

Design derived from Funke et al. (2023): three disclosure levels operationalize open, subtle, and concealed AI · Measures: trust, fairness, retention, cancellation fairness, empathy, comfort (7-point Likert)

Results

Effects vary by dimension

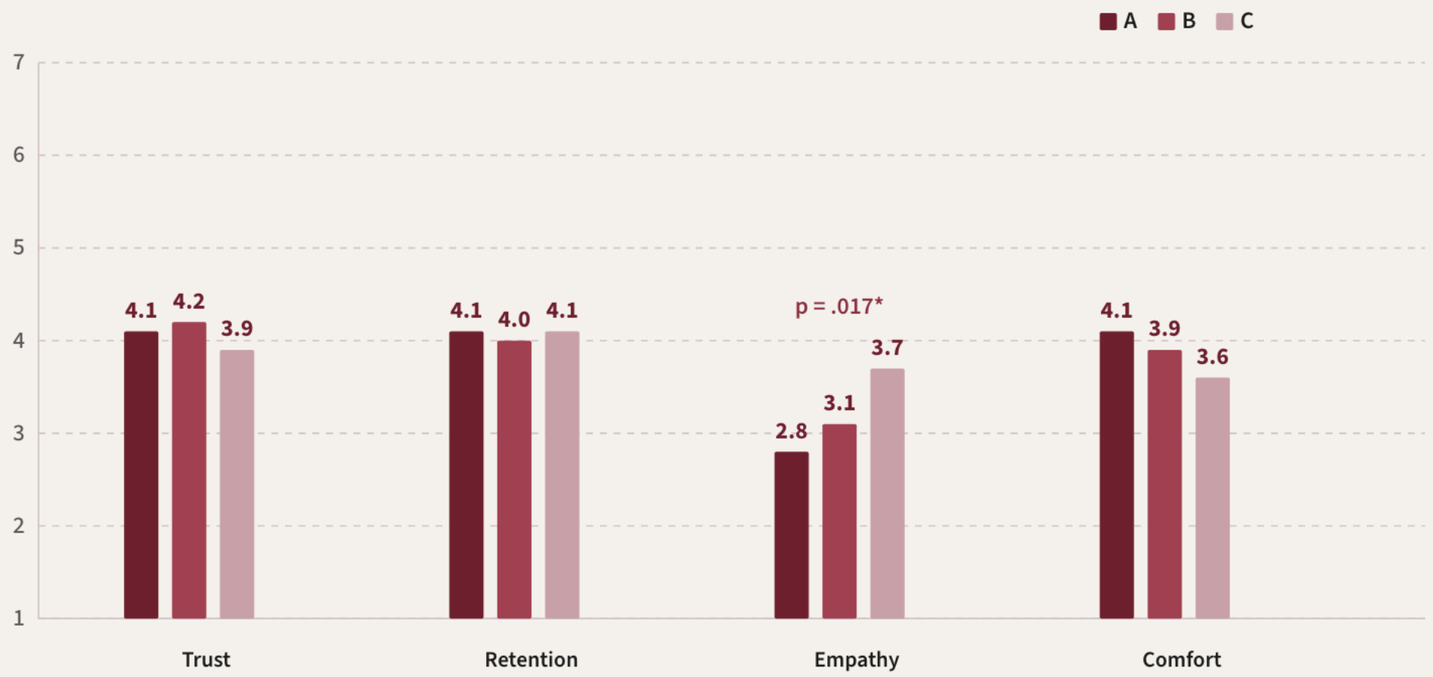
Online vignette study · n = 37 · randomized within-subjects order · paired t-tests · 7-point Likert scales

Paired t-tests

N = 35 COMPLETE CASES

Significant: Empathy · A vs C · t(34) = −2.50 · **p = .017***

Not significant (p > .05): Trust (A·B p = .834 · A·C p = .117 · B·C p = .208) · Retention (all n.s.) · Comfort (all n.s.) · Empathy A·B p = .285 · Empathy B·C p = .098 · exploratory · no Bonferroni correction



Key finding

Descriptively: **B** leads on trust (4.2), **C** on empathy (3.7), **A** on comfort (4.1). **Only empathy A vs. C** is statistically significant — all other paired comparisons n.s.

Discussion

Descriptive patterns · paired t-test interpretation

A — Radical

Comfort highest (4.1). **Empathy significantly lower than C** (p = .017*) — clearest t-test effect involving A. Open AI identity feels honest but less warm.

B — Subtle

Descriptive **trust leader (4.2)**, but **no significant difference** vs. A (p = .834) or C (p = .208). Minimal "AI powered" cue — promising, not statistically proven.

C — Disguise

Significantly highest empathy vs. A (p = .017*). Lowest trust & comfort descriptively — **not significant** in t-tests. Concealment may boost warmth but not verified on retention.

Inferential takeaway: Of 12 paired comparisons, **only empathy A vs. C** reached significance (t = −2.50, **p = .017***). Descriptive leaders on trust (B) and comfort (A) were **not statistically confirmed**.

Limitations

Student sample (n = 37; **t-tests n = 35**) · hypothetical vignettes · **12 pairwise tests without correction** · small n limits power · no service-outcome manipulation

Conclusion & Outlook

Recommendations

1. Match disclosure style to the primary UX goal — descriptive patterns differ by dimension
2. Do not fully conceal AI — C shows lowest trust and comfort
3. Use B when trust drives retention; use A for clarity — but only empathy A vs. C was statistically significant
4. Report inferential stats cautiously: small n, exploratory design

Outlook

Larger samples, Bonferroni or ANOVA follow-ups, real cancellation flows, and Funke-style service-outcome interactions.

Thank you!