

# Developing a Theoretical Framework for Web Credibility Assessment on Social Q&A Sites: Preliminary Findings

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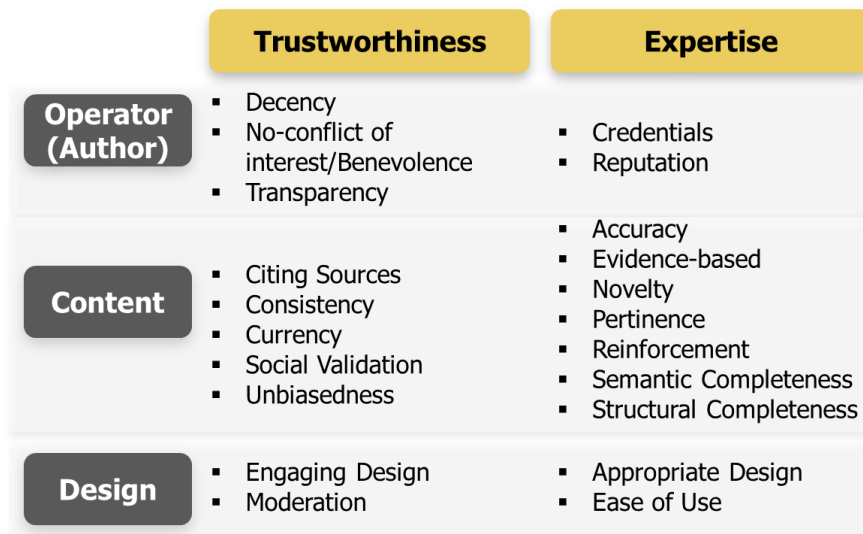
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## Introduction and purpose

- Social Q&A as a promising source of online information
- Lack of research on information credibility in social Q&A
- To explore users' perceptions of credibility markers specific to social Q&A environment

## Theoretical background

- An extended typology of web credibility (Figure 1) based on:
  - Hovland et al.'s [1] two key dimensions of credibility—**trustworthiness** and **expertise**
  - Fogg's [2] three types of web credibility cues—**operator**, **content**, and **design**



**Figure 1.** Framework of web credibility assessment on social Q&A sites

## Research method

- Conducted an online survey ( $N = 173$ )
- Distributed through Amazon MTurk in July 2022

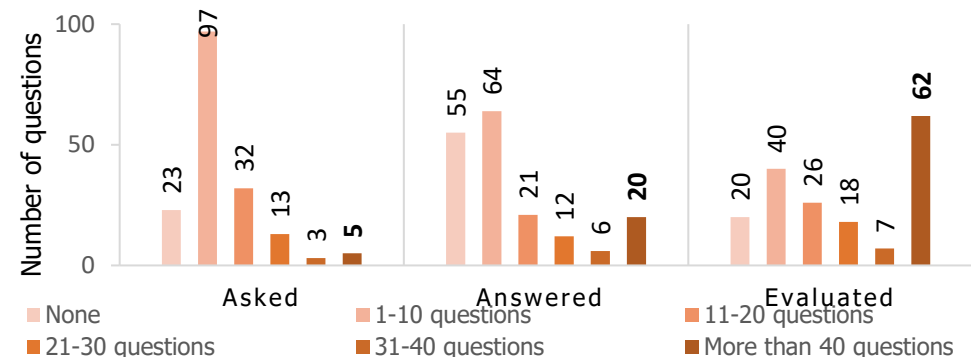
## Conclusion

- Necessity of **incorporating design features** (e.g., engaging design, moderation, ease of use) in the web credibility assessment framework for social Q&A

## Result

### Use of social Q&A sites

- Majority used social Q&A sites for more than three years ( $n = 152$ )
- Daily use counts approximately 26% ( $n = 46$ ) and weekly use about 41% ( $n = 71$ )



**Figure 2.** Descriptive statistics social Q&A sites usage ( $N = 173$ )

**More active in evaluating questions** than asking or answering questions and comments:

- 3% **asked** 40+ questions
- 9% **answered** 40+ questions
- 36% **evaluated** 40+ questions

### Perceptions of web credibility markers

- Top five credibility criteria - **All Content related criteria**: (1) accuracy ( $M=4.71$ ), (2) pertinence ( $M=4.46$ ), (3) evidence-based ( $M=4.44$ ), (4) currency ( $M=4.30$ ), and (5) semantic completeness ( $M=4.32$ )
- Most highly rated credibility type (Table 1): **Design expertise ( $M=4.27$ )**
- Participants perceived **expertise criteria highly important** compared to trustworthiness criteria

Types (M, SD)	Survey questions (credibility criteria)	M(SD)
OT: Operator Trustworthiness (3.64, 0.63)	Author of the content provides high-quality information rather than for commercial or self-interested purposes (No conflict of interest/benevolence)	4.30(0.78)
	Author of the content engages in providing high-quality answers (Decency)	4.16(0.84)
OE: Operator Expertise (3.92, 0.64)	Author of the content has sufficient knowledge and experience (Credentials)	4.29(0.87)
	Social Q&A community is reputed to be a reliable source (Reputation)	4.02(0.86)
CT: Content Trustworthiness (3.77, 0.59)	provide up-to-date information (Currency)	4.39(0.80)
	provide unbiased information (Unbiasedness)	4.24(0.90)
CE: Content Expertise (3.99, 0.58)	provide accurate information (Accuracy)	4.71(0.61)
	provide relevant and applicable information (Pertinence)	4.46(0.72)
	provide information based on valid and verifiable evidence (Evidence-based)	4.44(0.68)
DT: Design Trustworthiness (3.86, 0.76)	control malicious activities (Moderation)	4.31(0.96)
	provides features that enable users to provide feedback on answers or questions (Engaging design)	3.88(0.95)
<b>DE: Design Expertise (4.27, 0.59)</b>	designed appropriately for users to ask and answer questions (Appropriate design)	4.31(0.72)
	provides features that help users find relevant questions and answers for their information needs (Ease of use)	4.31(0.75)

**Table 1.** Top two credibility criteria and markers on social Q&A sites

### References

1. Hovland, C. I., Janis, I. L., Kelley, H. H.: Communication and persuasion: Psychological studies of opinion change. Yale University Press (1953).
2. Fogg, B. J. Persuasive technology: Using computers to change what we think and do. Elsevier (2003).