

Developing a Theoretical Framework for Web Credibility Assessment—A Case of Social Q&A Sites: Preliminary Findings



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Introduction

- Social question-and-answer (Q&A) allow users to "ask and answer question, evaluate content submitted by others, and view the com-munity's aggregate assessment of which questions, answers, and users are best."^[1]
- Characterized by their content-focused and collaborative nature, Q&A sites allow users to express their information needs as questions in natural language and obtain answers based on the community's collective knowledge.
- Relatively less research has focused on web credibility issues in social Q&A sites.

Theoretical Background

- Two-factor model of credibility^[2]
 - Trustworthiness: Perceived willingness of the source to provide high quality information
 - Expertise: Perceived ability to provide high quality information
- Web credibility framework^[3]
 - o Operator (author): Source characteristics
 - Content: Attributes of the content
 - Design: Design elements related to organizational, technical, aesthetic, and interactive features of the site
- Extended typology of web credibility (Table 1)^[4]

	Trustworthiness	Expertise
Operator	Operator Trustworthiness	Operator Expertise
Content	Content Trustworthiness	Content Expertise
Design	Design Trustworthiness	Design Expertise

Table 1. Six types of web credibility

Study Design

- To develop a platform-type specific framework for web credibility assessments, a three-phased study was conducted.
- Phase 1 Literature Analysis: To understand how previous studies on social Q&A sites or similar peer knowledge production communities have conceptualized and operationalized the credibility of information on such sites
- Phase 2 Synthesis of Findings of Phase 1: To create a conceptual framework for web credibility assessments of social Q&A sites.
- Phase 3 Content Analysis: To test and refine the framework by analyzing two specific cases—the Stack Exchange network of Q&A sites and Wikipedia Reference Desk.
 - Note: The current poster reports on preliminary findings of the first two phases.

Findings & Discussion

- Phase 1: Twenty-one criteria for web credibility assessment of social Q&A sites have been identified.
- Phase 2: An extended typology of web credibility for social Q&A sites, categorizing the 21 criteria into six types of web credibility has been proposed (see Table 2).
- Existing frameworks focus more on contentrelated attributes (e.g., evidence-based, semantic clarity), but less on operator- or author-related attributes (e.g., credentials).
- Design-related attributes (e.g., interactive design) were rarely included in the frameworks, which warrants further investigation on the potential influences of design on people's web credibility assessments of social Q&A sites.

	Trustworthiness	Expertise
Operator	Operator (author) trustworthiness: Decency Integrity Non conflict of interest/ Benevolence Transparency	Operator (author) expertise: • Credentials • Reputation
Content	Content trustworthiness: Consistency Currency Citing Sources Social Validation Unbiasedness	Content expertise: Accuracy Evidence-based Novelty Reinforcement Semantic Clarity/Comprehensive Structural Complete Usefulness
Design	Design trustworthiness: • Responsive Design	Design expertise: • Appropriate Design • Ease of Use

Table 2. Proposed typology of web credibility assessments in social Q&A sites

References

- [1] Gazan, R. Social Q&A. Journal of the American Society for Information Science and Technology 62(12), 2301–2312 (2011).
- [2] Hovland, C. I., Janis, I. L., Kelley, H. H: Communication and persuasion. Yale Uni-versity Press (1953).
- [3] Fogg, B. J. Persuasive technology: Using computers to change what we think and do. Elsevier (2003).
- [4] Choi, W., Stvilia, B.: Web credibility assessment: Conceptualization, operationaliza-tion, variability, and models. Journal of the Association for Information Science and Technology 66(12), 2399–2414 (2015).

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