A New Framework for Web Credibility Assessment

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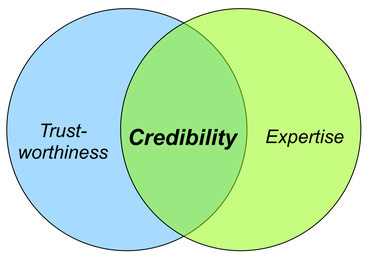
PROBLEM STATEMENT

- Web credibility has been defined and measured largely based on the three main objects of assessment: operator (source), content (message), and design (media).
- Several underlying dimensions have been identified to address each type of credibility—e.g., trustworthiness, expertise, etc. for *operator (source)*; accuracy, comprehensiveness, validity, etc. for *content (message)*; and stability, consistency, etc. for *design (media) credibility*.
- Even though each type of credibility and associated dimensions seemed to focus on different objects of assessments, ultimately, the root or overarching concept under investigation has been credibility.
- However, discussions of credibility have been shaped more by the sources and/or objects of credibility assessment rather than guided by a systematic conceptualization.
- This may lead to a conflation and confusion of the conceptual structure (i.e., criteria or dimensions), with measurements, and objects of measurements of the concept of credibility.

DEVELOPMENT OF A NEW FRAMEWORK FOR WEB CREDIBILITY ASSESSMENT

Key Dimensions of Credibility (Hovland et al., 1953)



1. ***Trustworthiness***: the degree of confidence in the communicator's intent to communicate valid assertion is considered as the communicator's trustworthiness
2. ***Expertise***: the extent to which a communicator is perceived to be a source of valid assertion

Figure 1. Two key dimensions of credibility

Typologies of Web Credibility Assessment (Fogg, 2003)

1. ***Operator (source)***: The organization or person offering the site—i.e., who runs a website is an important object of assessment for judging the credibility of the website.
2. ***Content (message)***: What the site provides in terms of:
   - information—e.g., currency, accuracy, relevance of content, and endorsement by a respected outside agency;
   - functionality—e.g., accessibility to past content on the website and customizability.
3. ***Design (media)***: The structural attributes of websites in terms of:
   - information design (the structure of information on each page and throughout the site)—e.g., organization of information;
   - technical design (how the site works from a technical standpoint)—e.g., search function is powered by a respected search engine;
   - aesthetic design (how things look, feel, or sound)—e.g., whether or not the site is professionally designed.

Table 1. Cross-mapping of the two key dimensions of credibility (Hovland et al., 1953) and the three categories of Web credibility (Fogg, 2003)

	Trustworthiness	Expertise
Operator	How trustworthy is the operator? – Whether or not the operator's character is: • Ethical • Honest/Sincere • Fair • Believable • Well-respected • Trusted	How expert is the operator? – Whether or not the operator (source) of the Web resources is: • Reputable • Famous • Authoritative • Competent
Content	How trustworthy is the content? – Whether or not the message/information being provided in the website is: • Neutral • Unbiased • Even-handed • Consistent • Current	How expert is the content? – Whether or not the message/information being provided in the website is: • Informative • Complete • Comprehensive • In-depth • Accurate • Correct • Clear
Design	How trustworthy is the design? – Whether or not the structure, functionality, aesthetic design, and interactivity of information and/or the website as a whole is: • Stable • Consistent • Reliable	How expert is the design? – Whether or not the structure, functionality, aesthetic design, and interactivity of information and/or the website as a whole is: • Well-organized • Easy to use • Aesthetically put together

FUTURE RESEARCH & IMPLICATIONS

- An online survey questionnaire will be developed based on the six constructs (i.e., six categories) in the framework (Table 1).
- Confirmatory factor analysis (CFA) will be used to test the framework.
- The outcomes of this study will include the new framework and survey questionnaire that could be used as reusable knowledge resources in development of credibility assessment models in different online contexts:
  - Online information topics—e.g., health, education, entertainment, etc.
  - Media types—e.g., websites, SNSs, social Q&A sites, etc.
- This new framework will help researchers operationalize Web credibility assessment in different contexts, as well as provide system developers with cues/markers to design 'credible' systems.

REFERENCES

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Fogg, B. J. (2003). *Persuasive technology: Using computers to change what we think and do*. San Francisco, CA: Morgan Kaufmann Publishers.