
TRUST EVALUATION OF USERS BASED ON SOCIAL FEEDBACK AND RATINGS

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ABSTRACT: The purpose of this paper is to examine the criteria individuals use to evaluate the trustworthiness of applications, service providers, and other users in online environments. Trust plays a crucial role in social networking platforms, where users decide whether to interact or share personal information based on perceived reliability. To identify key trust factors, a review of 264 research articles was conducted, among which 100 studies reported significant trust-related attributes. Based on this analysis, the paper presents a set of essential trustworthiness factors that influence user confidence in digital interactions. Furthermore, the study offers guidance for software engineers to select and incorporate appropriate trust features during the requirement analysis phase when designing social networking and similar applications. Considering these factors can help reduce risks such as identity misrepresentation and fraudulent behavior, including issues like catfishing, thereby improving user safety and enhancing the overall credibility of online systems.

Keywords: *trustworthiness; trust modeling; computer-mediated introduction; social media applications; software development.*

1. INTRODUCTION

Trust plays a vital role in establishing and maintaining successful relationships, both offline and online. In digital environments, particularly social media platforms, trust becomes even more important because users often interact with unknown individuals. These platforms enable people to form personal, professional, and commercial relationships through computer-mediated interactions (CMIs). Applications such as online dating services and sharing economy platforms rely heavily on user trust to support meaningful interactions, improve engagement, and attract new participants.

However, the online environment also introduces several risks. Users may encounter identity deception, fraudulent activities, privacy violations, poor service

quality, or even physical and psychological harm when virtual interactions move into real-world meetings. In addition, social media platforms and service providers may collect, store, or misuse personal data, increasing concerns about security and confidentiality. Since online profiles often present idealized or incomplete information, evaluating the reliability of individuals, organizations, or applications becomes a complex and subjective task.

Users' willingness to interact depends largely on their perception of the credibility of peers, applications, and service providers. Therefore, digital systems should support users in making informed trust decisions. Despite its importance, many software engineers lack clear guidance on how to incorporate trust-



related features during the design and development stages.

This study aims to address this gap by identifying key characteristics associated with trustworthiness through a comprehensive literature review. The findings provide practical insights to help software developers integrate relevant trust indicators into system design, enabling users to assess credibility more effectively and interact with greater confidence.

2. THEORETICAL BACKGROUND

Reliability is one of the factors that I shall This section examines the relationship between trust and the characteristics that influence perceptions of trustworthiness across different contexts. It also reviews how software systems have traditionally supported the development of trust in computer-mediated interactions (CMI). The concept of trustworthiness facets is introduced to describe the qualities associated with users, service providers, and application developers involved in CMI environments. A person, organization, or system is considered trustworthy when it consistently demonstrates the ability and intention to fulfill expected responsibilities. In this context, users act as trustors who evaluate whether other entities can be relied upon.

Research across multiple disciplines—including economics, sociology, psychology, and computer science—highlights common attributes associated with trust, such as competence, integrity, fairness, reliability, and transparency. Although originally defined for interpersonal relationships, these attributes are now widely applied to organizations

and technological systems. Variations in terminology exist across studies; for example, concepts such as ability, competence, fairness, and quality assurance are often used interchangeably depending on the domain.

Trust development typically occurs in stages. At the initial stage, users rely on limited information, prior assumptions, reputation, or categorization processes such as stereotypes or social similarity. This initial trust is fragile and influenced by perceived risks and benefits. Over time, as users gain experience and additional information, knowledge-based trust develops, leading to more stable and accurate evaluations. In CMI environments such as online dating or social networking, first impressions—profile information, images, and visible credentials—play a critical role in early trust formation, while continued interaction supports deeper trust. Trust in digital environments also extends beyond other users to include applications and service providers. Factors such as organizational reputation, transparency in data handling, privacy and security policies, third-party certifications, and the overall quality of information influence user confidence. Trust in a service provider often directly affects trust in its application.

Several approaches have been proposed within software engineering to support trust evaluation. The TRUST notation framework models social behavior in online communities by considering factors such as interaction relevance, collaboration value, and prior knowledge. Other models, such as computational trust frameworks for electronic commerce, estimate

trustworthiness using measurable factors like product quality, price, and expected value. Additionally, the TrustSoFt methodology focuses on identifying trust-related software requirements early in development, enabling systems to include features that help users assess the credibility of interacting parties.

By identifying and organizing key trustworthiness facets, this study provides a foundation for designing CMI systems that better support user trust evaluation. The findings can assist developers in incorporating appropriate mechanisms that enhance reliability, reduce perceived risk, and improve overall user confidence in digital interactions.

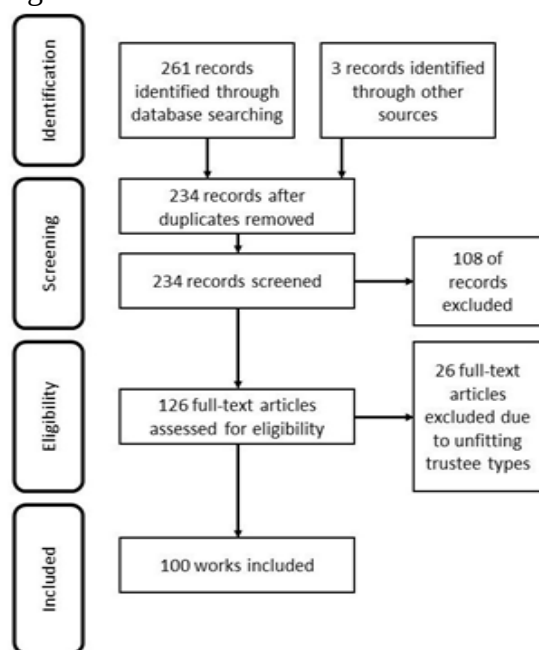


Figure1.PRISMAflowdiagram.

3.METHODOLOGY

To identify key trustworthiness characteristics, this study adopted a structured literature review methodology based on the guidelines proposed by von Brocke et al. The review process was completed over four months, followed by one month of detailed analysis.

Publications were selected regardless of their year of appearance, provided they were written in English and published in peer-reviewed journals or presented at international conferences. Relevant studies were retrieved from the Web of Science and Scopus databases, which cover a wide range of disciplines including social behavior, social networking, and cyberpsychology.

The search strategy began with the identification of keyword groups representing three trustee categories: individuals (trust between users), systems (software features and technical attributes), and organizations (trust in service providers). Trust-related terms such as trustworthiness traits and trustworthiness characteristics were combined with these categories using Boolean operators. When initial searches produced excessive results, refined keyword combinations were applied. In total, thirteen search queries were conducted. Forward and backward searches were also performed by examining citations and reference lists to identify additional relevant studies.

Due to limited research specifically addressing trust in computer-mediated interactions (CMI) within social media, the review considered trust-related studies across broader contexts. Trustees were defined broadly to include individuals, organizations, online vendors, service providers, and technological systems such as software applications or hardware components.

Following the selection phase, the literature was analyzed to extract attributes associated with perceived trustworthiness. For each identified characteristic, information such as definition, related

concepts, research method, application domain, and supporting references was documented. Only those factors supported by empirical evidence, theoretical models, or statistical analysis were included.

The study focused primarily on trust-related qualities that are understandable and applicable in practical software design contexts, rather than purely technical system properties. This approach ensures that the identified characteristics can support the development of user-centered systems that enhance perceived reliability and trust in real-world digital environments..

4. RESULTS

The literature review initially identified 264 publications published between 1957 and 2022. Studies that were not relevant to the context of social media, computer-mediated interactions, or the selected trustee categories were excluded. This included research focused solely on inter-organizational relationships, unrelated institutional structures, or trust concepts outside the scope of the study. After the screening process, 100 publications were retained for detailed analysis.

Several comprehensive review studies, including those by Fulmer and Gelfand, McKnight et al., Beldad et al., and Mohammadi et al., were particularly valuable in supporting the analysis, as they provided both theoretical foundations and empirical insights. The selected literature covered a range of research approaches, including conceptual frameworks, qualitative investigations, and quantitative analyses.

Based on the reviewed studies, trustworthiness attributes were organized

into three categories representing different trustee types: individual, technological, and organizational trust. These attributes were compiled into structured tables (Appendix A, Tables A1–A3). To address space limitations and conceptual overlap, closely related traits were grouped under broader themes. For example, complex concepts such as fairness or justice were treated as integrated dimensions rather than isolated factors.

When applying these attributes in software engineering contexts, it is important to preserve the original meaning provided in the source literature and consider the broader context in which trust is formed. The identified attributes are supported by detailed explanations and references to ensure clarity and reliability.

The reviewed studies covered diverse application contexts, including workplace relationships (e.g., manager–employee trust), healthcare interactions (patient–physician trust), and consumer relationships (trust in vendors or service providers). In digital environments, users commonly rely on platforms such as social media, online banking, and e-commerce to evaluate the reliability of technological systems. Organizational trust factors were examined across various settings, including online services, recruitment platforms, and internal organizational processes. These findings provide a comprehensive foundation for understanding trustworthiness across different domains and for supporting trust-oriented system design.

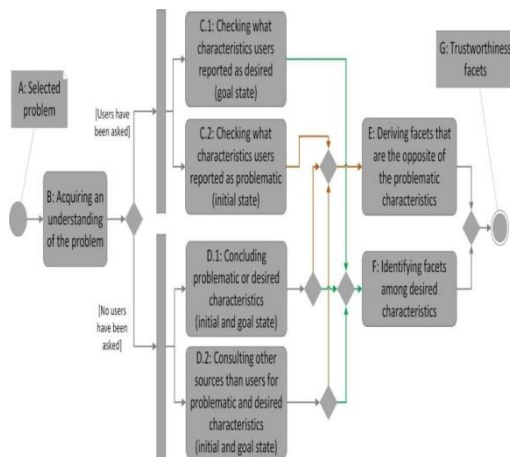


Figure 2.Comprehensive guidelines for identifying trustworthy individuals based on their appearance. Orange arrows are used to indicate the negative aspects. The methods used to locate the required properties are shown by green arrows.

5. CONCLUSIONS

Integrity is a key factor in building trust in both individuals and digital systems. In social media environments, allowing users to assess the credibility of others can improve the quality and safety of online interactions. This study analyzed important trustworthiness characteristics and proposed a structured approach to help developers select and integrate relevant trust features during the early stages of software development. Incorporating these features can support users in making informed decisions, enhance user confidence, and improve overall online experience. The findings also contribute to the development of more user-friendly and psychologically supportive social media platforms. Given the widespread use of social media, this work provides a useful foundation for future research and the implementation of reliability-focused system design.

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