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The TIA-TDAC Framework

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The TIA-TDAC Framework

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Introduction

Although trust in records has been an area of concern in archival science research for quite some time (e.g., Duranti[1] and MacNeil[2]), the digital environment raises new questions about trust in digital documents and records. In particular, research on users' perceptions of trust for digital archival content has begun to emerge, raising new questions about what trust means and how users interpret the concept, as well as what influences users' perceptions of trust in digital archival content, broadly defined. This article presents the Trust in Archives–Trust in Digital Archival Content (TIA–TDAC) Framework, a conceptual model for understanding how users' trust in archives influences their trust in digital archival content. The framework is based on research on trust in digital archival content from the perspective of an archives' user.

Trust Research

Research on trust in records is not new. However, according to Conway,[3] empirical research addressing actual users' trust in digital archival content is a relatively recent development. This shift in studying users' perceptions of trust in digital archival content is important because it emphasizes the role users play in judging the trustworthiness of archival content as opposed to considering trust a property inherent in or contained by any particular archival document or object. Definitions of trust in digital documents and records tend to include notions of accuracy, authenticity, and reliability, yet researchers vary in how they define and apply these terms. Analysis of existing research on users' trust in digital content underscores the importance of users' trust in archives as institutions.

Users' Trust in Digital Archival Content

A consistent finding across multiple user studies is the influence of the archive—by its institutional authority, reputation, or actions—on users' trust in digital archival content. This suggests that trust operates at two interdependent levels. For example, Meijer[4] found that when Parliamentary Committee (PC) members needed to use digital records about suspects in their investigation of the National Police Organization (NPO) in the Netherlands, they trusted those records because of the safeguards that the NPO put in place. Suspects' records were kept in two places: 1) a database management system of the Central Information Agency (CIA), and 2) digital systems at each regional police department. Although possible, tampering with suspects' records would require collusion between the CIA and the regional police departments. The PC members did not think these organizations would intentionally orchestrate tampering with suspects' records in multiple locations. In this example, it is important to note that the users' concept of trust in digital records depends on the actions of an organization. Specifically, users considered the NPO's preservation of these records in multiple locations a safeguard against tampering. According to Meijer, this was one reason why they were willing to trust in the authenticity of the records. This type of trust in records is based on trusting in the archives responsible for the preservation of the records. Specifically, trust that the records have not been tampered with is based upon trust that the archives has not tampered with them.

Similar to Meijer, Conway also reported on the influence of the archives on users' trust in digital archival content. Conway's study involved understanding the perceptions of users who had prior experience using photographs digitized by the Library of Congress (LOC) American Memory Project. Conway found that participants trusted the digitized photographs based on the institution that digitized them, the LOC, specifically due to its authority in regard to cultural heritage preservation. Additionally, his participants trusted the digitized photographs based on positive prior experience with photographs digitized by the LOC, which served as evidence of the quality of its digitization processes. In this example, participants trusted the digitized photographs because they trusted the LOC to digitize photographs that were faithful representations of their originals.

Pattenden-Fail et al.[5] reported on users' trust in information preserved by archives. Their study involved analysis of users' perceptions of the National Archives of The Netherlands' (NANETH) digitized and born-digital content. In their study, Pattenden-Fail et al. found that "users generally trust information that is preserved by . . .

(Continued on page 26)

(Continued from page 25)

archives."[6] In contrast to Meijer and Conway, participants in the Pattenden-Fail et al. study did not base their trust in information on any knowledge of specific actions taken by NANETH to protect content from tampering. Instead, their participants seemed to trust archives in their role as sources of information. As a result, they generally trust information preserved by archives, which is why they reported trusting information preserved by NANETH. The net result is still the same. Users' trust in digital archival content is shaped, at least in part, by their trust in archives.

Even though Bunn et al.[7] did not use the phrase "trust in information" or "content preserved by archives" in their study, they found that their participants perceived various types of digital archival content as authentic because of their trust in archives. In their study of University College London graduate students' perceptions of authenticity for born-digital archival content, they found that their participants were willing to assume that the born-digital content they viewed (e.g., blogs and press notices) was authentic because of their trust in the archives that preserved it, the National Archives of the United Kingdom and the National British Library. Specifically, they believed that these archives would not risk diminishing their reputations by posting inauthentic content on their websites. In this example, users' assumptions about archives, specifically assumptions about what archives do to protect their reputations, engenders trust in archives. This affects their perceptions of archival content—in particular, their perceptions of authenticity of digital archival content.

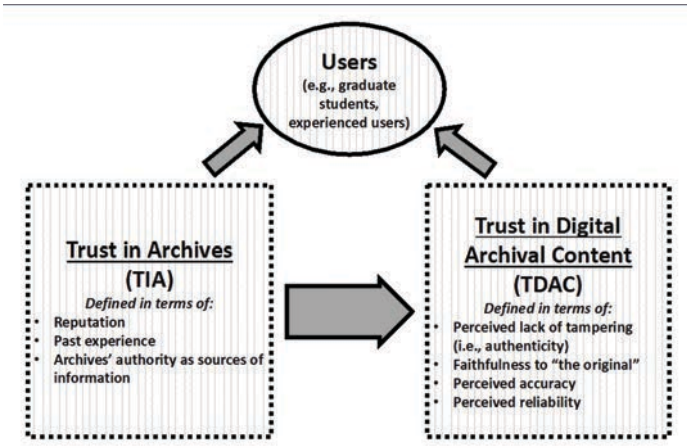
Taken together, findings from multiple studies on users' trust in digital archival content demonstrate that

- Trust in archives can be defined in terms of reputation, users' past experience, and/or archives' authority as sources of information;
- Trust in digital archival content can be defined in terms of a perceived lack of tampering (e.g., authenticity), faithfulness to the original item, accuracy, and/or reliability;
- Trust and trustworthiness are used interchangeably; and
- Trust in archives can influence users' trust in digital archival content.

A conceptual framework that can bring together all notions of trust within a unified model is needed.

The TIA–TDAC Framework

The TIA–TDAC Framework is a conceptual model for understanding how users' trust in archives influences their trust in digital archival content (see below). This model is based on synthesis of the literature on users' trust in digital archival content. The circle at the top of the framework, "Users," represents users of digital archival content. Examples of users in prior research on trust include undergraduate and graduate students as well as users with past experience using specific archives. Examples of digital archival content in prior research on trust include digitized and born-digital primary source materials such as press notices, photographs, police records, blogs, and marriage, death, and birth certificates. In the TIA-TDAC Framework, users' perceptions of Trust in Archives (TIA) and Trust in Digital Archival Content (TDAC) play a central role, as indicated by the arrows pointing from TIA to Users and TDAC to Users.



The TIA rectangle represents users' perceptions of trust in archives defined in terms of an archives' reputation, users' past experiences with an archives, or users' perceptions of an archives' authority as a source of information more generally. The TDAC rectangle represents users' trust in digital archival content, defined in terms of a perceived lack of tampering (i.e., an aspect of authenticity), faithfulness to the original, perceived accuracy, and reliability. The arrow pointing from TIA to TDAC represents how a users' trust in archives has an influence on users' trust in digital archival content. The arrow points from TIA to TDAC because prior research suggests that TIA has a positive effect on TDAC.

Conclusion

With so many changes in the digital environment, archivists need to know where they stand with their users and potential users. New sources of archival content are emerging in the digital environment, and it could be that users regard these new sources as more trustworthy than archives. As the digital formats of archival materials evolve, new questions arise about whether users can trust the information they are encountering while browsing the Internet. The hope is that the TIA–TDAC Framework will assist archivists when helping users assess the trustworthiness of digital archival materials.

Notes

1 L. Duranti, "Reliability and Authenticity: The Concepts and Their Implications," *Archivaria* 39 (1995): 5–10.

2 H. MacNeil, *Trusting Records: Legal, Historical and Diplomatic Perspectives* (Dordrecht, London: Kluwer Academic Publishers, 2000).

3 P. Conway, "Modes of Seeing: Digitized Photographic Archives and the Experienced User," *The American Archivist* 73, no. 2 (2010): 425–62.

4 A. J. Meijer, "Trust this Document! ICTs, Authentic Records and Accountability," *Archival Science* 3, no. 3 (2003): 275–90.

5 J. Pattenden-Fail et al., "Report on Usage Models for Libraries, Archives, and Data Centres, Results of the Second Iteration" (August 31, 2008), www.planets-project.eu/docs/reports/Planets_PP3-D2ReportOnUsageModels.pdf

6 Ibid., 12.

7 J. Bunn, S. Brimble, S. Obolensky, N. Wood, "InterPARES Report: Team Europe EU28 Project 2015-16: Perceptions of Born Digital Authenticity," interparestrust.org/assets/public/dissemination/EU28_20160718_UserPerceptionsOfAuthenticity_FinalReport.pdf.