

Trust: A critical element in whole chain traceability

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Oklahoma State University (OSU) developed the National Whole Chain Traceability Institute (NWCTI) in 2012. The institute grew out of OSU's research efforts focused on developing a whole chain traceability system. A core system development component was working directly with stakeholders. Stakeholder input is essential in developing a functional and user friendly system. Stakeholder buy-in is a must for any whole chain traceability system. In working with our stakeholders, OSU developed a list of critical issues related to implementing whole chain traceability. Trust consistently tops this list (Figure 1).

When discussing the issue of trust, stakeholders generally want to know “who will be able to access my information, alter my information, or use my information against me?” Trust is not automatic. Many producers and suppliers are reluctant to turn over information to people they don't know for fear of it being misused. But in reality, we do that every day with credit cards, SSN's, and banking information. We are comfortable with that because we know there are safeguards and protections offered by the credit card industry. NWCTI has taken every effort to develop a system where the information is safe, but remains completely under the owner's control.

In stakeholder discussions focused on determining where a traceability system should be housed, entities such as private firms, trade associations, federal government, state government, and land grant universities were discussed. Federal and state agencies were almost always immediately eliminated from the discussions (Figure 2). Trade associations were eliminated next because managing a traceability system is well beyond most trade association missions. They will play a role in the systems development, and system oversight, but not in managing the day-to-day operations. Private firms and land grant universities generally consume most discussions. The primary issues identified with housing traceability systems at private firms was reliability (will the firms be in business five years from now?) and the cost over time. The primary issue with land grant universities was the time to get systems up and running and concerns regarding the Freedom of Information Act. In general, this Act requires government agencies publish information records upon the reasonable request of those records. This could result in a breach of trust for participants in a traceability system sponsored by a land grant university.

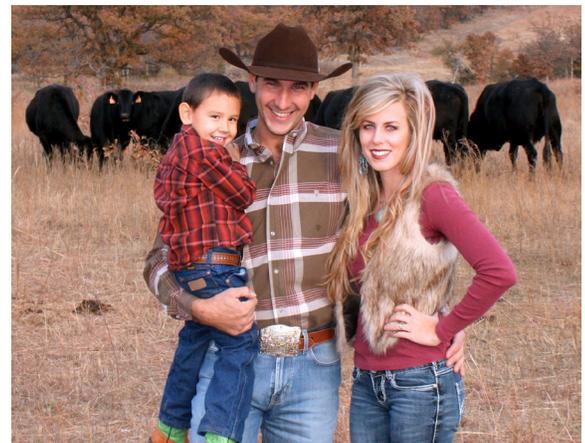


Figure 1. Trust is extremely important to cattle producers. As such, it is vital that any traceability system meet high standards for trust.

Addressing the trust issues related to how information is used once a data owner shares that information and ensuring information quality challenging issues. Stakeholder confidence in the systems computer security, management practices, and legal restrictions on who can access data are key aspects for building user trust. In general, users will be able to rate other users and file complaints with the system administrator. This approach is similar to the better business bureau system. Further, some stakeholders have suggested that there should be independent certification groups that regularly verify the integrity of data entered into the systems. Other computer security protocols have also been implemented to ensure data stored in the NWCTI system is not compromised. Trust is a fundamental issue that must be addressed in developing any traceability systems. Once that trust is established, it must be maintained, since losing trust in a company or traceability system can be a devastating. Trust in an integral part of OSU's NWCTI vision for whole chain traceability.

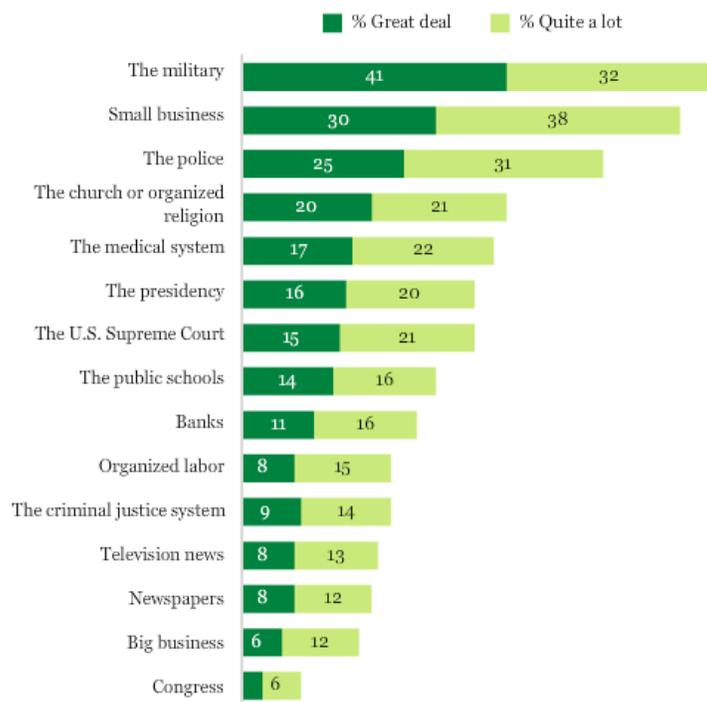


Figure 2. Trust poll for different institutions in American society. Individuals were asked to rate their confidence level in the group as a great deal, quite a lot, some, or very little. www.gallup.com

For more information about the NWCTI system, contact Dr. Michael Buser using the information below. YouTube videos related to the NWCTI system can be viewed at <https://goo.gl/MwPhoS>.



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