

TSA False Negatives and the URoSD

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In the recent New York Times article [6 Considered Threats Kept Licenses for Aviation](#), Matthew Wald reported on how the TSA failed to match suspected terrorists against their watch lists even though two of them were on the Federal Bureau of Investigation's Ten Most Wanted List.

A small database company called Safe Banking Systems was able to easily identify these suspected terrorists using "fuzzy logic" in their data matching techniques against publicly available watch lists used by banks to scrub lists of customers for potential links to terrorism.

David M. Schiffer, the president of Safe Banking Systems explained that exact matching techniques are ineffective because:

"This data's dirty. People have typos, misspellings, and the data gets truncated or entered in the wrong field."

This is the Universal Rule of Structured Data (URoSD) – data is never perfect, and it never can be! So we must build solutions that can function correctly given this immutable fact.

Effective data matching in the context of URoSD faces the challenging possibilities of both *false positives* (records identified as a match that do not represent the same entity) and *false negatives* (records that do represent the same entity but were not identified as a match).

Considerable concerns are often raised about the possibilities of too many false positive matches against terrorist watch lists.

This concern is also often cited in data matching involving data and applications not critical to national security where "under-matching" is often implemented because of the perceived higher negative impact of a false positive.

However, when the false negatives are potential terrorists planning an attack, this is simply unacceptable.

Data matching in the context of imperfect data is critically important and stories like this one demonstrate how vital data matching truly is.



About Netrics HD

Data matching is a fundamental operation in many applications, from improving data quality to implementing master data management. Stef Damianakis, CEO of Netrics, a world leader in matching technology, shares his thoughts on the state of the technology and business of data matching.

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Safe Banking Systems, LLC

114 Old Country Road | Suite320 | Mineola, NY | 11501 USA
Tel: +1 631 -547-5400 O Fax: +1 631-547-5415 www.safe-banking.com