# **Needle in a Haystack®** Detects data accidents you can't anticipate



# A ground-breaking QC tool for data governance

**Needle in a Haystack** software isn't another "build-a-wall-around-our-data" defense strategy. Rather, it finds and immediately reports data contamination originating from inside the wall. The software detects data quality issues that edit checks and exception reporting could never anticipate. Real-time reports about data accidents are emailed to business process owners who can quickly fix errors before they are propagated into a mountain of transaction embarrassments, lost productivity, and squandered opportunities.

This one-of-a-kind software delivers break-through functionality to help defend the enormous value of enterprise data. As such, it is a crucial quality control tool for data governance initiatives and it will deliver a competitive advantage to your enterprise.

# Artificial intelligence to detect data accidents

Unbeaten Path's **Needle in a Haystack** software watches for database changes that appear to be anomalies or rare events. The product teaches itself what is "normal/anticipated" by applying statistical paradigms to observed data.

When a pre-post field change falls outside of **Needle in a Haystacks**' self-taught statistical boundaries, the product immediately authors an e-mail alert addressed to the pre-designated "guardian" of whatever database has experienced the abnormal change.

After the product has gathered sufficient statistical evidence to distinguish between normal database changes and rare/odd database changes, that artificial intelligence permits **Needle in a Haystack** to author e-mail alerts announcing these kind of findings ... if they are rare events:



#### Field level illustrations

- ⊕ The alphanumeric content changed from "ABCDE" to "AB\_DE"
- This field has rarely or never been populated with: "W\_6WR\_R"
- A number just changed by a statistically unusual percentage or it changed to an extremely high/extremely low value.
- This user has never made a change to this field before
- + This program has never executed a change to this field before
- + The value in this field has just been changed to blank or zero
- Hany other illustrations: click here

#### Record and file level illustrations

- A record has been inserted, changed, or deleted from a file or member for the first time by this user or this program
- Ownership of the file has been changed
- A user's authority for this file has been changed
- + A record has been inserted/changed/deleted from a file or member
- A trigger has been added, changed, or removed from this file

# The ROI story for Needle in a Haystack

Unbeaten Path believes the productivity and profitability of your enterprise will increase if database accidents are discovered real-time. It's much more efficient to fix an accident before it creates a cascade of transactional consequences.

The objective is to find, investigate, and remediate rare database change events before an accident is propagated into dozens or thousands of transactions. It gives managers real-time data accident alerts, enabling them to stop invalid orders before they are launched, catch bad pricing before it's posted on the web site for customers to see, prevent customer credit embarrassments, and discover quality problems before they happen.

**Needle in a Haystack** will point directly at unorthodox standard cost changes, recognize manufacturing data typos, discover accounting configuration anomalies, expose orders with accidental delivery postponements, detect unauthorized back-door database adjustments, and identify employee training needs.

Your internal/external auditors are going to be very, very impressed with Needle in a Haystack.

### Real-life data accident findings from the product

Deliveries of the product did not begin until late in the summer of 2011. Nevertheless, some impressive illustrations of important data accident findings have already accumulated. Here are some 'anonymous' illustrations, starting with a 'world-class' eye-opener in the box below.

Needle in a Haystack found and immediately reported a **unit of measure** entry accident. The UM field change had eluded edit checking because the new two-character entry was legitimate .... but .... it was exponentially incorrect. A material requirement planning run would have kicked out a midnight purchase order FAX for way too much raw material.

> The question from the receiving dock would have been: "who in the world ordered all of this stuff?"



Click on the **image** to see two real-life alert e-mails generated by **Needle in a Haystack** when it found rare-event alphanumeric field changes in a PO header file.

Please inspect these additional rare event detection episodes, please click: sample set **one** sample set **two** sample set **three** 

The product is new; click **here** to see our first reference letter.





# Adjusting the sensitivity of rare event reporting

Recipients of **Needle in a Haystack** alerts can elect to "teach" the software about a given finding. For example, the software will report the first time it observes "RXZ" in a field. If the database manager knows that "RXZ" was recently defined for that field, then Needle in a Haystack can be instructed to entirely suppress future reports about "RXZ."

The product provides "volume control" functionality for each field level alert. For example, if a user elects to move the volume dial up for a given field, then **Needle in a Haystack**'s artificial intelligence will be instructed to report events for that field which are not quite as rare.

# Data observation

**Needle in a Haystack** configuration functionality enables users to select which databases will be monitored and which rare event categories to exclude from event reporting. The product relies in part on database change information observed and accumulated by **Stitch-in-Time** software.



# **Questions**?

It would be a privilege to answer any questions about **Needle in a Haystack** software. Here's Unbeaten Path International's contact information:

Toll free North America: (888) 874-8008 International: (+USA) 262-681-3151 Send us an email ( click here )



