

## SURVEILLANCE

# Spies at the counter

*New technology can prevent wanted people from opening accounts. One Swiss SME is playing a pioneering role.* MATTHIAS NIKLOWITZ

- Translated by Linguistic Search Solutions AG -



**H**ello, I would like to open an account with you." This is a popular phrase at the bank counter because many customers remain loyal for years, even decades. But certain potential customers are not allowed to open bank accounts because they feature on lists of people wanted for money laundering, funding terrorism, or arms or drugs trafficking. Information about

these people exists, such as personal details, business affairs and of course their names.

But this is where the problems begin. Names can be spelt differently. Carine Duboux can become Karin Dubout or Ralph Schwarz can mutate into Ralf Schwartz.

The most common case is when people hail from cultures where the Latin alphabet is not used – Greeks, Russians, Chinese,

Japanese, Arabs or Persians for example. There are several ways of writing their names using the Latin alphabet. For example, Boris Yeltsin is written Boris Eltsine in French and Boris Jelzin in German. Suleiman Hussein can be written Sulayman Hosayn or Souleymane Housseyn. The English, French, Germans and Italians often have different transcription methods.

### Treacherous variations

Such variations in names can be a real headache for bank compliance officers. They have to have reliable methods for identifying money launderers, terrorists, tax evaders or politically exposed people. They can do this by consulting watch lists of compliance data compiled by the authorities or commercial providers. While the name in the customer database usually corresponds to the name in the identity papers, the names on watch lists are generally from the international press or from lists provided by national or international authorities. The software has to be able to recognise an identity even if the spelling is different.

The crux is that while the different spellings of Jelzin, Yeltsin and Eltsine have to be recognised as interchangeable, names that have similar spellings but are actually different must not "match". Just one letter makes Davis and David are different names, just like Meier and Meder.

"Linguistic algorithms can help reach this balance between reliability and precision," explains Bertrand Lisbach, CEO of Linguistic Search Solutions that specialises in linguistic search technology. Such technology is more secure and less costly in the medium-term than non-linguistic search software. It is more secure in the sense that parties on which sanctions have been imposed,

terrorists or money launderers can be more easily detected in a customer database. It is also less expensive because only relevant profiles trigger an alert. Modern indexing methods also mean that search times are not too long.

"Users are spoilt by Google and expect search results within a fraction of a second and not within minutes as used to be the case. This also holds true for users who search in massive customer databases."

### Living fossils

Early search methods from the first generation have names such as Levenstein Distance or Soundex and have been in use for decades. But the user immediately notices their weaknesses as they are neither reliable nor precise. Nevertheless these "living fossils in the history of technology" are still quite widespread as they are often delivered with database systems. According to Bertrand Lisbach they are still in use in many Swiss banks.

The second-generation search methods were supposed to correct the most obvious weaknesses of their predecessors. They were called Jaro-Winkler-Distance, Metaphone or Double Metaphone for instance. "But the paradigm remained the same," points out Bertrand Lisbach. "The problem of name matching was identified as a technical problem and that's why engineers were given the task of finding solutions."

The breakthrough came via another very different approach.



**Profiles may trigger an alert. Modern indexing methods ensure that search times can be kept short.**

### Bertrand Lisbach / LRS

"It was no longer satisfactory to simply remove the old methods' most glaring weaknesses," says Lisbach. "Instead, there was an attempt to get to the bottom of the name search problem and it was discovered that the variations in the spellings of names were of a linguistic nature."

The source of the variations and their impact was examined. Then special linguistic matching methods were developed for each source of variation and were then integrated technically.

### A Swiss export

The biggest suppliers of name lists for banking compliance, Dow Jones, World Check and Accuity, are already Linguistic Search Solutions' clients. Apart from Swiss financial establishments such as UBS, insurance groups and globalised banks in Hong Kong, Beijing or Dubai for example are also now putting their bets on Swiss-made linguistic know-how.

National authorities also number among LSS' clients as do the compilers of lists of national and international sanctions. They are realising more and more that the efficient implementation of sanctions requires linguistic search methods. "The lists of sanctions in the form of PDF documents will soon be history," predicts Bertrand Lisbach. "The future belongs to intelligently structured XML lists, which can be automatically fed into computer systems and screened with the help of linguistic algorithms."

Even though it hasn't yet launched its marketing campaign, the young Swiss company is already in huge demand. The growing regulation of banking compliance and the need for a recognised search standard is leading to increased interest into the hands of Linguistic Search Solutions.

Article translated by  
Linguistic Search Solutions AG  
Source articles in  
La Banque Suisse 12/2010  
Schweizer Bank 12/2010