COMPUTERWORLD

Address Cleansing and Geocoding for Romania

Part 1: What is it?

Just as organisations have adopted CRM and Data warehousing technologies, they need to put in place a data quality strategy, too. Business in general, and marketing in particular, needs to become increasingly data-driven. If there is no care to govern, in particular, the **address data quality**, very soon there will be gaps in key activities.

A data quality strategy helps to identify the responsibilities of each function and level of management to ensure that legislation and codes of practice are followed; there are real dangers for organisations if their compliance is poor. On top of this, using inaccurate, out-of-date or incomplete address data – or just not having the right address data at all – can undermine all the effort put in to establishing positive customer and prospect relationships.

Geo Strategies has developed and operates SMARTaddress (www.geo-address.com) a comprehensive address parsing, cleansing and geocoding system / service for Romania.

This is fed by the most comprehensive location knowledge base compiled and maintained by the company since they started activities in Romania in 1993. This includes locality and place names, over 700,000 business locations, landmarks and Points of Interest for Romania, together with over 130,000 street names – all with the correct diacritics. More importantly, the tool operates a parser and rules-based algorithms tailored to Romanian phonetics and is supported by a secondary database of over 3 million variants – abbreviations, local names (unofficial names which are used in the local area), and indeed old address names.

The individual functions are:

Address cleansing	Identifying the individual address components (county, locality, street type, street name, etc.).
Address standardisation	Correcting any mis-spellings, adding diacritics, ensuring conformance to standard abbreviations, taking account of name changes, etc.
Postcode attribution	Assigning the correct 6-digit postcode from Poşta Română.
Geocoding	Assigning coordinates to the address (WGS-84)

SMARTaddress can process databases of up to 5M records and the success rate varies between 75% and 99% depending on the cleanliness of the input data. Typical success rates

for Romanian databases (which are all-too-frequently less than ideal) are in the order of 85%; however, Geo Strategies is happy to work with customers to correct gross errors in their address data.

It is commonplace to process a sample of e.g. 5,000 records (10,000 for larger databases) to assess the potential success rates for the full database.

Address services are available in one of four ways:

Via an Excel Add-in	A Tab (or Ribbon) in Excel provides direct access to a remoter server. This is ideal for small batches e.g. up to 5,000 records.
Via the Cloud	The remote server is accessed directly over the Internet. This is ideal for large databases.
Via an API	SMARTaddress can be accessed over the Internet via a SOAP compliant API e.g. for direct interface to a CRM.
As a managed service	Address services (including de-duplication) are available. from Geo Strategies for those that require a turnkey result. Customers are provided with a report to help them improve their internal processes for the future.

Cleansed and standardised addresses can be provided in a number of formats.

Part 2 – Who is it for?

The cost of unclean data takes its toll at multiple levels. There is an industry rule-of-thumb that estimates that it costs one dollar ($1) to fix a bad address record at time of entry; $10 to fix it on the back end; and $100s if that bad address record is allowed to fester uncorrected over time. If we multiply the 1-10-100 dollar ratio by hundreds-of-thousands or even millions of addresses, it becomes clear how fast these costs add up.

Who has the address pain?

1. The **IT departments** are usually overwhelmed by the task of bringing together financial and operational databases from across the organisation. The demands from customer insight and marketing will be down on their list; rather, the IT manager's problem is **to reduce the IT burden and promote efficiencies.**

   Is there value to the IT from SMARTaddress?

   Definitely! SMARTaddress can be rolled out in various ways:

   (a) Based on a (local) thin client i.e. an Excel Add-in working with a remote server. There is no requirement for expensive servers and infrastructure as costs are incremental i.e. per record processed. This is recommended for small batches e.g. daily address maintenance and geocoding.

   (b) SMARTaddress also supports flexible working as SaaS (Software as a Service) via the Cloud: it is particularly suitable for larger databases (between 5,000 and 500,000 records).

(c) An API is available for integrators who may wish to establish a direct connection from within their CRM or data warehouse.

(d) Geo Strategies also offers an address cleansing, standardisation and geocoding service which is particularly suitable for organisations wishing to audit and overhaul their contacts' database. This service includes full QA and reporting on errors plus recommendations for improving data management procedures.

Similar benefits apply to the **Integrators** who very often face end-client dissatisfaction on new technology implementations due to the quality of the data rather than the technology brought in by the integrator.

2. **The CRM Manager's** challenge is to evolve the CRM from 'data storage' to proper , effective customer management. The CRM manager needs to add value to corporate decision-making and this can be enabled through geocoded, clean address data. This is particularly true as senior decision-makers (the Board and, especially, Marketing Managers) begin to realise the benefits of knowing precisely where their customers are located and how far they have to travel to obtain goods or services. McKinsey, Gartner and others all agree that over 80% of all data contains a location element and SMARTaddress can provide that information. *Location is king!*

What is SMARTaddress value to CRM ?

The clean and geocoded data enables internal processes such as corporate mapping through to Call Centres via location search. It helps present a single geographic representation of the business 'as is' and also market opportunity data. It can integrate the CRM with the Internet to promote self-service. The analytical benefit is seamless : for example, a critical retail optimisation application is based on calculating distances from any organisation office to a POS, competitor or to a customer location.

3. **The Marketing Manager** is quite frequently inhibited by technology. However he/she needs easy access to a single view of customers (SCV) to generate insight, develop and match propositions and communication.
Knowing where customers live (being able to see them as dots on a map) provides huge insight as "birds of a feather flock together" i.e. similar people tend to cluster in e.g. Pantelimon, Baneasa or Snagov. SMARTaddress underpins this ability.

What does SMARTaddress do for the Marketing Manager?

It makes life easier by operationalising mountains of data which the IT doesn't own. Once correctly addressed and geocoded customer data can be segmented, mapped and enhanced with additional information linked by address. The power of the address (location) is that it is relative to all other data from internal and external sources. Overall, it strengthens Marketing's resilience for critical analysis and decision-making; and it helps Marketing challenge the IT for bespoke slicing and dicing of bigger data.

4. **The Data Analyst** needs location information to provide the information increasingly required by Boards. GIS has become relatively common place in larger organisations but all the maps in the world are useless without real business information. Again, SMARTaddress can provide the geocodes to unlock the wealth of information and, potentially, business insight that resides in address databases.

'Address data issues impact company performance in many ways : the costs of bad or useless address records are high due to leading to duplicate communications, poor segmentation, missing opportunities based on mis-calculating the unique customer value, poor service, poor decisions. SMARTaddress is a ready-to-use, powerful tool to turn bad address data into good and valuable information for every organisation which stores and manages Romanian addresses.' **Says Daniela Florea, CEO of Geo Strategies Ltd**