Why is It Useful to Validate Physical Locations?

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In brief

Imagine you're buying a property across the country or abroad. You have the address, but how do you know an actual building is there?

Imagine you're buying a property across the country or abroad. You have the address, but how do you know an actual building is there? To verify the address, you'd use a tool to validate the physical location.

Address verification or lookup is the process of confirming the existence of a property based on publicly available information. Companies also use tools to validate locations. They do this to double-check addresses and maintain accurate customer databases.

E-commerce businesses look up addresses to verify customer addresses. Their address lookup systems use software, APIs, or the internet to determine whether an address is correct.

Why is validating locations important?

Before software was used, people spent hours contacting clients and confirming addresses. In some cases, they were only able to reach some clients. Today, businesses, particularly, take advantage of address lookup tools to save work, time, and other resources.

Address verification services confirm address data against reliable databases like the United States Postal Service and others. This confirmation allows for improving shipping, optimizing delivery routes, and verifying customer addresses against official records.

What is reverse lookup?

A reverse address lookup or search uses a specific address to gather details about former or current occupants or owners of a property. To do a reverse address lookup, you would search using the street name and number, zip code, city name, and other property details.

A standard reverse phone lookup can provide access to the following details depending on your verification system of choice:

- Age
- First and last name
- Previous addresses
- Criminal records
- Contact information
- The physical information about the property

People also look up addresses to search for others, verify phone book addresses, conduct background checks, and find more information about the neighborhood.

Types of methods

The types of address verification methods include real-time lookup, fuzzy matching, address standardization, partial verification, post-entry validation, geocoding, and more.

Real-time lookup

The first method of address lookup checks addresses before they are included in mailing lists or databases. It adds missing components and standardizes addresses as well.

Fuzzy matching fixes spelling errors, typos, extra words, duplicate addresses, missing spaces, swapped letters, wrong entries, etc. It can play a critical role in correcting small errors.

Address data is updated using a standard format via address standardization. The US Postal Service determines the official format.

Partial and post-entry

Partial verification is where the software populates the city and state after the client has entered their zip code.

Post-entry verification requires you to enter addresses from a list manually. Customers must confirm the right address to go through the checkout process.

Geocoding

Finally, there is geocoding and reverse geocoding. The former transforms addresses into geographic coordinates. It is used by businesses to assign an address to a location.

Reverse geocoding does the opposite. First, it converts geographic coordinates into physical addresses. Then, businesses combine the two to make sure the address is accurate.

Address lookup consists of a find request and a retrieve request. After narrowing addresses down, the first displays a potential list, and the second delivers standardized addresses in the post-office-approved format.

When you enter a street name and number, a city, a zip code, and a state, the system forwards the request to the API and returns with an ID. This ID asks to retrieve a fully formatted address.

Main steps of the address lookup process

There are three steps: address parsing, standardization, and verification. Parsing involves labeling, breaking down, and verifying address elements. Standardization puts the address in postal format. For the UK, this would be Royal Mail. For Canada, it is Canada Post.

Finally, verification confirms whether the standardized mailing address is accurate. At this point, the address lookup software checks for missing info.

Address parsing is a complex process that involves identifying the individual elements within a mailing address. This can be challenging, as there is often no standard format for addresses. For example, some addresses may include a building name, while others may not. The address format can also vary depending on the country, city, or neighborhood. Address lookup software uses advanced algorithms to accurately parse the mailing address and identify all relevant elements.

Once the address has been parsed, the next step is standardization. Standardization involves putting the address into the correct format for the postal service in the country of delivery. This can be a challenging step, as different countries have different formats for addresses.

For example, in the United States, the postal code typically comes after the state abbreviation, whereas in Canada, the postal code comes before the province abbreviation. Address lookup software uses an address database to determine the correct format for the address.

The final step in the address lookup process is verification. Verification involves checking the accuracy of the standardized mailing address and making any necessary corrections. This step is critical, as even small errors in the address can lead to delayed or misdelivered mail.

Address lookup software uses various techniques to verify the accuracy of the mailing address, including comparing it to other addresses in the database, checking for missing information, and ensuring that the address meets the formatting requirements of the postal service. Once the address has been verified, it can be used to ensure that mail or packages reach their intended destination.

References

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