



## CASE STUDY

# Faraday

## Enhancing AI customer predictions with address verification

### Challenge

Faraday needed a turnkey way to standardize and blend address data from various sources to feed their customer behavior prediction models.

### Solution

Faraday uses Smarty's US Address Verification for address matching, cleaning and standardizing addresses so they accurately match its national database of 1,500 customer attributes.

### Results

Despite messy client data, Faraday achieves an 80-90% address match rate with its database.

## PRODUCTS USED



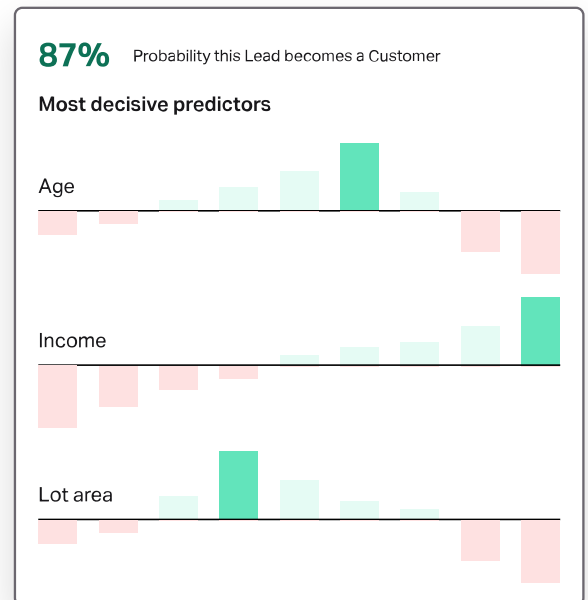
US Address Verification



## The client: Faraday

Faraday gives data science & engineering teams everything they need to build breakthrough customer experiences. As the only AI platform built exclusively for predicting customer behavior, Faraday includes 1,500+ attributes on 240M US adults, so you don't have to license expensive data yourself. Faraday automatically engineers predictors from your first-party data, including time-, frequency-, and value-based projections. All AI models come with regulator-friendly model reporting, and in production, Faraday automatically applies the right model based on how long somebody has been in your customer lifecycle.

Faraday currently serves thousands of brands and platforms. By integrating AI with advanced address-matching algorithms, Faraday empowers platforms to build new predictive features and enables brands to grow using data.



## The challenge: Matching messy customer records to Faraday's customer data points

Garbage in, garbage out, goes the saying. Nothing is so true as in AI modeling.

In Faraday's case, the garbage comes from their client's list of customer addresses, which is so messy that it often borders on "terrible." Challenges include address errors, missing components, and incorrect formatting.

Faraday matches the physical address in addition to the phone number and email address because the physical address offers a higher hit rate with its database of customer attributes.



**Smarty makes messy data not a problem anymore, Smarty just works and fades into the background as you'd hope. That's been our experience for the past 10 years.**



**Seamus Abshire**  
CTO, Faraday

Without standardizing bad addresses, Faraday can't match and blend customer records with its goldmine of customer data.

"The alternative, if you don't have Smarty's address-matching software, is to implement a lot of fuzzy matching logic yourself. And that's very hard to do," explained Faraday's CTO, Seamus Abshire. The lack of reliable address-matching tools required Faraday to correct and compare data manually. It wasn't Seamus's favorite way to run his business.

As Seamus put it, "There are multiple phases of frustration if you're trying to build your own address standardization solution, especially when you're trying to achieve high match rates."

## **The solution: Implementing Smarty's address verification and address key technology**

After evaluating options like Google Maps and open-source tools like Libpostal, Faraday chose Smarty in 2013 to streamline its address-matching process. "Other APIs were inconsistent," said Seamus. "They didn't give you a feeling they were a solid foundation you could build your product on."

Using Smarty, Faraday found an address-matching software solution that provided the accuracy and speed required to simplify data blending, scale its business, and focus on its core competencies.

"Smarty makes messy data not a problem anymore," says Seamus. "Smarty just works and fades into the background as you'd hope. That's been our experience for the past 10 years."

With Smarty's address-matching algorithm, the team at Faraday felt empowered to scale their business as needed.

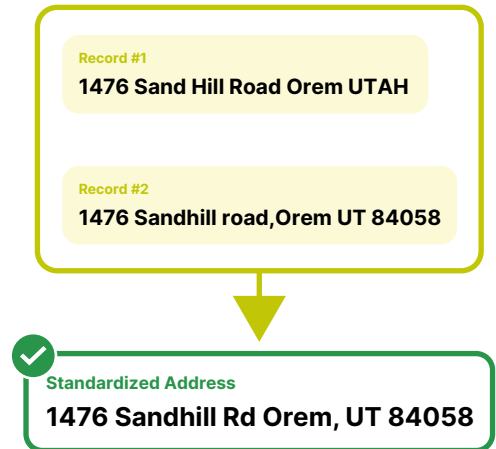
Smarty's address verification service now also provides Faraday with address keys—persistent, unique identifiers for each verified address. This addition reduces matching errors and enables simple, efficient address matching without combining address components into a single string.

## The results: Faster, cleaner, and more reliable data processing

Integrating Smarty's address verification software enabled Faraday to achieve:

- **80-90% match rate:** Faraday consistently reached higher address match rate accuracy than previously, successfully aligning even messy client data with its national data set.
- **Faster processing:** Seamus reported that when Faraday started with Smarty, they were on an unlimited rate plan that processed addresses 100 times faster than previous solutions. Since then, Faraday has migrated to a rate-limited plan but has organized their processing so they still never hit the processing cap rate. "Smarty's address-matching software makes the problem of data blending much simpler by turning it into a straightforward comparison. You can go from zero to 60 very fast if Smarty is your source of truth."
- **Reduced development effort:** With Smarty's results, Faraday avoided the need to develop their own address standardization system, something Seamus describes as not wise for a company like his. "Trying to develop your own solution is an impossibility on impossibility. Smarty takes a whole class of problems and makes them disappear, allowing us to focus on our core competencies," said Seamus.

Smarty's address-matching software also absorbed data complexities, making it possible to effectively and efficiently handle poor-quality input data.



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## Looking forward: A long-term partnership with Smarty

Since implementing Smarty's address-matching software more than a decade ago, Faraday has seen sustained success in maintaining data quality. Seamus reflected, "We've never regretted building on top of Smarty. It's helped us scale our business and focus on our core competencies, and their technology has kept up with the cutting edge. Even 10 years later, Smarty's still the best address API on the market. We're thankful for the long-term partnership."

Faraday has expressed interest in exploring additional Smarty offerings, including census-based georeferencing and property data attributes, to further support data enrichment and bias mitigation. By leveraging Smarty's suite of address-matching tools and the address key technology paired with robust georeference data, Faraday anticipates future innovations and enhanced data quality to keep it at the forefront of predictive analytics.



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**Seamus Abshere**  
CTO, Faraday

Smarty helped guide Faraday's AI predictive analytics to new heights, ensuring they always reach the closest match for their data predictions.

What can Smarty do for your organization?

Talk to an address expert today and find out.

But don't take our word for it; we'll give the last word to Seamus:



Smarty does exactly what it says it's going to do. It's fast. It's a very good infrastructure piece. If you're going to build on a good foundation, Smarty is an excellent foundation.



**Seamus Abshire**  
CTO, Faraday



**Questions?**

Learn more at [Smarty.com](https://Smarty.com)

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