The Ultimate Guide to Customer Data Onboarding
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>What is Customer Data Onboarding?</td>
<td>2</td>
</tr>
<tr>
<td>Making Customer Data Onboarding a Top Priority</td>
<td>5</td>
</tr>
<tr>
<td>Common Customer Data Onboarding Challenges</td>
<td>7</td>
</tr>
<tr>
<td>Elements of an Effective Customer Data Onboarding Strategy</td>
<td>9</td>
</tr>
<tr>
<td>How to Improve Customer Data Onboarding</td>
<td>11</td>
</tr>
<tr>
<td>Customer Data Onboarding Metrics to Measure</td>
<td>13</td>
</tr>
<tr>
<td>Low-Code External Data Platform</td>
<td>15</td>
</tr>
</tbody>
</table>
Introduction

All companies have some sort of onboarding process to welcome new customers and teach them how to use a product, but not all have an efficient process for onboarding customer data. This is a critical part of the process, because it enables a stress-free customer experience.

A disjointed or tedious data onboarding will only turn off new customers, which can lead to churn as they leave your company for competitors. Acquiring new customers is up to 25 times more expensive than retaining existing ones, so it's important to help them reach their aha moment from the start.

Seamless customer data onboarding benefits everyone involved—from customers, partners, and vendors to your internal customer-facing teams.

By reducing the manual labor required for wrangling data, engineering and data teams can focus on building your product. That leads to a faster time to value for customers because teams spend less time cleaning data and more time on revenue-generating work.

Whether your company is looking to create a data onboarding process or simply improve your existing one, it's important to understand why it's valuable and how to design a system that reduces friction.

In this guide, you'll discover the benefits and challenges of customer data onboarding, how to create an efficient onboarding process, and see how the right approach can lead to a faster and more streamlined operation for all.
What is Customer Data Onboarding?

Customer data onboarding is the process of ingesting online and offline customer data into an operational system(s) in order to successfully use that product. While the data can arrive from sources such as data warehouses, APIs, or spreadsheets, the goal is to import data from your customers into your systems so they can begin using your products and immediately see the value of fundamental features.

Data onboarding is just one part of the customer onboarding process, but it’s important to the overall customer journey. Let’s look at several ways companies can use data onboarding:

**eCommerce**

eCommerce companies need to ingest product catalog data from multiple distributors and vendors, often several times a day. But data is sent to them in various formats, such as XLS email attachments, CSV dumps in FTPs, or ingests via APIs.

Rather than relying on manual data wrangling procedures, the eCommerce companies can use a streamlined data onboarding process to update product catalogs throughout the day and improve their ability to forecast and plan.
MarTech

Personalization is essential for successfully targeting customers, but martech companies need to constantly ingest data in order to make relevant product recommendations. This can include campaign data, offline purchase data, clickstream data, and online purchasing datasets. When data is in demand, engineering teams get pulled into building and maintaining internal tools to handle continuous data onboarding.

An automated data onboarding process can lower costs by employing AI-powered tools to validate and clean data, onboarding customers faster, and transferring onboarding responsibilities to lower-cost teams.

Supply Chain

Managing logistics is no easy task when customers send POs, channel partners share sell-through data, and vendors share product catalog data via various non-standard formats. Putting this data into a usable format typically requires an operations team that copies and pastes it into a record system or an IT team that “glue codes” multiple tools and customer scripts to try and automate the data wrangling.

With an organized and automated data onboarding process, manufacturing and logistics companies can save on people costs, reduce shipping errors, and improve visibility into the operations.
Customer data onboarding can benefit any company that needs to simplify data importing and reduce onboarding costs.

It’s not restricted to certain industries and has proven to help companies in every industry that rely on cross-organizational data collaboration

- Retail
- Fintech
- Proptech
- Insurance
- Manufacturing
- Distribution
- CRMs
- eCommerce
- Martech
- Adtech

Now let’s walk through how an efficient customer data onboarding process can benefit your business and improve the customer experience.
Businesses constantly change, but data onboarding needs to stay at the top of the priority list if you want to reduce costs and provide a superior customer experience.

Consider how research firm Ovum found that approximately 40% of enterprises take over 30 days to onboard a new trading partner. If a company has hundreds or thousands of partners, the time to onboard new customer data can quickly compound beyond control.

The faster the customer data onboarding, the better. According to Forrester, over 65% of adults believe valuing their time is the most important thing a company can do to provide a good online customer experience.

So using customer data onboarding solutions is not only better for your team—who may be dealing with manual imports and data wrangling—but it can also strengthen your relationship with customers.

This can benefit your business in several ways:

1. **Free up internal resources**

   Customer success, product, dev, engineering, and data teams can spend weeks or even months gathering, cleaning, and ingesting customer data. On top of that, 98% of companies say that data pipelines break frequently, with a majority breaking once per month. Trading a manual data onboarding process for an automated or self-serve one frees up internal resources so technical teams can focus on the core business.

2. **Faster time-to-value**

   How long is it taking to you to import customer data? A well-designed data onboarding process increases your value by providing customers with a great experience and gets them to the AHA moment faster. Smart data uploaders and data pipelines allow customer data to be directly imported into your operational systems, so your customers can start using your products quickly.
3. Ingest clean, structured data

Data doesn’t come in a standard format, so it needs to be validated and cleaned before it is ingested. Customer data onboarding that uses no-code data transformations can be set up to validate, map, and clean datasets to match your schema format, without developers writing any code.

4. Reduce costs

Manual data onboarding can be very costly for your business. Rahi, a global solutions and services company, saved over 60% on delivery costs by using Osmos Pipelines to automate the external data wrangling and data import process for their largest clients.

5. Empower end-users

A study by Seagate found that 68% of data available to companies goes unleveraged. A major culprit is that the amassed data is often unusable. Traditional data onboarding processes rely on engineers to validate and clean customer information before it’s ingested. With automated data pipelines and smart data uploaders, it’s easy to empower customers to share clean data, while you control how that data is ingested and where it goes.

6. Increased revenue

In a survey done by research firm IDC, 52% of respondents said that data quality holds up deployments. Of course, these delays drastically cut into revenue as teams halt high-value work to put out fires. A comprehensive data onboarding solution like Osmos can cut onboarding time from months to minutes, so teams can take advantage of new opportunities and enjoy streamlined data pipelines.

Great customer experiences will also lead to cross-selling and up-selling opportunities within the first few months of onboarding, further leading to increased loyalty and satisfaction levels.

Although the benefits of a well-designed customer data onboarding are clear, a poorly-designed process can introduce more problems at a higher cost.
Common Customer Data Onboarding Challenges

Customers today expect top-notch service, and data onboarding is no exception. Common sticking points—like manual data imports and internal bottlenecks—can slow down the onboarding process, which often results in a frustrating experience for customers.

Let’s look at the top signs of a broken process and explore how data onboarding solutions can easily fix the issues for everyone involved.

Emailing sensitive data

Email is efficient, but it’s not the best way to share sensitive data that gets exchanged during onboarding. To ensure your data, and your customer’s data, are safe from hacks and breaches, look for companies like Osmos that are SOC II and GDPR compliant. Your legal team will thank you!

Troubleshooting CSVs

Engineering teams spend too much time re-uploading CSV files when data goes missing, files are too large, or data fields differ. To reduce friction between you and your customers, set up a data onboarding process that uses no-code data transformations to automate data imports. Osmos does this by allowing customers or internal teams to quickly map data that matches your system’s schema and upload it without writing any code.

Manual data clean up

Customers share data in all sorts of formats, but it needs to be validated and cleaned before it’s ingested into your company’s operational systems. It’s possible to speed up this process by swapping manual data wrangling work for an intuitive interface that allows non-technical users to clean up data using column mapping, AutoClean, QuickFixes, and formulas.

Manual data importing

Customers need a simple, streamlined way to share data so they can use your application. If you don’t want to ask customers to manually import their data, you can automate the process with a data ingestion tool that allows your team to automatically format, map, and import data on a recurring basis no matter the file size.
Fumbling with FTP uploads

File transfer protocol (FTP) uploads typically need technical teams to utilize custom scripts, share specific documentation, or additional code before the data can be ingested into your operational system. Similar to CSVs, this process drains resources from your team. A data onboarding process that uses automation to validate and import data makes it simple to handle FTP and SFTP uploads with minimal technical assistance.

Writing custom glue code

Data onboarding can be a complex process, but having to write and manage custom Python scripts for each data source only increases the time and stress on your team. Using data onboarding solutions, your team can spend less time maintaining custom glue code and more time building new product features or functionality.

Managing internal bottlenecks

Developers shouldn’t have to drop every task just to onboard a new customer’s data. Rather than pulling teams away from valuable product work, it’s possible to minimize bottlenecks by using data importing tools that give customers or non-technical teams the freedom to share data in just a few clicks.

Scaling inefficiently

Costs quickly add up when using a manual data onboarding process: hiring a technical team, building custom importers and APIs, troubleshooting pipeline issues, and training support teams to help customers. A data onboarding process that speeds up data validation and importing decreases the time-to-value for customers, so they see results from your products or applications much faster. This helps create a positive customer journey and frees up resources to attract more buyers.

Offering a terrible customer experience

Customer service teams are the first to know when something is wrong with the data onboarding process, but they often need support from technical teams to resolve issues. A rigid data importer only complicates the situation. Instead, you can use a customizable, intuitive data importing solution, like the Osmos Uploader, to empower customers to easily format and map data to your operational system.

Time-consuming for all teams

New customers are cause for celebration, but a stressful data onboarding process strips away the time and excitement from teams. A seamless data onboarding process creates more time for value-added tasks through intuitive tools, like no-code data transformation, that make it easy for customers to share clean, validated data.

Each one of these data onboarding challenges can be resolved by using comprehensive data onboarding solutions, but it’s important to find the right strategy and tools for your team.
Elements of an Effective Customer Data Onboarding Strategy

Every company has different data onboarding needs. Without a universal standard for sharing data, companies importing external data from customers, partners, and vendors are easily overwhelmed by the amount of work needed to turn it into usable, structured data.

To solve this problem, businesses often choose between two common strategies: 1) manually onboarding data, or 2) building a custom data importer tool.

Both strategies require a massive amount of time from technical teams, who will likely spend more time wrangling data, troubleshooting errors, and maintaining custom solutions rather than developing core product features.

Fortunately, Osmos offers two effective ways for onboarding customer data. Both are powered by code data transformations so engineers and dev teams can focus on product work, not cleaning data.

Let's explore the options:

**Self-serve data imports**

Empower end-users to send you clean data, without having to write any code. Customers can easily format, map, and clean the data to match your system’s schema before it's ingested.

This embeddable, self-service solution is exactly what SaaS company Mosaic needed to manage a variety of scenarios. The company planned to build an internal data importer to handle customer onboarding, but soon discovered it would take 6-12 months to build and the plus the additional time to maintain it once complete.

Instead, they embedded a custom into their application and began importing clean customer data. The smart data uploader saved Mosaic hundreds of engineering hours, faster time-to-value for their customers with less effort, and improved their customer experience.

“We want to build the best resource management system possible, not the best data import tool.”

Nima Tayebi, CTO of Mosaic
**Automated data imports**

Equip internal teams with no-code data transformations that make it simple to clean up and ingest customer data.

With Osmos Pipelines, teams can schedule recurring data pipelines that map, clean, and ingest data into the company's operational systems using examples and formulas, such as conditional logic (If/then), column split/merges, string manipulation, numerical manipulation, and validations.

Automating external data imports helps reduce data duplication, ensures data integrity, and resolves data inconsistency issues - in both, front-office and back-office systems.

If you're looking to free up your engineering team's time, the built-in management system makes it easy for non-technical team members to resolve errors and manage transformations.

**Do I need an uploader or pipeline? Both?**

Wondering which is the right fit for your customer data onboarding process?

Below is a decision tree showing how self-serve imports and automated data ingestion can improve the onboarding experience based on our needs. For some use cases, it makes sense to employ both solutions.

**What are your data onboarding needs?**

Provide my **customers** a self-serve way to send data.

 Equip my **internal teams** to import data.

- **Osmos Uploader** for end-users

- **Frequency of data exchange?**
  - **Low**
  - **High**

- **Automate it?**
  - **No**
  - **Yes**

- **Osmos Uploader** for internal teams
- **Osmos Pipelines**
How to Improve Your Customer Data Onboarding

A survey by Dataversity found that more than 75% of companies "sometimes or often" have problems with their data onboarding process. This culture of inconsistency may be why the Product-Led Alliance (email required) found that 68% of product managers choose data analytics platforms based on how easy they are to set up.

The thing is, customer data onboarding isn't just a one-time process. Companies that want to stay competitive constantly seek customer feedback, track metrics, and evaluate product pain points. Without the right solutions, cleaning and importing customer data can burden multiple teams.

No-code self-serve and automated solutions are a simple way to improve onboarding and ensure incoming data is always formatted to match your system's schema. Let's see how these tools can improve the data onboarding process.

**Smart Data Uploads**

Osmos Uploaders enable customers and third parties to send data directly into your operational systems without any heavy lifting from your team.

The four-step process to create and embed an Osmos Uploader only takes a few seconds, and you can also add custom validation functions within the Uploader to ensure the data you receive is properly formatted.
**No-code Data Pipelines**

Osmos Pipelines equip your internal teams to automate data imports from customers and partners. Recurring data pipelines make it easy to schedule routine data imports in a few clicks, so clean, validated data is ingested directly into your operational system every time.

An automated data onboarding solution is perfect for companies that need to frequently ingest data from distributors, manufactures, and vendors.

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**CUSTOMER DATA SOURCES**

- File Stores
- Databases
- Applications
- APIs
- Emails

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Rahi leveraged Osmos Pipelines to reduce manual data wrangling and errors during their data onboarding process.

Before using Osmos Pipelines, the company spent over 60 hours per week wrangling and importing data from customers, which led to longer fulfillment times for customer purchase orders. Their teams scheduled Osmos Pipelines to automatically validate, clean up, and restructure the messy PO data to fit their ERP schema and format.

Now, Rahi can quickly identify incoming order requests and find the updates and changes to products, resulting in a faster time-to-value for customers, increased customer satisfaction, and a manual 60 hour data processing time is now automated in minutes.

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Streamlined data onboarding benefits companies in many different ways, but there are a few key metrics to keep an eye on to ensure your process is efficient and effective.

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“Osmos is a strategic enabler of our global platform, making it easier to bring solutions to our customers, partners, and distributors”

Matt Robinson, CTO of Rahi
Customer Data Onboarding Metrics to Measure

Customer satisfaction is an important metric to track when onboarding new customers and partners, but because data onboarding is one of the most complex parts of the process, you want to make sure it's efficient and seamless. That's why the following metrics are essential for delivering a great data onboarding experience.

**Time-to-value**

How impactful is a customer's data onboarding experience on future, longer-term success on the product? A simple, quick customer data onboarding process speeds up the time-to-value. New customers expect to receive the value they paid for in a timely manner.

This value is cyclical because when customers can fully utilize your products, they can receive the results they want from your product. This improves their overall experience and drives your business growth with higher retention rates.

**Data accuracy**

What is the import success rate for my customers? You need to see when an upload has occurred, how much data is ingested into your system, and whether or not an error needs to be resolved.

With Osmos, you can see all of these metrics via dashboards and get notified if errors occur. Plus, no-code data transformations reduce the amount of human errors and validations increase the accuracy of your data imports.
**Speed**

Customer data onboarding should take minutes, not months—customers won't stick around if they’ve paid for a product they have to wait months to use. A quick and straightforward data onboarding process can keep the momentum moving forward. Osmos can accelerate your customer data onboarding process in two ways.

First, you can create a self-serve smart data uploader in a few minutes. Second, your customers can use the Uploader with the built-in no-code data transformations to minimize the time and technical ability needed to clean nearly any source—spreadsheets, CSVs, or JSONs—and get it into a usable, structured format.

**Privacy and Security**

Companies have enough to worry about when it comes to keeping customers happy, so security and privacy shouldn't be a concern. Osmos data onboarding solutions come with security, reliability, and permissioning built in and are fully SOC II and GDPR compliant.

All data is encrypted utilizing the 256 key bit Advanced Encryption Standard, and customers own their data. When choosing a data onboarding solution, make sure to look for data encryption, architecture security, solution infrastructure, communications security, and a secure password policy.

“The more time our teams spend on data processing the less time they spend on finding the best supply chain availability for our customers.”

Matt Robinson, CTO of Rahi
Low-Code External Data Platform

Customers want to be wowed, and although data onboarding isn't the most obvious way to impress people, it has a major impact. A streamlined process establishes a strong, trusting relationship with new customers, partners, and third parties.

It ensures all external data ingested into your operational systems is clean and ready to use. And it frees up everyone’s time and breaks internal bottlenecks, so your teams can focus on the high-value work that comes after customer onboarding.

At Osmos, we believe no-code data cleanup empowers everyone and every business to handle messy external data no matter their technical ability. We’ve eliminated the headaches of ingesting external data by teaching our AI-powered data transformation engine how to automatically clean it, fit it into the right formats, and then send it where it needs to go.

We’re creating a better way for companies working with external data, but our ambitions are much larger. This is our audacious journey to becoming the “railroads” for inter-company data sharing that’s system agnostic.