



The Customer Success Leader's Guide to Successful Data Onboarding



Introduction	3
What is data onboarding, and how does it affect your company?	4
Common data onboarding challenges and use cases	6
Data onboarding for implementation projects	6
Data onboarding via file import by end users	6
Data onboarding for internal use	6
Data onboarding and ongoing data feeds	6
The human factor – key considerations	6
Examples of specific data issues that can cause problems during onboarding	8
Large file size	8
Source to target mapping	8
Data transformation	8
Value issues	8
Missing data	9
Non-digestible formats	9
Workarounds and pitfalls	10
Using traditional integration tools	10
Relying on templates and documentation	10
Internally built data import solutions	11
Critical questions CS leaders can ask	13
Key customer success metrics to watch	14
Retention rates	14
Product adoption	14
Time to value	14
Net promoter score	14
The business impact of automating data onboarding	16
The customer success leader's role	17

Introduction

Your organization may have developed an amazing product, but if customers can't effectively use it, they'll never realize its value. If you have a product or service where customers, prospects, employees, partners or vendors need to supply data before they can effectively utilize and derive value from your product or service, you've probably encountered time delays, errors and complaints during this very step of the onboarding process. Unfortunately, customers who encounter roadblocks and a lot of run-arounds to get their software or service up and running will probably leave and not return.

Customer success (CS) leaders today know that any software application that requires data ingestion comes with a unique obstacle to user satisfaction: Data onboarding. The challenge of taking in user data from external sources — called data onboarding — is a critical first step in the overall customer experience. Successfully navigating the data onboarding process is crucial to ensuring a positive first impression. Glitches and delays from poor data onboarding can derail a new relationship before it's even begun. By improving the data onboarding process, companies can reduce costs, accelerate revenue and significantly increase customer satisfaction.

This guide defines data onboarding and how CS leaders today are handling it. It addresses the challenges inherent in the data onboarding process, why migrating data can be so complex, how it can significantly impact your team and your customers and what can be done to streamline the process.

What is data onboarding, and how does it affect your company?

Data onboarding, sometimes referred to as "data import," "data collection," "data migration," or "data exchange," is the process of uploading a customer's required data to your product. The data migration process must be complete for a customer to use a product and start experiencing its benefits, but CS leaders are all too familiar with the pitfalls of frequently onboarding a customer's data.

The required data might be sourced from a previous software vendor, from a legacy database or reside in spreadsheets or a whole range of other applications or files. Getting that data in shape for your product will almost certainly require complicated data mapping, review, cleanup and validation, and you may even need human oversight before it can be imported into your new target system. If it isn't handled correctly, onboarding data can become a long and painful process that inhibits product adoption.

The data onboarding process has continued to grow in importance as data has become a frequently exchanged currency. Companies in nearly every industry require data onboarding, from healthcare to manufacturing.

- HR solutions require comprehensive data on employees, benefits and payroll before they can be effectively used for automating HR processes
- Ecommerce providers need product and pricing details from their merchants and suppliers before they can include these products in their offering
- Service providers such as cleaning or maintenance services need facilities information and other service requirements before they can send out crews and start billing their clients
- CRM platforms need customer data such as contact information or customer history before they can be used by a sales team

Not only do many companies have products and services that require data as a starting point, but this data is often complex. While CS leaders are familiar with migrating data into a product, the scale, scope and timing of the data onboarding process varies greatly for each company. For some, it may encompass the first two weeks of the customer relationship. For

others, the process of collecting, mapping, transforming, reviewing and cleaning data can go on for months.

The common denominator is that onboarding customer data is clunky, time-consuming and error prone

Common data onboarding challenges and use cases

There are a number of data collection, import, transformation and collaboration challenges that companies commonly face, including:

Data onboarding for implementation projects

If you have customers using your software applications, loading those apps with data is a necessary first step before customers can get any value from your software or service. Delayed or complicated data onboarding processes will affect your users' ROI, decrease customer satisfaction and, in some cases, can cause customer churn.

Data onboarding via file import by end users

If you have applications where customers, partners, prospects, employees or vendors can upload data files via self-service, you've probably encountered delays, errors and complaints from users. Unfortunately, if those users can't complete the simple task of importing their data files, they will almost certainly leave and won't return.

Data onboarding for internal use

Gaining a normalized view of data can be a complicated task. Data from external and internal systems needs to be shared seamlessly, which often involves emailing Excel files back and forth over long periods of time for review and data cleanup. This process nearly always introduces data errors, versioning issues, time delays and frustration. Additionally, team members sharing CSV and Excel files via email carries enormous data privacy and security risks - they need to be able to send and receive data through a safe and secure process.

Data onboarding and ongoing data feeds

Most organizations need to collect data from partners, agents or remote employees or need to aggregate data from remote departments or divisions. These files might be emailed, dropped into a shared folder or sent via FTP. Some might be ready for a seamless import into a system or database, but more often, they require resources to be dedicated to a mapping, formatting, cleaning and review process before they can be combined with other data.

The human factor – key considerations

Making sure that the right people with the right access control manage the right data at the right time is critical. Companies often need to orchestrate complicated data workflows and

deliver seamless implementation projects. Orchestrating these workflows can be incredibly challenging with the involvement of multiple teams, systems and processes. If, for example, you need to coordinate 122 exhibitors, 17 external vendors and 11 different teams that are working on 37 separate Excel files, it would require an intricate workflow for importing, validating, editing and approving data with complex transformations to split, combine and merge data easily.

Users can't be expected to have technical skills or read lengthy instructions. They need to be able to upload a file, look through it, fill in any blanks, make simple mapping decisions and move on. The human-in-the-loop component in the data integration process is an aspect of data imports that can pose significant challenges, and it requires an entirely new approach to managing data exchange.

Transformation by domain experts

The key distinguishing feature of data exchange is that transformation is handled by those with intimate knowledge of the data's business context. Cleaning, standardizing, enriching or reformatting data based on agreed-upon business rules and requirements will ensure the data is meaningful, actionable and tailored to the specific needs of its final use case.

This process frequently requires manual data review with exception handling and approvals on both the sending and receiving ends. On the sending end, a user who submits a file needs to review what they're submitting. The receiving side may need to identify exceptions, review data in a consolidated form or even send back requests to users to fix or update certain parts of the data.

Examples of specific data issues that can cause problems during onboarding

Large file size

A file provided by a customer for data onboarding, such as spreadsheet or CSV file, is often too big, which can be the result of too many fields, records, columns, or rows in the file. This typically triggers import errors which may be caused by limits set by the program using the file or lack of available memory on the systems.

Source to target mapping

Columns that don't match expected field names, which can be caused by different values, field names not on the first line, or the complete absence of column names, cause errors. Mapping errors can occur when the expected columns are in the wrong order or required columns are missing. An additional problem is the existence of multi-row field names that bury the actual data under a secondary header. Merged cells can also hamper the process of mapping the source data in a file to the desired target format.

Data transformation

Data transformation is the process of converting data from one format, structure, or system to another, which is often necessary when integrating data from diverse sources during the onboarding process. Potential challenges include inconsistent schemas, diverse formats, complex transformation and validation rules, and numerous data quality issues like missing values, duplicates and inaccuracies.

Value issues

Data value issues can be a significant cause of data errors during the data onboarding process. These could include unexpected data length - either too long or too short. Value issues could be caused by unacceptable characters, such as text in a numbers-only column or numbers in a boolean (a data type with two possible values: true or false). Other value issues include having related fields with conflicting data, such as records with multiple types of unique identifiers when only one is allowed. For example, the city/state names differ from their actual zip code or even a related field without required data.

Missing data

Missing data is one of the most common errors. Examples include incomplete data like invoices that have month and day but no year or missing city/state data with zip codes present. Any required value that is missing will trigger an error, block the next step and require manual intervention.

Non-digestible formats

These include simple format mismatches that need format normalization, such as phone numbers or social security numbers, which are numbers only without symbols. For example, “July 31st 2020” or “June twentieth 19.” Charts and pivot tables also can’t be imported.

Minimizing these errors can be a time-consuming process and highlights the challenges of the data onboarding process.

Fortunately, a [data file exchange solution](#) can not only help teams resolve these common issues but safely and efficiently import all the highly variable data files they need. Even if files come from many different sources, arrive in a wide variety of formats and need manual mapping, review, cleanup and validation before they’re imported, a data exchange solution can help CS leaders deal efficiently with all of the real-world data that customers have.

Workarounds and pitfalls

Data mapping, review, cleanup and validation often aren't easy to handle, and there are a number of ways that CS leaders attempt to solve the challenges inherent in the data onboarding process. Common workarounds include:

Using traditional integration tools

Data integration and management tools have been around for decades, but they aren't designed to support the data onboarding and data migration use cases that CS teams struggle with every day. Traditional ETL (Extract Transform Load) and iPaaS (integration Platform as a Service) solutions are built on the idea that data is only ever safely and securely transferred between tightly managed IT systems. Unfortunately, they ignore the reality that data is messy! The data you need from your customers will often require complicated data mapping, review, cleanup and validation before it can be migrated and imported into your target system. Additionally, data often needs human review and oversight, which may involve deeper collaboration between your CS team and the customer.

Relying on templates and documentation

One popular solution that companies rely on to address data onboarding is providing pre-made templates to customers and having them manipulate their data to fit a specific, fixed data model before uploading. In this scenario, an end user handles the work, but your organization needs to provide documentation, tutorials, FAQs and other how-to documents to walk a customer through the data import and migration process.

Many companies ask users to adhere to one very specific spreadsheet format, and even the slightest deviation from that format results in the rejection of the data import attempt. Unfortunately, after the second or third attempt, users become highly frustrated, which can make an already challenging situation even more difficult. The impact of this process on customer satisfaction, conversion rates and missed top-line revenue is one of the most overlooked issues in data integration.

Does this process waste customer time? One team found that their customers were experiencing significant upload failures with their data files, which caused delays and required client operations and IT to get involved to solve the issues. They ended up spending a lot of time going back and forth with many of their customers, having them fix their files and resend them.

If the data migration experience is manual and your process relies heavily on templates and on customers to update and fix files for onboarding, it may be time to reevaluate and examine how much time and energy are being dedicated to the process.

[BuildOps](#), a company that developed an all-in-one software platform that enables commercial contractors to drive their sales, service and project management from a single platform, has customers that serve data centers, hospitals, power plants and other large-scale critical infrastructure. Historically, at BuildOps, implementation managers performed data onboarding manually, which could take weeks to complete. With new contractors coming on board every day, the volume of data was becoming overwhelming. BuildOps knew it was time to automate. To combat the data flow bottleneck and streamline its workflow, BuildOps implemented Flatfile, enabling it to decrease overall time to launch by an estimated 15%-20%. The result was a faster onboarding process that allowed BuildOps customers to get their focus back on the field and take care of business.

Internally built data import solutions

Initially, many teams gravitate toward building their own solutions for importing data files, filtering data, flagging anomalies and correcting information. At first glance, this might seem like a practical choice that offers the most control over the finished product and frees up data management resources. Unfortunately, custom solutions introduce their own set of difficulties. As many CS leaders already know, if you're dealing with non-trivial needs, a homegrown solution often ties up limited and expensive resources, introduces dependencies on other internal teams with different priorities and usually costs more in the long run.

Many companies are convinced that building internally is necessary due to their unique data onboarding requirements, but it's becoming increasingly rare that companies actually need to build data import capabilities on their own. Enterprise-scale data onboarding solutions are built to address different organizations' varied needs. They're created and maintained to enable flexible workflows and configurations, and they bottle up the experience of domain experts, which is impossible to develop in a one-off project.

Data onboarding isn't a set-it-and-forget-it solution. The business and your customers will require ongoing enhancements and maintenance of your data onboarding solution. Any team

that takes on the responsibility of building a solution is also committing to support and maintain it over time. It typically becomes the responsibility of the team that created it and this ongoing maintenance is almost guaranteed to be a distraction from the core business functions that attracted your customer in the first place.

It's becoming increasingly rare that companies actually need to build data import capabilities on their own.

Critical questions CS leaders can ask

A central responsibility of customer success teams, with support from teams like product and engineering, is to ensure successful data onboarding, the ongoing use of your product or service and the long-term retention of your customers. This, of course, requires a positive customer experience, especially early on after a customer has just made that purchase decision, which becomes difficult if you start on the wrong foot and the customer gets frustrated during the very first steps of onboarding – trying to get their data to you.

Questions you can ask are:

- How long does it take customers, on average, to onboard their data?
- How many actions are typically required by the customer to ensure successful data onboarding?
- What percentage of customers go through the data onboarding process without any issues?
- How many interactions between the CS leader or support team are required to get a customer's data onboarded?
- How often does the CS leader or support team require the help of other teams across your company to overcome a data onboarding issue?
- Where specifically are my customers getting hung up during the data onboarding process?

Answering these kinds of questions will help ensure you have an efficient process that enhances your customers' experience and provides timely onboarding of your customers' data.

Key customer success metrics to watch

Improving the data onboarding process will have a direct impact on your overall customer success metrics. Key customer success metrics to watch include:

Retention rates

This metric provides the most direct insight into whether your customers are happy with your product and service. A poor data onboarding experience will hurt your customer relationship and general customer satisfaction and can impact your retention rates. Conversely, a streamlined data onboarding process can positively impact your retention rates because those who can get started and derive value quicker will be more satisfied customers as a result.

Product adoption

Consider the speed and volume of usage of your product. How long did it take customers to use it for the very first time? Are they using it daily? Is usage growing or shrinking? These could be indicators of a solid or weak customer experience during onboarding.

Time to value

This measures the time from signup to the time users activate. If your data onboarding process relies on time-consuming spreadsheet uploads and follow-up emails to handle the inevitable data errors that arise, you can expect a delay in activations.

The more steps in your activation process, the longer it will take individuals to begin successfully using your product. You may have a clear checklist that takes users through an activation process, but if one of the items is “import data” and the data onboarding process isn’t up to par, customers will experience delayed time to value.

Net promoter score

CS leaders often track the Net Promoter Score (NPS) throughout the customer journey to better understand how customers feel about their product. A painful data onboarding process will not only negatively impact the early engagement period but also leave lingering bad impressions that can affect scores going forward.

When CS leaders are laser-focused on these metrics, tying the value of data onboarding back to them can make a difference in the ongoing quest for successful product adoption.

The business impact of automating data onboarding

Automation can offer numerous benefits during the data onboarding process and reduce the pain that CS leaders face. Here are the key points to remember if you're considering automating your data onboarding.

- **Time to value for customers:** The sooner your solution can solve a problem, the sooner your customers can derive value from it. Streamlining and accelerating the process of getting data into your systems will give your customers and users the benefit of having an improved user experience and allow them to gain access to their data much more quickly.
- **Increased efficiency:** Slow, manual data onboarding forces teams to spend an excessive amount of time hand-holding customers who are trying to upload their data. Automating your data import process will offer much more comprehensive functionality, much faster and at a fraction of the in-house development cost, enabling teams to start working with the data they need right away.
- **Relieving the burden on other teams:** Building a data onboarding solution that likely won't work in many scenarios and requires constant updating drains valuable resources and limits the availability of technical resources including skilled data engineers and IT support. Eliminating highly manual and repetitive steps will have an immediate effect on the company's bottom line and allow teams to focus on more value-added activities, like building new features and improving user experience.
- **Improved bottom line:** Leveraging an automated data onboarding solution saves time and resources for both the customer and the organization, which means dollars saved and increased revenue for the company.

Automating the process is one of the most effective ways to solve the data onboarding challenge. Packaged solutions that streamline data import and data onboarding processes are a growing trend as companies look for ways to accelerate revenue, improve their bottom line and ensure a happy customer base.

The customer success leader's role

Customer success leaders can be the bridge between the customer and the technical aspects of data onboarding. They're critical in defining strategy, overseeing processes and ensuring that outcomes align with overall goals and user needs.

CS leaders can drive data onboarding success by strategically aligning user needs with data acquisition, ensuring that each piece of onboarded information enhances the customer's experience at every step. Ultimately, they're responsible for creating the best experience for their customers, helping new customers become customers for life.

Learn more

Flatfile offers a comprehensive data onboarding solution based on a developer-friendly platform that supports highly customizable automation and advanced data collection, mapping, transformation and validation capabilities, as well as [AI-powered features](#) that will speed up your customer onboarding process. For more information about the Flatfile Data Exchange Platform, watch a [demo](#) or [contact us](#).

About Flatfile

Flatfile, the pioneer of AI-assisted data exchange, provides companies and their software development teams with the easiest, fastest and safest way to build the ideal data file import experience for their users. Hundreds of companies such as ADP, AstraZeneca, Square and Sage rely on Flatfile's extensible, API-first platform to create enterprise-scale, intelligent, file-based data import solutions, increase developer productivity, reduce cost and improve data quality.

www.flatfile.com

© Flatfile - all rights reserved