Persistent

Solution Sheet

AI-Driven Automated Data Integration

Integration of data from customers, suppliers, and partners has always been a challenge for SaaS products and services. While the products need data in a pre-defined format governed by APIs or data models, the actual data provided is in varying formats. The customer onboarding team is often left with the mammoth integration task of mapping customer data from raw file formats or streams, to a standard data model - a manual, error-prone, and slow process.

This means that only a limited number of customers can be onboarded during peak demand which can cause huge losses. Additionally, the SaaS TCO goes up proportionately with the need to maintain a dedicated team for data integration.

Onboarding new customers involves manual, error-prone and slow data integration processes	Manual integration results in low customer onboarding and missed opportunities during peak demand	A multitude of data formats cause complexities in integrating data on a regular basis

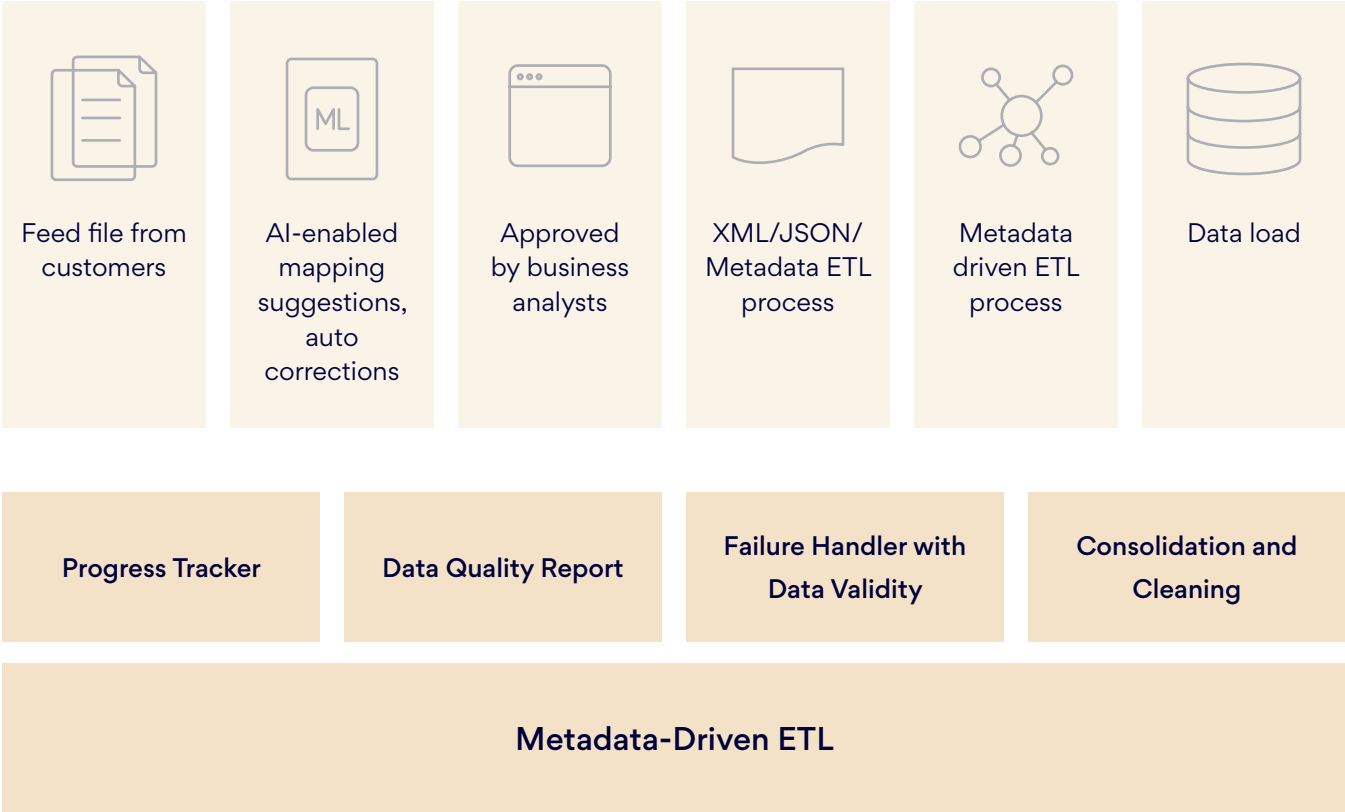## Persistent's AI-Driven Automated Data Integration Framework

Persistent's AI-driven automated data integration framework automates up to 40% of data for faster and more accurate customer onboarding. The framework constantly monitors ongoing integrations and sends out alerts for potential data issues automatically.

The framework works with multiple data formats including JSON, XML, and CSV and eliminates any data mapping, formatting, and joining challenges. It serves as an adaptive model that continuously learns and improves, and enables faster verification for business analysts with auto suggestion and auto-correction. The framework offers a single code base for all customers that significantly lowers maintenance overheads.
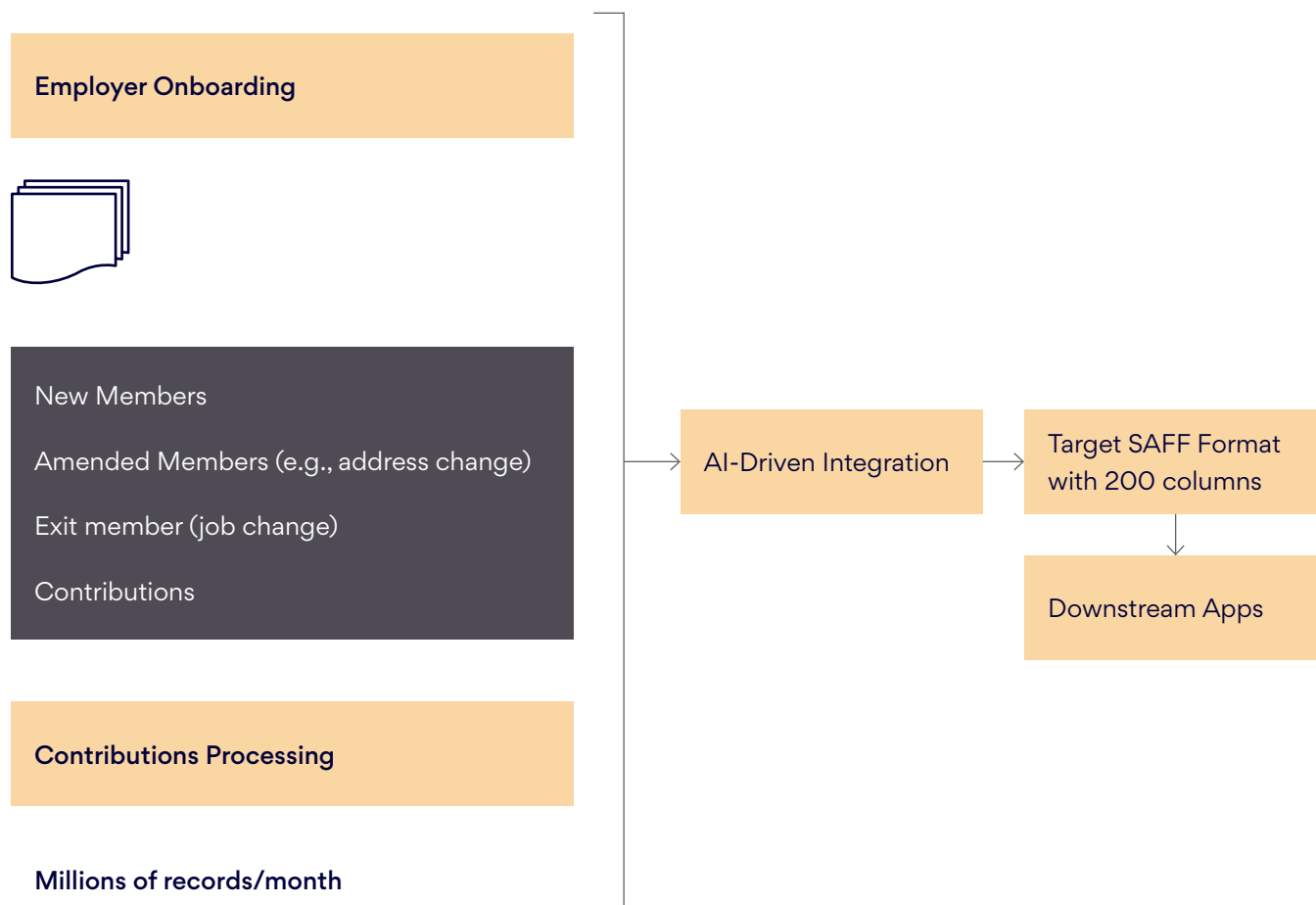
How It Works

Feed file from customers	AI-enabled mapping suggestions, auto corrections	Approved by business analysts	XML/JSON/ Metadata ETL process	Metadata driven ETL process	Data load

Progress Tracker	Data Quality Report	Failure Handler with Data Validity	Consolidation and Cleaning

Metadata-Driven ETL

Build once, re-train as required	Reduced Code Changes	Accelerated Development	Reduced Maintenance Efforts
One-time AI-ML model and incoming file format parser development. Handle incoming data formats like JSON, CSV, XML	Adaptive model, hence continuous learning on new data. Eliminates ingestion and mapping challenges	Faster mapping creation by business analyst using auto suggestions and auto corrections	Single code base for data ingestions across customer, parallel processing, hence reduced maintenance.

Automated Data Integration in Action: AI-Driven Superannuation Details Processing

Discover how Persistent's AI-driven automated data integration framework works in the context of superannuation processing, an extremely data-intensive process.

Employer Onboarding

New Members

Amended Members (e.g., address change)

Exit member (job change)

Contributions

Contributions Processing

Millions of records/month

AI-Driven Integration

Target SAFF Format with 200 columns

Downstream Apps

Self-learning

A model that is trained with different inputs, varying file formats converted into SAFF format.

Dictionary Lookup

Model that maps varying column headers to SAFF by "looking up" in a dictionary — empowered with feedback learning.

Improve Productivity

The model improves the productivity levels of human operators by automating format conversion.

Conflict Management

In case of conflicting data where the model cannot interpret the right target column, it flags conflicts to the human operator for intervention. The model learn from this intervention and loop-I feedback.

Interpret Data

In the event of missing headers, the model uses past knowledge of similar data under a particular column header and maps the blank header data to a standard column in SAFF.

- ■ Different file format by each employer/payer
- ■ Column headers different from SAFF headers
- ■ Column headers may be missing
- ■ Order of column headers may change

Enjoy the ease of automated data flows regardless of the volume and variety of your data.

Request Demo

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