

With our flagship *DataInFormation<sup>SM</sup>* suite of solutions for Image Labeling, Data Annotation, NLP Calibration and Form Data Capture, Liberty Source is proud to serve a wide range of clients across many industry verticals. Our *Solution Briefs* provide a snapshot of the challenges clients bring to us, and the outcomes we achieve for them.

### Airline Ticket Data Aggregation

Industry	Transportation / Airlines	Data Type	Structured (delimited .csv)
Project Duration	6 Months	Ongoing?	No

#### Challenge

A U.S.-based travel services firm provides financial settlement services between airlines and third-party ticket sellers. To improve the accuracy of the settlements, the firm needed to begin utilizing data from Ticketed reservations instead of from the traditional Reserved itineraries. This would entail collecting ticket data from all commercial airlines worldwide, requiring the largest data structure in the industry to contain data on over 1.2B tickets annually.

#### Solution

A prescribed data format specifying the required fields and delineation parameters was provided to each airline. A team of six data analysts worked with the airlines to provide instruction and to acquire sample data to verify both the consistency of the feed mechanism and compliance with the specified format. Each file was initially processed via a proprietary automated intake mechanism, then verified with a human-in-the-loop validation.

#### Outcome

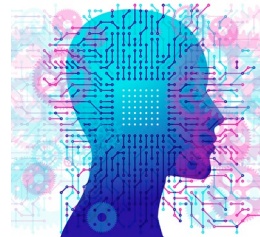
Validating compliance with the input specifications via a human-augmented process ensured that the data structured not only contained accurate information, but that it was readily accessible for accurate transactions and for analytic purposes.

### Airline Ticket Data Aggregation

Source: airline ticket data in various formats feeds to centralized repository



**Human in the Loop** – Data is extracted from provider’s data store, transformed into an ingestible format, and loaded into the analytic platform for final processing



Output: Consistently structured data

Carrier	LastName	FirstName	Flight Number	Date	Time	Class Seat	Origin	Destination	Sequence
Acme Air	Doe	Jane	1234	2/30/2023	1245	A	Metropolis	Gotham	0005
Acme Air	Smith	John	0333	2/15/2023	1830	B	Gotham	Metropolis	0006
Acme Air	Jones	Mike	1010	2/18/2023	955	V	Gotham	Metropolis	0004
Acme Air	Wilson	Nancy	0018	2/25/2023	1655	F	Gotham	Metropolis	0001