



# Automating Data Ingestion and Extraction

*“Do whatever it takes to deliver the right business results”*

## Most Common Challenges with Data Ingestion and Extraction

### Data Challenges

Many organizations are seeking to automate inefficient manual processes that ingest and extract data to get it ready for consumption and use by downstream business operations and systems. However, there are many inherent challenges, and few common ones include:

- Data sources may be internal and external, which require different security considerations
- Data is often in many different formats (e.g., PDF, spreadsheets, etc.) and may come in via different channels (e.g., email, shared drives, secure web locations, etc.)
- Placement of data fields can vary from one period to the next, including errors such as missing fields
- Dependency on specific people who either have special knowledge, or have written notes on how to deal with discrepancies and special situations, or even the need to handle things in a special way that may be unique to the business
- Immature data management processes that necessitate improvisations or special instructions that vary from one period to the next

There are other numerous challenges inherent to this process, and building the right automation capability, while achievable, requires a great deal of thought and expertise.

### Finding the Right Solution

Some of the most common challenges companies face in identifying the right solution include:

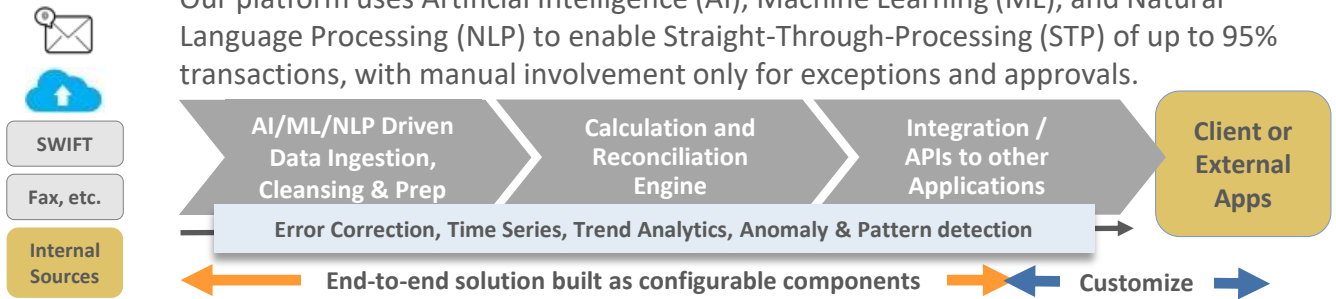
- The abundance of marketing hype, biased reports from “experts” and vendors that create confusion and promise a panacea for all types of data ingestion and extraction processes
- Lack of organizational expertise and depth in understanding some of the newer technologies, such as Optical Character Recognition (OCR), Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP), and Robotic Process Automation (RPA) which are often the basis for many available solutions
- Fact is, that all of these (and other) approaches can work, but the success depends on their fit for a particular situation

### What You Should Expect from an Optimal Solution

- A perfect solution to automate your data ingestion process 100% and with 100% accuracy is unlikely
- However, you should be able to automate 70-95% of your process, and significantly reduce manual labor, errors and costs
- An effective solution should not require ongoing maintenance as data content formats, and content placements change

## A Smarter Way Forward

Our platform uses Artificial Intelligence (AI), Machine Learning (ML), and Natural Language Processing (NLP) to enable Straight-Through-Processing (STP) of up to 95% transactions, with manual involvement only for exceptions and approvals.



## 4 tests to find true AI, ML, NLP platforms, and why it matters

A true AI/ML/NLP platform learns like a human, by training and reinforcement learning, so

- 1) Continues to work when input formats change, or data appears on different pages or places
- 2) No need to define pre-built templates to read inbound documents or other data formats
- 3) Reads and processes footnotes (even when the footnotes appear in different places)
- 4) Performs data ingestion including digitization, extraction, ontology-driven and second-source validation, auto-tagging of data and metadata, and use of knowledge graphs for identifying and storing information and relationships

Most solutions such as those embedded with RPA, document management and workflow tools will fail these tests, leaving in relatively expensive, still manually-intensive and error-prone processes. Let us collaborate with you to leverage AI/ML in the most optimal manner for your business.

*"[Haystream] identified over \$6 million in savings during just the first phase, with an 80% reduction in processing time, and with an astonishing 96% accuracy rate." - Top 5 global bank*



*"Vision with Action"*

Haystream helps clients automate and bring your operations into the 21<sup>st</sup> century

(without the desks, of course!)

