Straive™

# Accelerating Data & Digital Transformation Strategies in Life Sciences

At Straive, we are uniquely positioned to support clients in advancing digital transformation by enhancing process efficiencies and creating robust data moats that serve as significant business differentiators. Our approach integrates domain-specific, tailored analytics and Generative AI solutions, augmented by a team of over 6000 domain experts. This synergy ensures high-accuracy, regulatory-compliant outcomes, fully unlocking the potential of data and technology to drive innovation and efficiency.


We amplify business impact of clinical and R&D processes by unlocking value from data and documents


We implement, execute, and manage enterprise-scale services that prioritize efficiency, auditability, and democratized access to data and technology


We help with personalized and faster commercial engagement with actionable insights on KOL, Pricing, HCPs leveraging unique data and GenAI tech

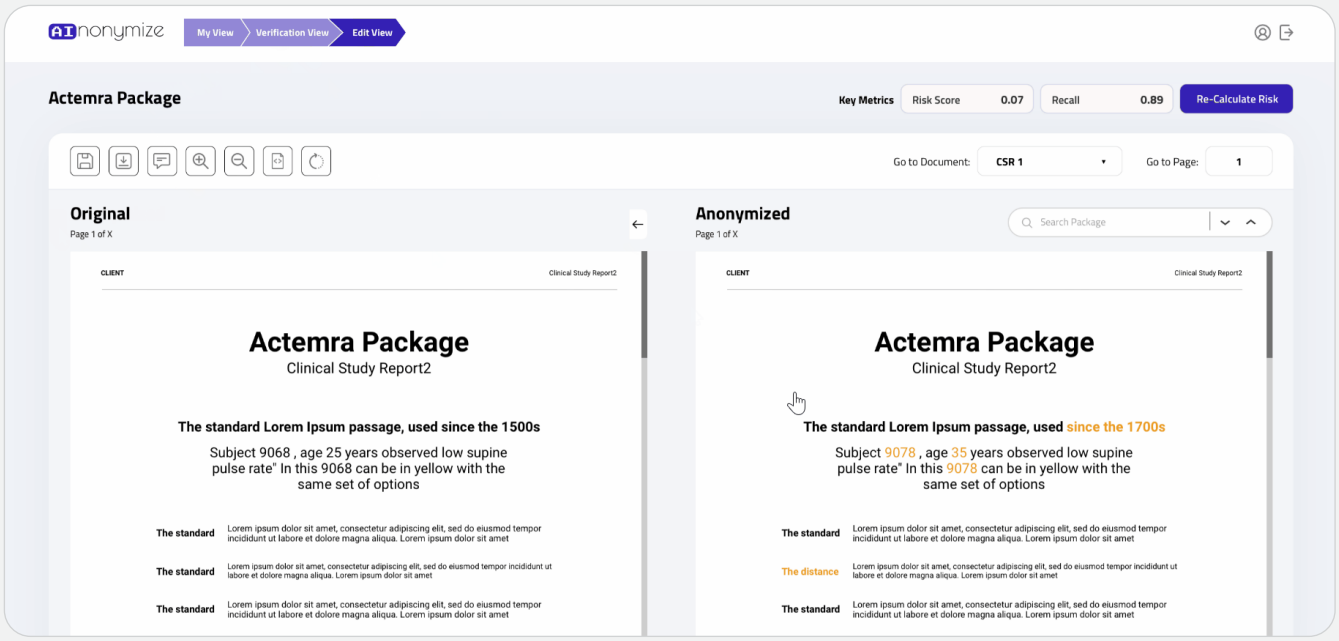
## A proven track record of delivering successful Pharma D&A use cases

We have leveraged data and AI technologies such as ML, NLP, NER, & computer vision to improve outcomes across the pharma & life sciences value chain.

### Research & Development

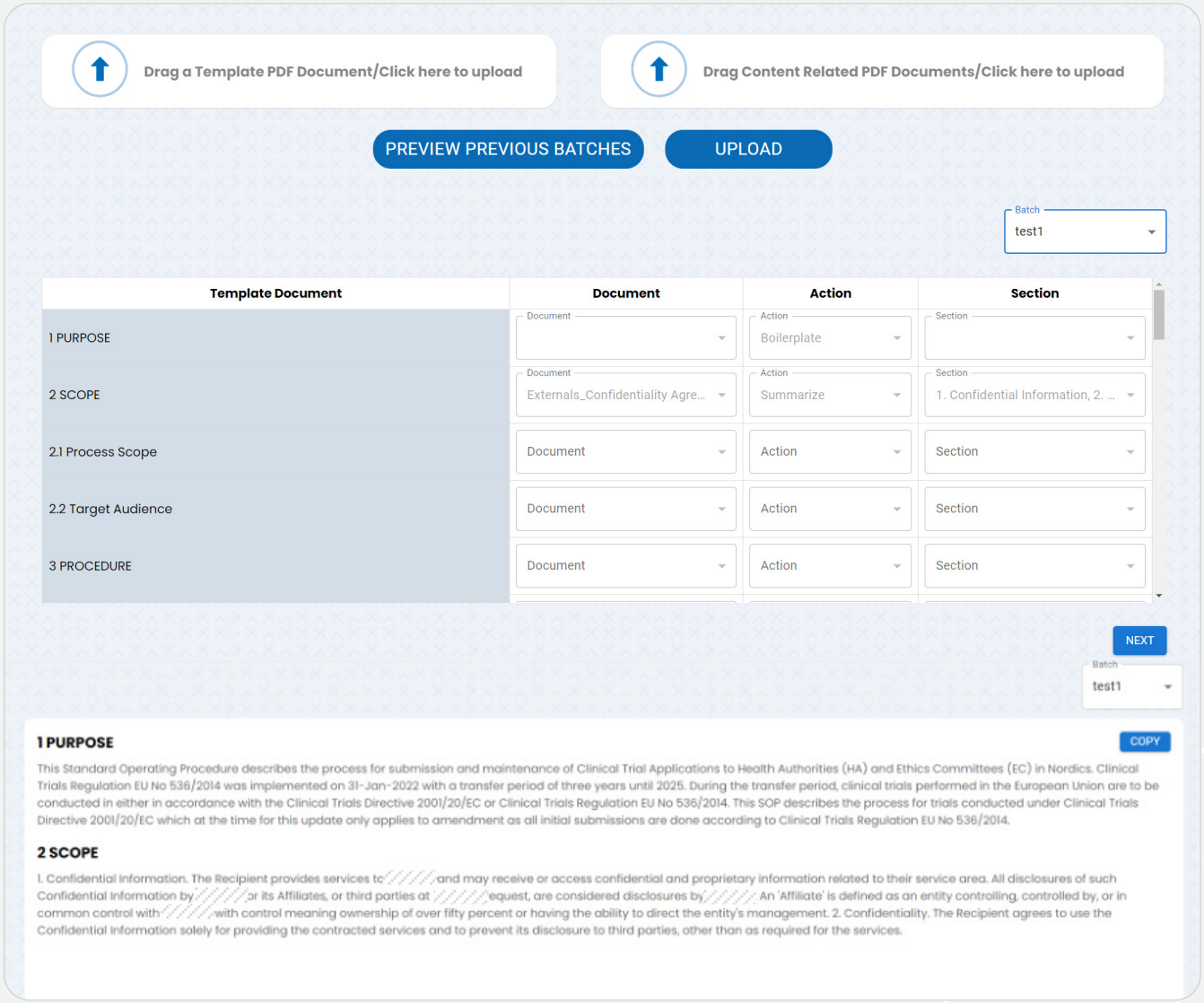
### 85% faster turnaround for anonymized document submission

Organizations need to protect data, ensuring privacy and transparency in public disclosures or else face costly lawsuits arising from errors. Also, report submission delays may lead to penalties. Our solution combines advanced NER models with anonymization techniques with a Human-in-the-loop framework. It identifies and classifies PII as direct and quasi-identifiers to ensure compliant anonymization, safeguarding confidential documents, and saving 85% of time.




### Seamless templatized document unification with 50% TAT reduction

Creating accurate documents manually can be challenging. There is a pressing need to expedite document creation without sacrificing quality. Our solution leverages GenAI, Data Engineering, and advanced NLP techniques, allowing users to upload target and content documents. It extracts and integrates sections based on user specifications, offering options to summarize, paraphrase, or insert content, reducing creation time by 50%.




## Improving Clinical data accuracy by 50% with automated quality control

> Inconsistent and incomplete data for clinical trials across 20 countries resulted in a time-consuming manual verification process and inefficiencies in identifying and disambiguating trial details, affecting trial outcomes. Our solution integrated ACQuire, OCR Engine, and SPiZone to enrich clinical trial data by aggregating missing information and enhancing quality. It also reduced the time needed to collect and verify clinical trial location data, improving scale and speed.

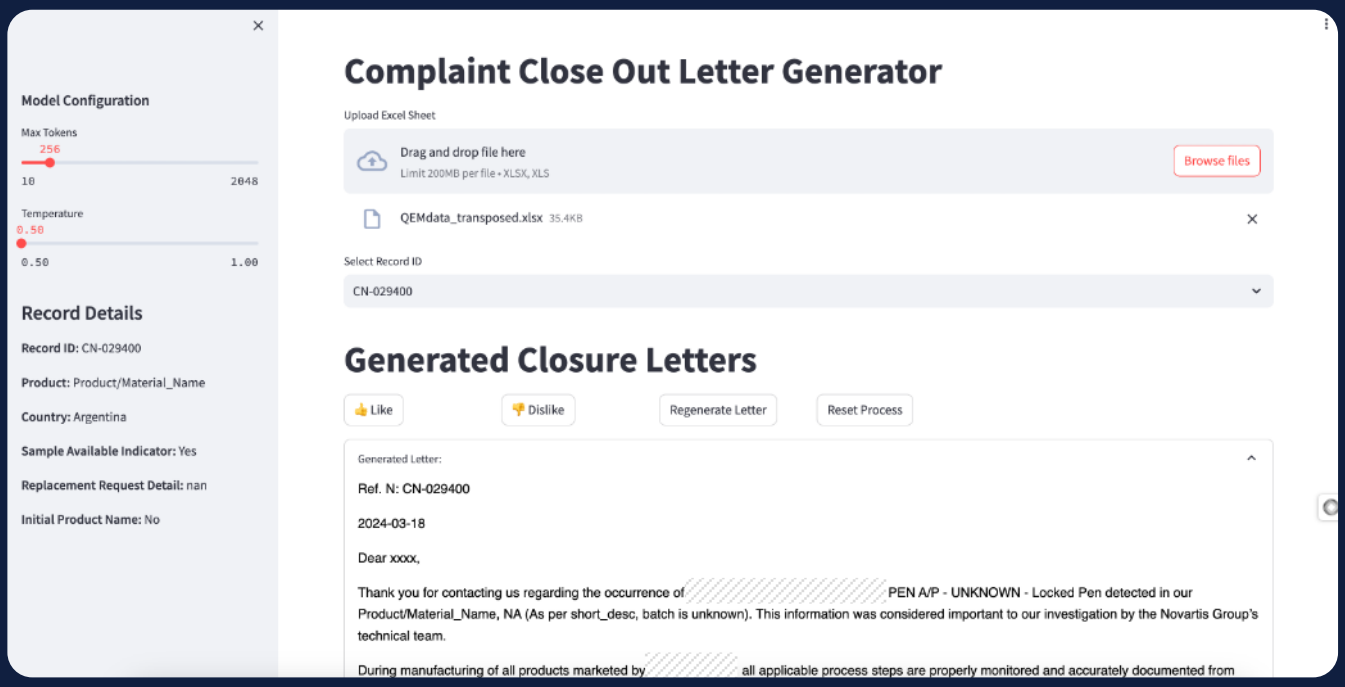
## Speech Transcription for effective information retrieval analysis

> Existing speech-to-text technology may misinterprets medical terms and accents, causing transcription errors. Our Gen-AI enhanced transcription capabilities capture medical terminology, diverse accents, and discussion context, improving overall clinical trial document accuracy.

Pharma Operations

## Enhancing CX with GenAI-powered Summarize Assist

Handling adverse events accurately is crucial, but summarizing investigation reports is labor-intensive and costly. Thus, reducing TAT for customer complaints is essential. GenAI-powered Summarize Assist automates report summarization into concise, four-line paragraphs for quick customer communication. Multi-shot prompting ensures sensitive information is protected, enhancing regulatory adherence, while reducingTAT.

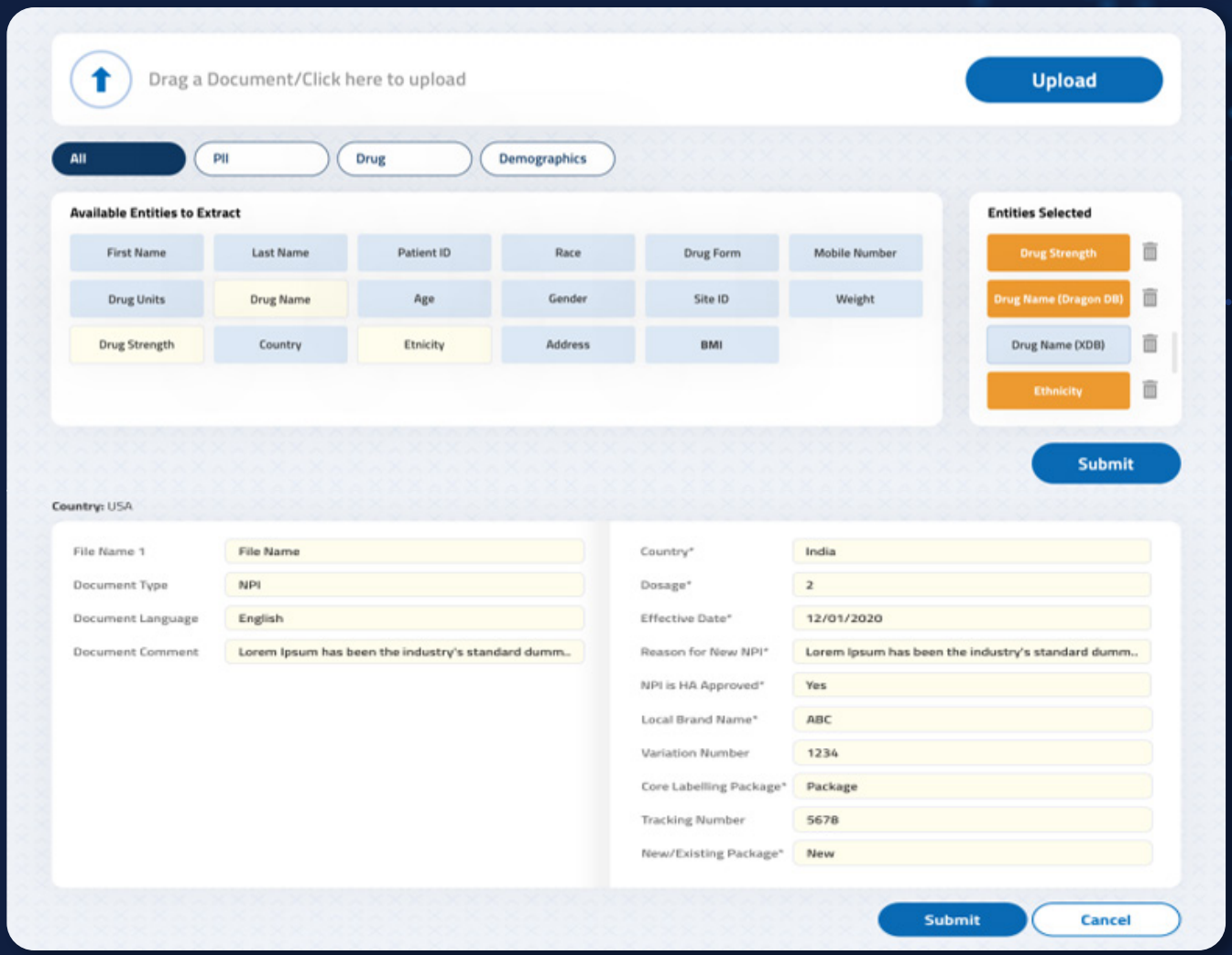



## 50% TAT reduction in integrating physician data with accuracy

Gathering comprehensive physician data from diverse international sources poses significant challenges, especially with non-scrapable websites and incomplete physician records. A robust validation system is must to ensure accuracy of physician information. Our solution automates data collection from primary and secondary sources, supplements it with manual research for non-scrapable sources, and completes partial records. A scoring system and established rules validate data, resulting in a comprehensive database with, reliable information.

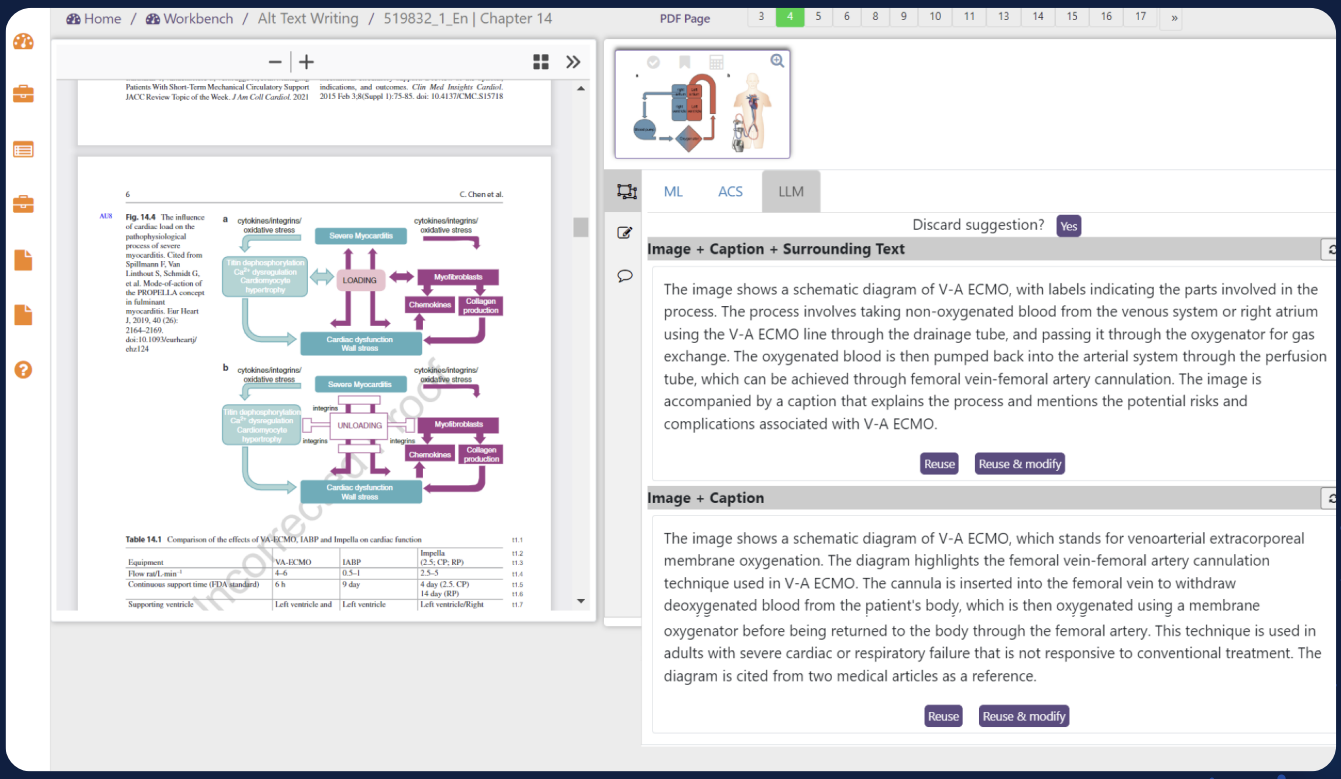
## Savings $5.2 Mn/yr using advanced NLP for auto uploading drug labelling docs

Pharma writers manually fill product information by referring to documents before uploading labelling documents that need to be classified by type and country, with attributes manually sourced from various systems and languages. We developed advanced NER models on client data, offering better accuracy and resource utilization than cloud alternatives. Integrated with a quick-view UI, it reduced the time required for writers to process each document 45 minutes to 2 minutes.




## Implementing LLM models for automated alt-text generation saving 50% of time taken

Inadequate alt-text for complex life science images limits content accessibility, with manual generation by SMEs being time-consuming and not scalable, lacking detail, and affecting user comprehension. Our LLM for automated alt-text generation, integrates multiple ML models for context and object recognition. The QC module reviews and refines auto-generated alt-text, increasing the detail and accuracy of alt-text for life science images, improving content accessibility.




## Commercial Pharma

### Accurate KOL identification to reduce communication gap by 15%

Our client required an automated KOL management solution to compare industry experts based on parameters such as subject matter expertise, sphere of influence, etc. An analytics-powered visual app improved communication between sales and marketing users- Marketing users efficiently planned scenarios, while sales leads operationalized them. Clustering, variable associations, and NLP powered the dashboard, increasing KOL satisfaction and decreasing rejections.


| Name | Degree | Specialty | Institution | State/Region | Country | Aggregated Score |
|---|---|---|---|---|---|---|
| Ahluwalia, Manmeet S | MD | Neuro-Oncology | Cleveland Clinic | Ohio | USA | 13.37 |
| Wen, Patrick Y | MD | Neuro-Oncology | Dana-Farber Cancer Institute | Massachusetts | USA | 10.34 |
| Reardon, David A | MD | Neuro-Oncology | Dana-Farber Cancer Institute | Massachusetts | USA | 8.23 |
| Vogelbaum, Michael A | MD | Neuro-Oncology | Erasmus MC Cancer Center | Newyork | USA | 7.86 |
| Nabors, Louis B | MD | Neuro-Oncology | University of Alabama | Alabama | USA | 7.82 |
| Grossman, Stuart A | MD | Oncology | Johns Hopkins University | Maryland | USA | 7.10 |

## Automating drug pricing monitoring with 99% accuracy

Manually tracking drug prices across multiple sources is time-consuming and error-prone, compounded by rapidly changing prices and new drug introductions, creating challenges in maintaining up-to-date records to ensure compliance. Our solution employs automated price tracking. Its human-augmented validation ensures data accuracy and regulatory adherence. This approach enables swift adaptation to market changes for strategic pricing decisions, and regulatory compliance and through timely drug price monitoring.

## GenAI automated content generation such as images, texts, and training material for the sales force

The generation of promotional content for sales and marketing activities needs to be done in compliance with regulatory and governmental policies. It also requires a rapid pace for execution so collaterals can reach HCPs in time. Our GenAI-powered solution helps sales and marketing teams to produce marketing and POS collaterals at scale and speed with an aim to cut down the TAT from 4-5 weeks to 8 days.

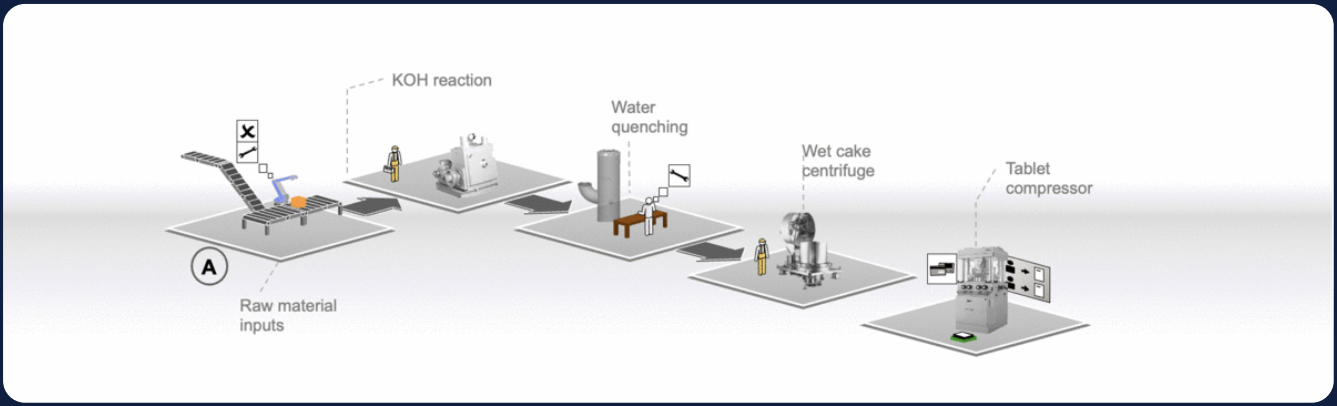
# Manufacturing & Logistics

## Effort to quantify innovator drug's excipient concentration cut down by 95% with computer vision solutions

The R&D department of a pharma company faced challenges with manually counting cells in liposome images from Transmission Electron Microscopes, leading to a 30-35% error rate, high costs, and a manpower requirement of 500-600 hours/month. We developed a Deep Learning counting model based on Convolutional Neural Networks (CNN) combined with a RANSAC model to detect and count cells in specific regions of liposome images. With an interactive UI emphasizing human-computer interaction, this solution reduced the effort required for morphology image processing by 450 person-days per month and achieved over 90% accuracy.

## Advanced ML helped identify golden batch with 3-5% yield improvement

Maintaining high and consistent production of the Golden Batch is daunting. It requires identifying the operational and material parameters crucial for optimal production yield. We conducted Exploratory Data Analysis to understand various patterns and applied classification and regression models to determine rules and variable importance. Our solution established the relationship between operational and material parameters, leading to improved production yield and $2 million savings.




**Advanced analytics-driven digital twin model help improve manufacturing process steps**

## Automation in Order Creation and Management with 99% time savings

> Manual order processing for academic publications was slow, error-prone, and required significant human effort for non-value-adding tasks, resulting in high turnaround times due to manual entry across multiple systems. Our unattended bot offered end-to-end order processing, integrated with SAP for real-time order updates and creation, and enabled 24/7 service to automate updates and manage exceptions, resulting in an automated order processing system.

## About Straive

Straive helps clients operationalize the data → insights → knowledge → AI value chain. Straive's clients extend across industries that include Financial Services, Insurance, Pharmaceuticals & Life Sciences, Scientific Research, Information Providers, EdTech, and Logistics. Straive has a global presence across the United States, Canada, UK & Europe, Singapore, South Africa, India, Philippines, Nicaragua, and Vietnam.

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