

How a Top-20 E-Commerce Giant Optimized Their Refund Process

with Flexor's Unstructured Data Structuring Capabilities

Stack



The challenge

A rapidly expanding e-commerce leader, known for its vast product range and generous returns policy, faced a significant challenge in optimizing its refund process. The company needed to:

- 1. Structure and analyze** large volumes of textual data from various channels.
- 2. Understand the reasons** behind frequent refund requests.
- 3. Analyze the gap** between refund requests and approvals.
- 4. Reduce costs** associated with unnecessary refunds.

The company had vast amounts of unstructured textual data in the form of:

Phone call transcripts

Online reviews

Customer emails

Live chat transcripts

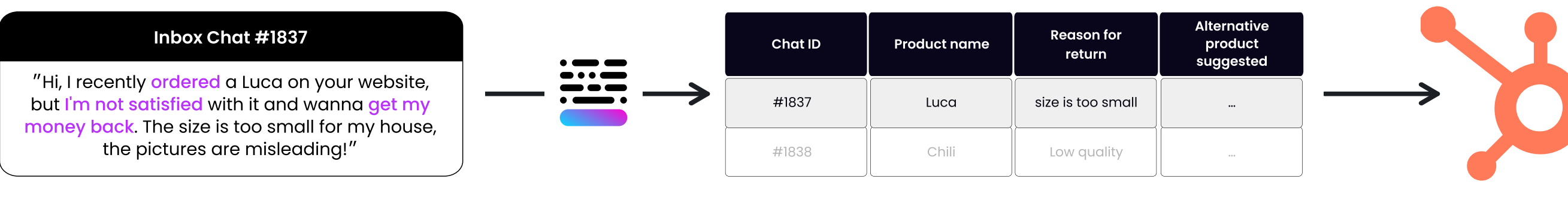
Inefficient preparation and analysis of this textual data drastically impacted their ability to derive actionable insights to optimize processes.

Previous attempts by their data science team involved utilizing off-the-shelf NLP libraries but were hindered by a lack of scalability and domain-specific accuracy.

The solution

Flexor, a powerful tool for structuring unstructured textual data at scale, provided the solution the e-commerce giant needed. Working with the company's data team, Flexor was implemented for:

- 1. Data Structuring:** Flexor processed and structured the unstructured data from multiple sources – call transcripts, reviews, emails, and chat transcripts, within the company's existing data warehouse.
- 2. Data Cleaning:** Flexor unified all their unstructured sources into a consistent and clean form, making the data ready for LLM-based analysis.
- 3. Data Transformation:** Flexor turned the company's free text data into tabular signals the company could feed directly into dashboards, advanced analytics and predictive models, with industry-leading quality.
- 4. Data Democratization:** By transforming complex unstructured data into standardized, easily understandable structured formats, Flexor enabled non-technical teams to access and derive insights from the data, fostering a data-driven culture throughout the company.
- 5. Scalable Processing:** Flexor's architecture handles massive volumes of unstructured data without compromising performance or accuracy, with zero additional infrastructure burden.



Implementation

A single data engineer integrated Flexor into the company's data platform in less than two weeks, turning it fully unstructured data and Gen AI ready in no time. This rapid implementation was possible due to several key factors:

- 1. Native Data Warehouse Integration:** Flexor connects directly with the company's existing data warehouse, eliminating the need for complex data transfers.
- 2. SQL-Based Interface:** Leveraging Flexor's SQL-first integration, data engineers and analysts can quickly write and deploy sophisticated transformations.
- 3. No Additional Infrastructure:** Flexor requires no new infrastructure setup and seamlessly handles all the necessary LLM-related infrastructure behind the scenes.
- 4. Scalable Architecture:** Flexor's design allowed for easy scaling to handle the massive volume of multi-channel textual data without compromising performance.

The results

With structured data now available, the company's data team was able to derive valuable insights:

- Their analyses and new data pipelines yielded significant business impact, including: 25% reduction in unnecessary refunds, 40% improved response time for urgent cases, and 15% increase in refunds turned to upsell.
- The data team delivered results two quarters ahead of schedule, positively impacting the company's financial performance.
- Democratization of the "voice of the customer" – with Flexor, unstructured customer text became an integral part of the company's business decision-making, as every data scientist and analyst could infuse it into their analyses, without worrying about data or result quality.
- The GenAI project success rate doubled, with the data and engineering teams focusing on solving real problems using high-quality data provided by Flexor's platform to feed their RAG chatbots.

Flexor has revolutionized our approach to handling refunds and customer satisfaction. By simplifying our data preparation process, we've gained the ability to accurately analyze our refund patterns at scale. This has not only saved costs but also improved our customer satisfaction. It's transformed how we balance customer-friendliness with business sustainability.

- Director of Data and Analytics

Conclusion:

By leveraging Flexor to structure their textual unstructured data at scale, this US top 20 E-commerce giant achieved significant improvements in refund management, customer service, and operational efficiency. The implementation democratized customer insights and accelerated data-driven decision-making across the organization. With plans to expand Flexor's use, the company is now more adept at fostering growth, improving customer satisfaction, and retaining its competitive edge in the e-commerce landscape.

There's a whole treasure trove of unstructured data waiting for you. **Unlock It With Flexor.**

Flexor Plays Nicely With...

| | | | |
|----------------------------|-----------------------------|-----------------------------------|--|
| Data Warehouses | Vector Databases | Visualization/BI Tools | ETL, Orchestration & Transformation Tools |
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SECURITY & PRIVACY

Flexor was built from the ground-up with the safety of your data in mind, and complies with leading industry standards

