Stackdrop

Case Study: Transforming Customer Support with AI-Powered Automation

Overview

As a **leading e-commerce accelerator in the luxury sector**, our client has helped over **50 high-end brands across fashion, design, and luxury goods** rapidly scale their online presence. With an ever-increasing volume of customer support requests, from order tracking to complex logistics, their existing workflow became inefficient. **Long resolution times and overwhelmed agents** became a bottleneck as the business grew.

Our role: A Transformative Partner

At Stackdrop, we specialize in low-code, AI-powered solutions that improve team efficiency and scalability. Using Retool as the backbone, we partnered with this e-commerce leader to **centralize their ticketing system** and **integrate AI-driven automation.** Our focus was on **speed, precision, and empowering them to implement meaningful changes** without overburdening their internal resources.

The Challenge

What the Company Struggled With Before Stackdrop

Time to First Response Was Too Long

Challenge
Agents had to open up to **six different tools** (Zendesk, Kibo, Qapla, and internal databases) just to resolve a single ticket.

Impact
This resulted in **delayed first responses**, as agents spent more time gathering data than actually addressing customer issues.

Opportunity
Centralizing data into **one platform** would immediately **reduce response time**, making the support experience faster and more efficient.

Lack of Automation & Manual Workload

Challenge
The support system lacked automation. Agents were tasked with manually categorizing tickets and drafting responses for common inquiries.

Impact
This led to **inconsistent response times** and **high manual workload** for agents, preventing them from focusing on more complex issues.

Opportunity
Introducing **AI-powered categorization** and **pre-filled responses** would reduce the manual work, allowing agents to focus on high-priority tickets and respond faster to customers.

Scalability & Complexity of Customer Requests

Challenge
Our client's customer support team struggled with the variety and complexity of incoming requests, including frequent returns and complex policy queries.

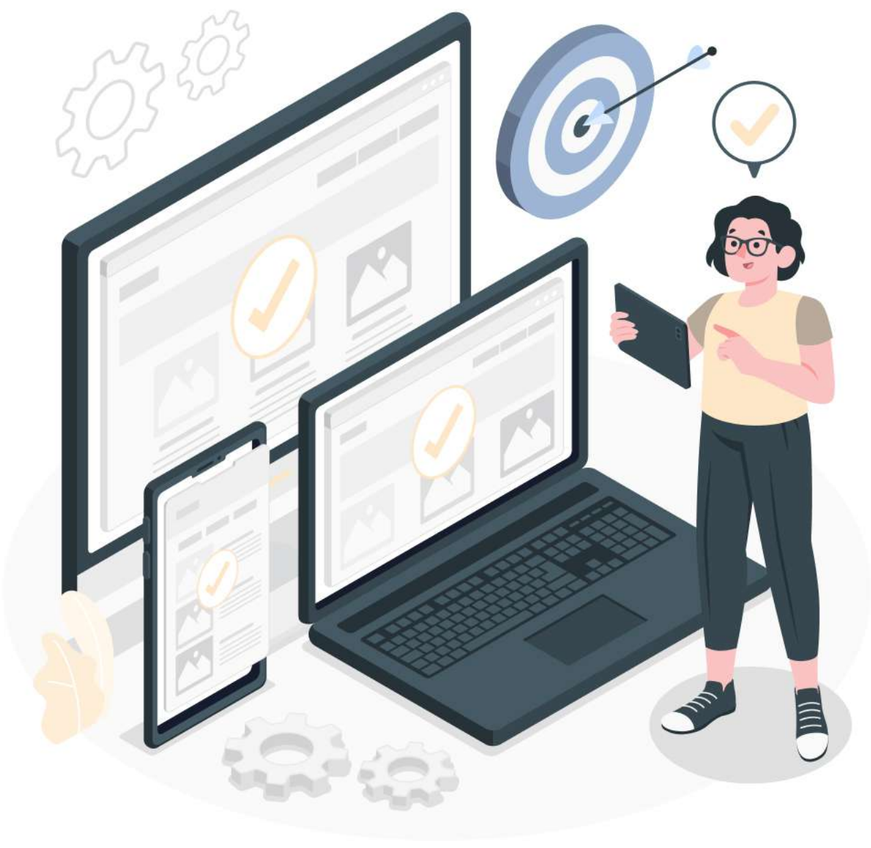
Impact
The absence of an **automated decision-making system** meant agents had to check each ticket against policies individually, adding extra time to the resolution process.

Opportunity
AI-driven decision trees could be implemented to automatically handle routine inquiries (like returns or order tracking), enabling agents to focus on more intricate cases.

Implementation process

Rather than jumping straight into building a solution, we started with **a structured discovery phase** to understand the pain points and constraints of the support system.

Our discovery phase allowed us to pinpoint key pain points, identify the most time-consuming tasks, and design a solution that would streamline the workflow and maximize efficiency.



Steps taken

A structured path from insight to implementation

Step 1: Discovery Phase with Stakeholders
We engaged with the support team, operations managers, and IT leads to map out their workflow and pain points. This process helped us understand:

- Where agents were losing the most time in ticket resolution.
- Which types of tickets were most repetitive and could be automated.
- How fragmented data was impacting efficiency and response accuracy.

Step 2: Understanding the Data Model and Fragmented Platforms
The client's ticketing workflow relied on multiple systems that didn't communicate well with each other. We conducted a deep dive into:

- How data was stored across Zendesk, Kibo, Qapla, and internal databases.
- What information agents needed most frequently to resolve tickets faster.
- How we could design a single source of truth for ticket resolution.

Step 3: Ideating and Defining the MVP
Once we identified the key bottlenecks, we designed a minimum viable product (MVP) that could deliver immediate impact while setting the foundation for AI-driven automation. The MVP included:

- A centralized ticketing system that consolidates all necessary data into a single interface.
- An automated categorization system to reduce manual sorting of tickets.
- A scalable infrastructure that would allow AI integration in future phases.

→ With this structured approach, we ensured that our solution wasn't just another tool but a strategic shift in how our e-commerce leader handled support operations.

The Solution

The Solution: A Two-Phase Approach

Phase 1: Centralized Ticketing System—A Game Changer
To eliminate inefficiencies, Stackdrop built **a centralized ticketing system** using Retool, allowing agents to:

- Instantly access **customer order details** without switching between platforms.
- **Reduce manual search time**, allowing them to resolve tickets faster.
- Rely on **a single dashboard** that integrates Zendesk, Kibo, Qapla, and internal databases.

This system handled **20,000 tickets** efficiently, reducing ticket resolution times and improving overall workflow.

Phase 2: AI-Powered Automation—A Major Shift

While the centralized system was a massive improvement, the company wanted to go a step further. Many customer requests followed predictable patterns, order tracking, refunds, address changes, yet agents were still manually handling them. The next phase was integrating AI-powered automation to categorize tickets, extract order details, and generate pre-filled responses for agents.

Early testing showed promising results:

- AI learned to categorize **80% of incoming support requests** with high accuracy.
- Instead of manually crafting replies, agents could **approve AI-generated responses with one click.**
- **Multilingual support** allowed AI to translate responses based on the customer's language.
- More complex cases were **flagged for human review**, ensuring that AI only assisted where appropriate.

Results

Measurable Impact and Expected Outcomes

By implementing a centralized system first, then layering AI-powered automation on top, our client was able to streamline its support operations significantly.

- **Average Handling Time (AHT) reduced from 3–4 minutes to 30 seconds per ticket**
- **AI now automates 80% of incoming tickets,** drastically reducing repetitive workloads for agents.
- **Multilingual AI capabilities** allow our client to provide consistent, fast responses globally.
- The system ensures that **only complex cases require human intervention**, improving efficiency.

This transformation not only optimized daily support operations but also positioned them for future scalability. As AI continues to evolve, the potential for further automation and expansion into other areas—such as sales inquiries, onboarding, or internal service requests—remains strong.

From a fragmented, manual-heavy support process to a streamlined, AI-powered workflow, the luxury retailer has embraced innovation to future-proof its operations.

A Partnership for Excellence

Stackdrop's expertise in AI and low-code automation has not only reduced response times and improved agent productivity but also positioned our client as a leader in intelligent customer service.

And this is just the beginning.

Want to streamline your business?

Drop us a message at hello@stackdrop.co !