Smart Labeling and Automation of Dispatch Guides

Chapter 3 – The Next Step in Pharmaceutical Logistics Efficiency
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Introduction

At Logisa, every package matters. Pharmaceutical logistics demands precision, agility, and traceability. After progressing in temperature monitoring and load organization using lightweight AI, we are now developing a tool to completely transform the way we label products and generate dispatch guides.

Transforming Labeling and Dispatch with Smart Automation

I am currently developing a solution that will dynamically generate labels, including all critical product data: batch number, expiration date, available quantity (whether balance or full master pack), and delivery destination. These labels will automatically align with the dispatch guide information, making the process far more efficient and less prone to human error.

More Than Labels: A Connected and Intelligent Vision

The tool under development not only streamlines labeling and document issuance but is envisioned as the core of a broader system. I plan to integrate this solution with an API connected to our ERP system (Odoo), leveraging the power of Python for analysis, automation, and the creation of visual reports.

Expected Benefits of Automation

- Elimination of manual errors in guides and labels.
- Automatic and accurate generation of critical data: batch, expiration, quantities.
- Significant savings in warehouse operation time.
- Reduced sanitary risk and greater regulatory control.
- Full visibility of product movement from dispatch to delivery.
- Visual reports with dynamic dashboards showing deliveries, product rotation, and distribution by client or region.

A Scalable Logistics Chain

With this solution, we aim for every warehouse movement to be connected. Smart labels and automatically generated dispatch guides will be the foundation for robust, dynamic, and scalable traceability. All this without the need for large investments: leveraging accessible technologies, lightweight programming, and a mindset focused on continuous improvement.

Conclusion

The future of pharmaceutical logistics doesn't lie in complex systems, but in smart, connected tools designed from the warehouse outward. We are building that future—step by step, label by label.

Chapter 4 will bring a new vision: full route integration, GPS tracking, and real-time delivery validation.