

Portugal

Implementing GS1 Standards to increase efficiencies at a retail pharmacy's warehouse

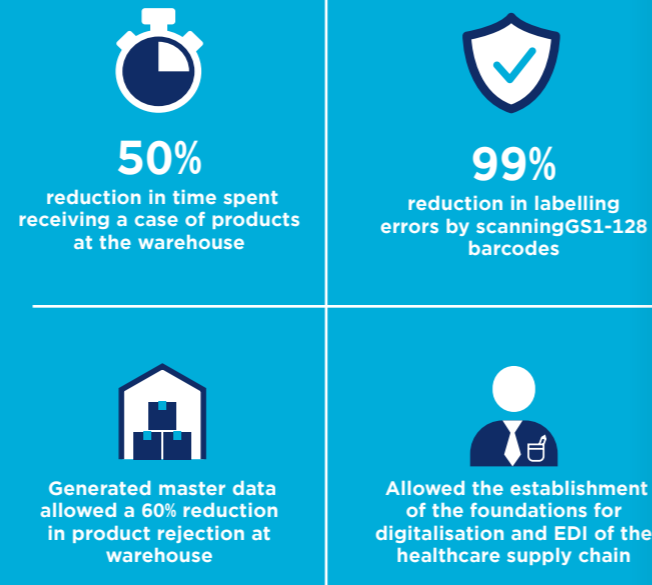
Challenge

The particularities of the OTC supply chain regarding product identification, unit of purchase, supplier's technological maturity and constitution of logistic units such as pallets, lead to great inefficiencies and high levels of operational errors and rejection of orders.

Approach

It is known that GS1 Standards support the decrease in operational errors and increase in efficiencies, among other proven benefits.

Using GS1 Standards, and with the help of GS1 Portugal, MC was able to standardise its case and pallet label requirements applied to orders delivered at the warehouse and align their master database.



Introduction

MC is a Portuguese retailer that offers its customers an OTC (**Over The Counter**) Pharmacy service called Wells. Their warehouse operations, managed by DHL, showed severe inefficiencies and after trying to implement the same logic as MC implemented in their FMCG (**Fast Moving Consumer Goods**) retail warehouse, they understood that the healthcare sector needed a specific approach.

GS1 Portugal was asked to audit the warehouse's reception operations then present, train and implement a labelling solution on cases and

pallets based on GS1 Standards to improve efficiencies. Simultaneously GS1 Portugal was asked to work with all partners to align databases with the relevant master data, allowing the first steps in implementing EDI (**Electronic Data Interchange**).

The project, initiated in January 2021, consisted of five different phases: preparation, gathering of evidence at the retailer's warehouse, analysis of data gathered, communication of new requirements and supporting suppliers implementing new requirements.



The status quo

At the warehouse evidence was collected from 209 different suppliers allowing GS1 Portugal to understand that the same supplier could deliver its order to the warehouse, in different logistic formats depending on the volume of the order: homogeneous pallets, heterogenous pallets or individual cases. From those that presented heterogenous pallets, only 30% used a pallet label to identify its content.

Analysing the identification used on pallets, 69% (46) of suppliers delivering pallets already used a GS1-128 logistic label and, of those, 85% used the correct Application Identifiers (AI) requested by MC.

On the other hand, case labels didn't express the same tendency. Only 18% (61) of suppliers identified their cases using GS1-128, and of those only 18% showed the necessary AIs.

The records at the warehouse showed that during the month of January 2021, 32,59% of pallets received had incidences registered relating problems with the GS1-128 pallet label and 4,68% of SKUs (Stock Keeping Units) received had invalid GTINs - GTINs not listed in the warehouse's database.

Due to these inefficiencies, an operator took in average 34.76 seconds to receive a case of products.

The solution

After analysing 209 different suppliers, GS1 Portugal presented a solution for both logistic label and case label, using GS1-128, that would allow the standardisation of information and gain of efficiencies at reception.

Different solutions were presented depending on each specific scenario:

For pallet labels

1. If a supplier delivers an order with complete cases (fixed quantity per case), then the logistic label will present the following AIs: (02) Case GTIN, (10) Lot number, (17) Expiry date, (37) Total number of cases and (00) SSCC.
2. If the supplier delivers an order with variable count of units per case, based on the purchase order, then the logistic label will present the following AIs: (02) Unit GTIN, (10) Lot number, (17) Expiry date, (37) Total number of Units and (00) SSCC - **Serial Shipping Container Code**.

For the case labels

1. If the cases are complete cases (fixed quantity per case), then the case label will present the following AIs: (01) Case GTIN, (10) Lot number and (17) Expiry date.
2. If the cases have variable quantity per case (dependant on the purchase order) and because they are not a unit of sale, then the case label will present the following AIs: (02) Unit GTIN, (10) Lot number, (17) Expiry date, (37) Count of trade items within the case.

For products identified solely with a national healthcare reimbursement code (NHRN)

1. Since legally these products don't require a GTIN code, the proposed solution was based on the assignment of a GTIN code to the unit, communication of this pairing (GTIN - NHRN) to all involved parties but didn't require the printing of the GTIN on the unit label.

If the case is of fixed quantities the label presents the following AIs: (01) Case GTIN, (10) Lot number and (17) Expiry date.

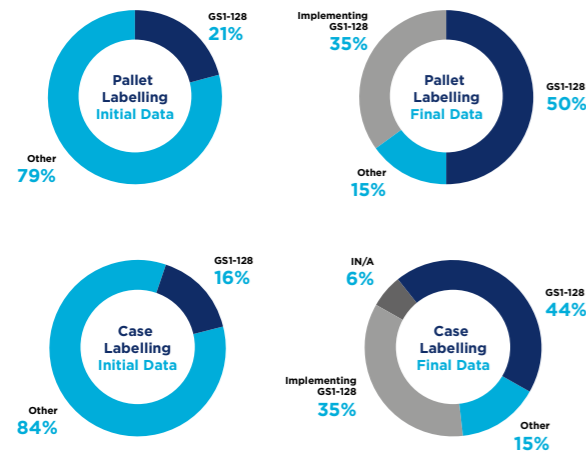
If the case is of variable quantities, and because the case isn't seen as a unit of sale, the label presents the following AIs: (02) Unit GTIN, (10) Lot number, (17) Expiry date and (37) Count of trade items within the case.

All solutions implied that all pairing information (NHRN, unit GTIN, case GTIN and fixed quantity per case, if applicable) was shared with all involved parties beforehand to update the warehouse's master data information.

The Benefits

After extensive work with the suppliers, labels started to arrive at the warehouse correctly structured.

Of the 209 suppliers initially analyzed, 142 worked with GS1 Portugal to implement the new labels. By the end of the project, the warehouse staff registered a 136% increase in suppliers presenting a correct logistic label (from 30 suppliers to 71) and a 174% increase in suppliers presenting GS1-128 labels at case level (from 23 suppliers to 63).



On the retailer's side, the warehouse registered improvements regarding logistic labels, product master data database and time spent receiving orders [comparison between 2021Q1 and Dec2021 + Jan2022]:

- 99.1% reduction in GS1 Logistic Label errors registered upon arrival (from 28.3% to 0.25%).
- 59.9% reduction in invalid GTIN codes [GTINs not registered within the retailer's database] (from 2.91% to 1.17%).
- 48.5% reduction in time spent receiving an order (from an average of 34.76 seconds to an average of 17.89 seconds).

	GS1 Logistic Label Errors identified at Reception	
	Q1-2021	Dec.2021 + Jan.2022
Incidence (%)	28,3	0,25
Improvement (%)		99,1

	Invalid GTIN codes due to Database misalignments	
	Q1-2021	Dec.2021 + Jan.2022
Incidence (%)	2,91	1,17
Improvement (%)		59,9

Average Time Receiving a Case without GS1-128 Label (s)	Average Time Receiving a Case with GS1-128 Label (s)	Reduction (%)
34,76	17,89	48,5

"This project, implemented within Wells' operations and created by the partnership between GS1 Portugal and MC - Wells, was a pioneer initiative in the healthcare sector that allowed the optimisation of not only the reception process but also the enrichment of product logistic data shared between suppliers and MC - Wells."

"The suppliers had access to GS1 training, adopting best practices in labelling of cases and pallets. The day-to-day work of the warehouse operators was simplified, guaranteeing the automated traceability of products at the point of entry of the warehouse."

Beatriz Almeida
Business Interface Technician
MC - Wells

Next steps

This project included a selected group of suppliers, chosen by MC as the most relevant suppliers at the warehouse. GS1 Portugal and MC will continue to work together to help the remaining suppliers to implement these labelling and master data requirements. The goal is to have 100% of suppliers compliant with MC's logistic specifications during 2023.

Conclusion

Thanks to standardised pallet and case labelling, associated with the corresponding alignment of the warehouse's product database, the reception processes became more efficient, registered by the decrease in errors caused by incorrect labels and by the time-savings gained during the execution of the verification and entry of the orders.

The project allowed GS1 Portugal to prove once again that the use of GS1 Standards brings great efficiencies at a process level.

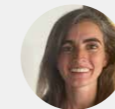
About the author



Beatriz Almeida
Business Interface Technician

Beatriz Almeida with a master's degree in Industrial Engineering and Management from IST - Lisbon University is a partnership enthusiast and likes to learn from others daily. During her experience in Food and Pharma Retail, she reinforced her ability to empathise with suppliers and encourage their efforts. For two years now Beatriz is responsible for dealing with more than 250 pharma suppliers, being a Logistics consultant between them, the logistics service provider and MC - Wells (Pharma Retail business).

Local coordination



Maria Madalena Centeno
Healthcare, Processes and Standards Manager at GS1 Portugal

Madalena Centeno is an International MBA Graduate from IE Business School with a Master's degree in Veterinary Medicine. She is a Healthcare professional experienced in international and EU data quality standards and logistics. Talented project manager who leads cross-functional inter-company efforts on quality, traceability, and legislative compliance. Today, Madalena is responsible for Standards, Processes, and the Healthcare sector at GS1 Portugal engaging with the Community to help them comply with new regulations and implement GS1 Standards to improve efficiency and patient safety.



Sofia Perdigão
Healthcare Junior Manager at GS1 Portugal

Sofia Perdigão holds a MSc in Pharmaceutical Sciences from the University of Lisbon and completed three months externship at the University of Oxford in laboratory research. Before joining GS1 Portugal Sofia worked at pharmacies and pharmaceutical industries in regulatory affairs and business development areas. At GS1 Portugal, Sofia belongs to the Healthcare and Data Quality & Compliance departments, working in healthcare strategy, as well as general patient safety. She also manages several projects regarding legislative compliance and data quality standards.

About the organisation



MC is the food retail, health and wellness segment of the multinational company SONAE. MC-Wells distributes health, well-being and eye care products.

www.sonae.pt/en/