Colombia

Implementing traceability at a pharmaceutical company

Challenge

Cruz Verde offers a range of pharmaceutical services in Colombia, including wholesale distribution of medicines and other supplies to hospitals. Dosed medication delivered by the company has a lot number and expiration date, but it is coded in a non-standard way. This means that hospital staff receiving the drugs need to manually verify each medication. This takes up to eight hours and has an error rate of 1.5%.

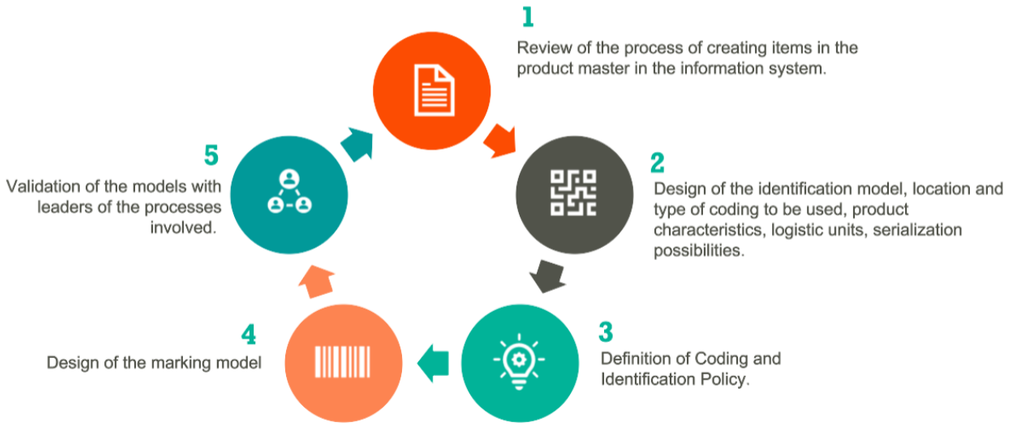
Approach

Staff at the company have worked with teams at GS1 Colombia to design and implement a model for product identification with automatic information capture and transmission. This will make it much easier to develop good logistics practices and to ensure traceability of products, in turn increasing efficiency and safety.

Introduction

Cruz Verde, a large pharmaceutical and medical supplies company providing a range of services in Columbia, is in the process of introducing an automatic traceability system. The work involves defining an identification model and the technology for the automatic capture of information on medicines, supplies and medical devices.

The company has worked working with GS1 Colombia on the project, which consists of three different phases. The first phase focuses on characterisation; the second on the identification model; and the third on the data capture and transmission model. The idea is that, once the project is fully completed, Cruz Verde will have a traceability and identification model for medicines under the GS1 global standards.



At present, the pharmacy information system in hospitals acquiring goods from Cruz Verde does not facilitate product rotation or verification. The pharmacist must do a manual verification through the packing list to enter lot and expiration date information in Excel. This is time consuming and prone to error.

When the product is dispensed, traceability information to the patient is not recorded. This means the pharmacist must perform inventory queries in Excel to understand stock levels, which takes time and resources. There are between 17% and 20% returns of pharmacy consumption.

Once the new identification model is fully in place, the process will be automatic – and much quicker and more accurate. The model will be based on GS1 DataMatrix barcodes.

Step by step

The characterisation phase of the project covers:

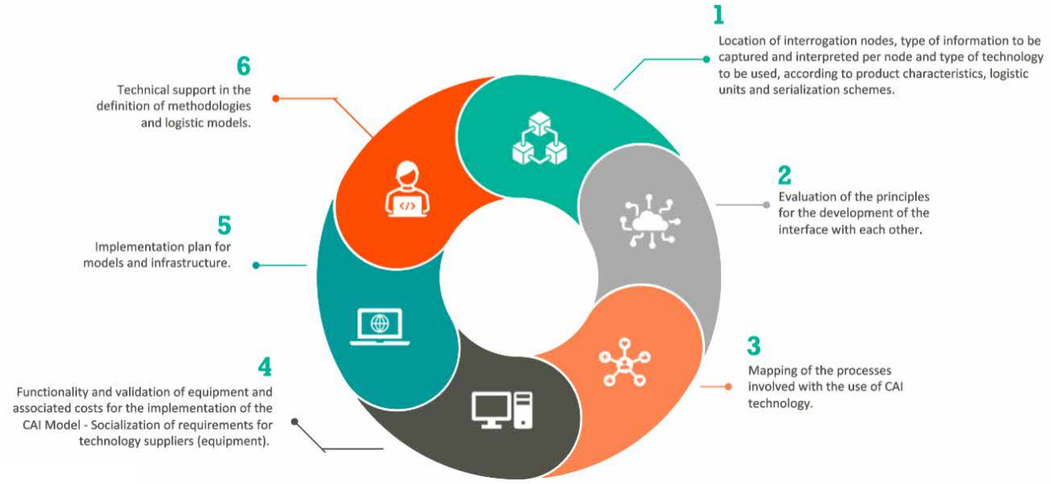
- Building an understanding of current logistic and commercial processes and their interaction.
- Identifying the actors involved in the supply chain.
- Identifying the information of the entities to be traced
- Performing a traceability diagnosis.

This involves information gathering about the current situation, including through interviews with relevant staff. Every step of the current process is mapped out:

- Receiving: Domestic and imported materials, returns, receiving areas, approval, quality, and unloading process.
- Warehousing: Types and special requirements of locations, capacities, infrastructure and equipment, and transfer policies within the warehouse.
- Picking: Analysis of current picking tools and processes.
- Dispatch: Product consolidation and delivery process, transfers, and documentation.
- Inventory control: Documentation and internal processes.
- Invoicing, anchorage analysis, and closing of the logistic process with invoicing.

The next step covers the development of the identification model. It involves reviewing the item creation process in the product master in the information system and:

- Designing the information structures that will support the model: labelling location, serialisation, marking, and identification level under the GS1 standard.
- Designing the marking model.
- Defining the coding and identification policy and detailing it in a document.
- Validating the proposed model with leaders involved in the current processes.
- Developing training sessions on the GS1 standard.



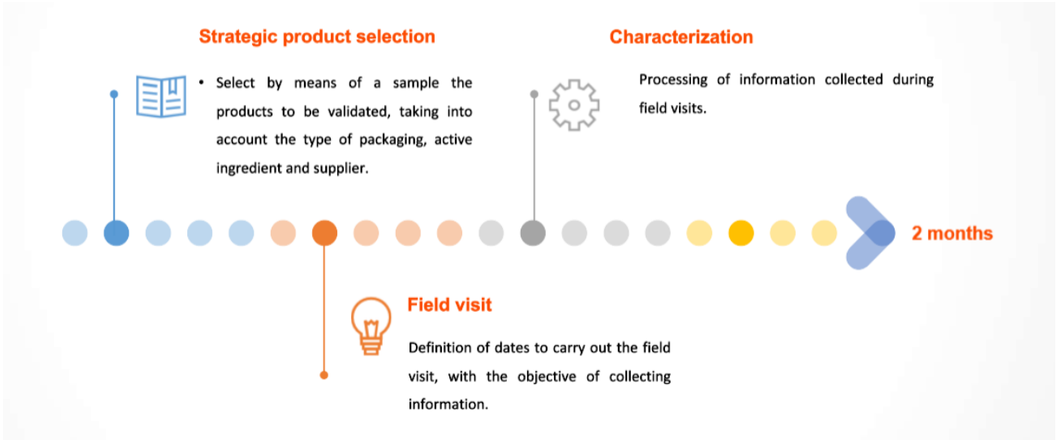
The final stage is to develop the data capture and transmission model. This includes:

- Designing the automatic information capture model with GS1's Global Traceability Standard (GTS). This is a standard that seeks to help organisations and industries in the design and implementation of traceability systems. Designing the model will involve location of point of interaction in supply chains, type of information to be captured and interpreted per point of interaction, and technology to be used, according to product characteristics, logistic units, and serialisation schemes.
- Sharing information on the automatic information capture model with all relevant stakeholders.
- Generating equipment and technology requirements for data transmission to the system.

All the processes involved with the use of automatic information capture technology are mapped, including methodologies and logistic models. Equipment and associated costs for the implementation of the model are detailed, and there is discussion about technology suppliers' requirements.

A full implementation plan for the model, and the infrastructure needed, is developed.

Next steps



Conclusion

Implementing an automatic traceability system for the products Cruz Verde supplies to hospitals will increase the efficiency of pharmacies. It will remove manual processes which are prone to error, replacing it with automatic data capture. This will increase efficiency and safety.

Cruz Verde is already piloting the setup, testing technology to integrate the model into its information and traceability system.

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About the organisation

Cruz Verde has more than 35 years of experience in the pharmaceutical sector. The firm specialises in the purchase, storage, distribution, marketing, and delivery of health and wellness products and services, which, with excellence, contributes to the quality of life of customers, employees, and communities. It has provided services in Colombia since 2012 and now has a broad portfolio covering five lines of business: retail, through a chain of more than 600 pharmacies; dispensing, with the delivery of medicines to more than four million members of social security entities; wholesale distribution, with sales to more than 400 clinics and hospitals in both the public and private sectors; intra-hospital pharmacies, with the integral management of supply and dispensing inside 21 important clinics and hospitals; and Medicare, a network of 17 clinics specialising in treating complex, high-cost diseases.

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