



Quintil
Valley

CHALLENGE 1

“Comprehensive Real-Time Traceability”

CHALLENGE CONFECCIONES TRENTO S.A.C

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CHALLENGE 1: Comprehensive Real-Time Traceability

How might we integrate, digitize, and automate the key processes of the production chain to generate information that strengthens strategic, tactical, and operational decision-making, thereby improving its sustainability and efficiency?

Context

At Confecciones Trento, the planning, production, quality control, and logistics processes operate manually or semi-automatically, which hinders real-time traceability and limits access to information for effective decision-making. The lack of system integration leads to data fragmentation and reduces the ability to anticipate operational deviations.

The challenge seeks to implement a **digital and automated traceability** model that captures and analyzes real-time data across the entire value chain (supplier - plant - client), facilitating access to consolidated information and optimizing operational management.

This will enable:

- **Sustainability:** Reduction in resources (materials, personnel, general logistics, time)
- **Operational efficiency with clients and suppliers:** Immediate access to information for quick and accurate decisions throughout the value chain.

The solution will enhance Trento's ability to operate more efficiently, sustainably, and in a more connected and integrated manner with its main stakeholders.

Identified Problem

Confecciones Trento S.A.C is facing challenges due to the lack of integration among the systems supporting its key processes, limiting full traceability and access to consolidated real-time information. This situation affects operational efficiency and the company's ability to meet international sustainability standards, such as product traceability and environmental impact at the end of the value chain (Digital Passport).

Main Objective

To develop and implement a comprehensive technological solution that enables progress toward digital and automated traceability across the entire value chain—from suppliers to clients—facilitating system integration and data-driven decision-making with an impact on sustainability.

Key Success Indicators

- Optimization of the service lifecycle
- Reduction of resources: Water, Transportation, Materials
- Improvement in energy efficiency
- Implementation of suppliers with Digital Passport in the pilot phase

Desired Solutions

- Automation of production processes for line optimization
- ESG Passport based on Blockchain to ensure sustainable traceability
- Business Intelligence for predictive analysis and informed decision-making
- Digital Twins
- AI for optimization and planning

Undesired Solutions

- Solutions lacking a sustainability focus
- Technologies with TRL (Technology Readiness Level) lower than 6
- Closed systems without integration capabilities