

Valorsul digitises daily routines resulting in greater efficiency and a **93% reduction** in the time spent analysing inspections data.

Background

Valorsul is responsible for the treatment and recovery of about 600 thousand tons of municipal waste produced per year in Portugal, corresponding to 20% of all domestic waste.

This amount of waste is treated and valued by Valorsul through a modern Integrated Management System of Urban Waste appropriate to the composition of municipal waste. At Valorsul waste becomes a resource capable of being transformed into cardboard boxes, electricity, fertilizers, or construction materials.

On the way to entering a new phase of efficiency and productivity, Valorsul felt the need to make procedures more efficient and take advantage of all the data that was already at its disposal.



Valorsul has three shifts and rounds with a total of 500 questions. As a result, they sought to make a significant qualitative leap in their processes, **making digitalization a crucial component in optimizing their activities.**

Challenge

Before the implementation of Glartek's solution, inspection rounds were conducted with paper-based documents that had to be filled out and handed in after the rounds were over.

The use of paper documents was not practical, as the inspections included measuring temperatures and assessing the condition of machines, boilers, and turbines. During execution, some data wasn't valued or was outdated, and operators couldn't access critical information about the equipment. In addition, collected data was not being used to provide any relevant information.

- Routines and operational instructions easily outdated
- No evidence of the work performed and data history
- Time-consuming administrative and monitoring routines

Solution

Following the problem assessment, the solution was progressively implemented based on three main pillars:

Routines and Work Instructions Digitalization

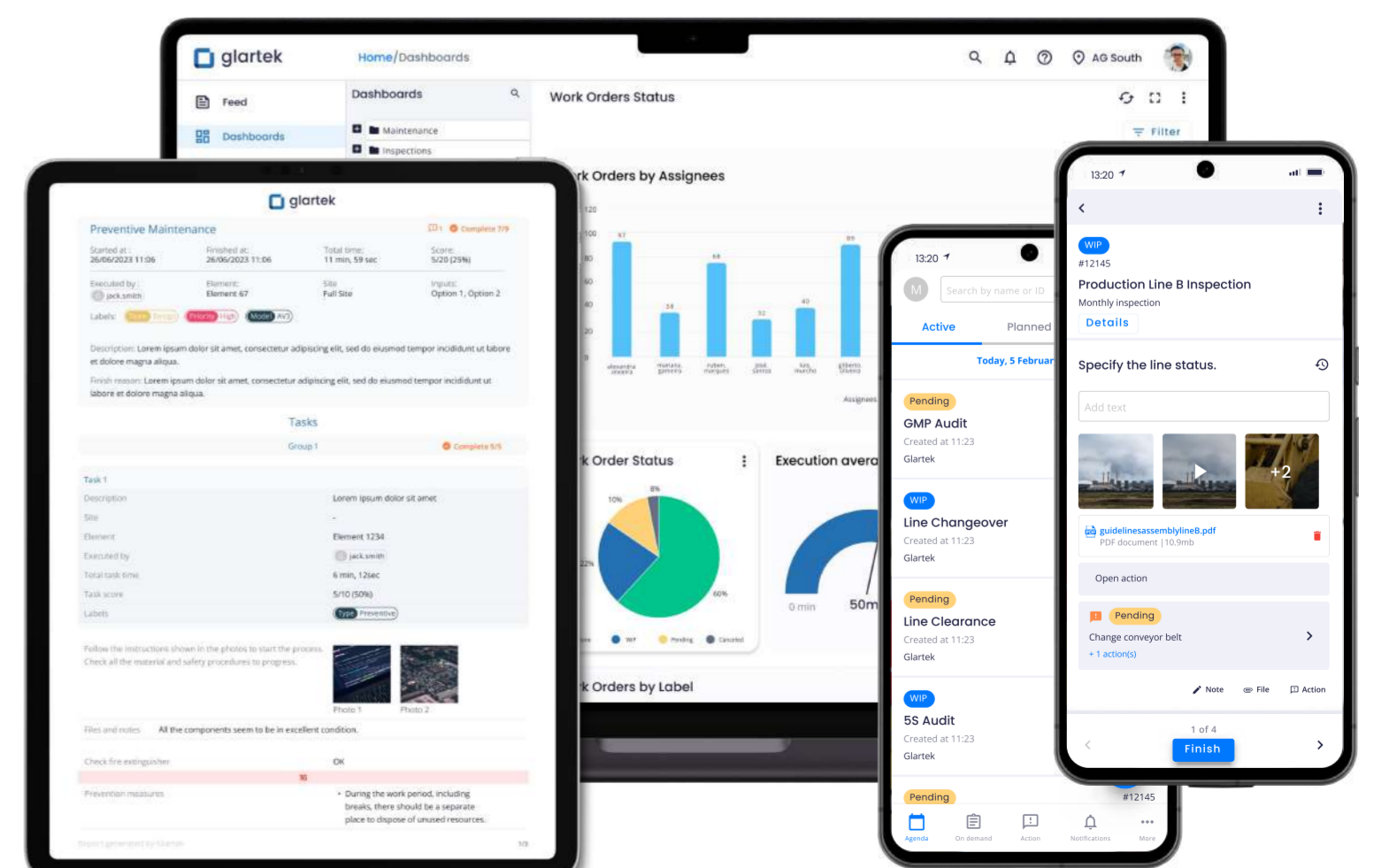
Eliminated paper-based routines, transitioning to digital SOPs with clear digital instructions to enhance efficiency. Frontline workers have access to step-by-step work instructions and up-to-date documents on tablets and smartphones to guide them through their tasks. At the same time, supervisors can monitor the procedure's status in real-time and follow its execution.

Data Recording and Management

Streamlined the entire data entry process, enabling frontline workers to digitally record data without errors. It allows recording issues using photos and videos, enabling quicker and more accurate diagnostics. When a non-conformity is detected, it can be immediately reported, triggering notifications to the shift manager and maintenance team.

Information Centralisation

Glartek's digital solution has centralised all records in a comprehensive database, enhancing data tracking accuracy. Teams can access and compare historical data, such as temperature variations and pressure readings during and after execution. In addition, access to automatic reports that enable faster decision-making and generate valuable metrics.



Results



89%

Less time spent updating checklists



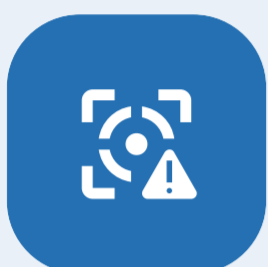
50%

Decrease in inspection execution time



93%

Less time to analyse inspections data



90%

Time saved managing non-conformities

- Fully digitized data
- Zero paper based processes
- Two times faster work progress monitoring

Next Steps

The system's efficiency in addressing operational needs has set the stage for future expansions. Valorsul plans to extend this digital solution to other activities, further embedding digitalization into its core operations.

- **Extend** the Connected Worker platform to other operations
- **Digitalize** other operational procedures
- **Adapt** the solution to other facilities



Conclusion

The collaboration between Glartek and Valorsul showcases the transformative power of digital solutions in enhancing operational efficiency and productivity. Both companies look forward to continued innovation and success as they lead the way in digitalizing waste management processes.

BEFORE

Paper documentation not fully up to date with low guidance during execution and inefficient data recording and access. Difficulties in monitoring activities and managing non-conformities, leading to redundant efforts.

AFTER

Fully digitized routines with increased guidance during rounds and access to real-time information, improving monitoring of all activities and decision-making.



Implementing Glartek's solution has allowed us to eliminate paper routines and centralise all data, being able to consult the records at any time. It also enables data to be collected efficiently and all non-conformities recorded using photographic and video evidence."

- Eduardo Martins, Specialized Engineer at Valorsul

ABOUT US

Founded in 2017, Glartek specializes in Augmented Reality (AR) solutions tailored for the industrial sector. Our core mission revolves around enhancing efficiency and safety within industrial processes. We achieve this by integrating Augmented and Connected Worker technologies, providing visibility, optimization tools, and reassurance for frontline workers. Our focus is on improving industrial efficiency and safety for frontline workers while fostering a culture of Continuous Improvement to drive Operational Excellence. Our customer base is diverse, ranging from asset-intensive companies like EDP to manufacturing firms such as Renault.



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