

Healthy Workplaces Good Practice Awards 2023–2025

CASE STUDY



Digitalisation of occupational safety and health management in automotive manufacturing

ORGANISATION/COMPANY

**Gonvauto Iberia
(Gonvarri Industries)**

COUNTRY

Spain

SECTOR

**Automotive
manufacturing**

TASKS

**Manufacturing, supplying
and distributing metal
components and
automotive parts**

Introduction to the case study

Digitalisation of occupational safety and health (OSH) management has helped to reinforce OSH preventive culture at Gonvauto Iberia, an automotive manufacturing company in Spain. Workers at the plant often failed to report safety risks and undue time was spent resolving safety-related actions and incidents. To address this, a series of easy-to-use mobile apps was created. For example, safety inspection, work permit and stowage apps have improved efficiency and traceability. Other apps and digital workshops get workers actively involved in reporting risks and proposing solutions.

Background

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Gonvauto Iberia is a division of the Gonvarri Industries Group, with three production plants in Spain and one in Portugal.

Gonvauto Iberia has over 30 years of experience as a supplier to main automotive brands, directly or through its network of automotive stamping companies. It also provides metal solutions to other sectors, such as household appliances, construction and industry.

Problems identified

- Operators were not sufficiently involved in OSH management, nor in OSH improvement. For example, they often failed to report risks.
- Paper-based documentation was inefficient.
- Excessive time was needed to resolve OSH improvement actions and OSH incidents.
- Communication with operators was inadequate.
- Supervisors were overloaded with tasks.

Aims

Gonvauto Iberia aims to significantly improve its safety culture by creating a range of digital tools that facilitate documentation and get operators and supervisors more involved in OSH management.

What was done and how?

A series of apps was developed internally using tools available in a common productivity software package. They focus on improving workplace safety and involve all departments. Training in the use of the apps is provided to workers in the form of digital workshops, and participation is strongly encouraged.

The apps have the following advantages:

- They can be accessed from any mobile, tablet or computer.
- They are straightforward to use.
- Workers are involved in their development.

1. Safety apps

Digitalisation has made safety management processes more efficient and reliable, easier to track and less time-consuming.

1.1 Health and safety inspections

Every month, production supervisors must perform health and safety inspections at the plant. Deficiencies are immediately corrected or included in an action plan.

This new app replaces previous paper-based inspection reports. It generates reports, statistics and customised calendars, and sends notifications to stakeholders. Consequently, 100% of inspections are completed and reported improvement actions have increased by 345%.

1.2 Work permits

In the past, work permits for dangerous tasks were not managed at the plant.

This new app manages such permits (welding, electrical work), facilitating their creation and monitoring with automatic notifications. Today, 100% of external companies carrying out risky work have been inspected.

1.3 One-point lesson (OPL)

This new app digitises lessons learnt from incidents with electronic approvals. Operators are actively involved and reports are accessible from any device.

1.4 Stowage

Stowage legislation requires internal audits to inspect truck stowage and prevent accidents.

This app digitises such audits and generates automatic reports for easy tracking. It also provides guidance on resolving anomalies and allows for re-inspections once deficiencies are rectified.

1.5 PDCA (plan, do, check, act)

This new app consolidates all corrective actions that arise from accident investigations, safety inspections, audits and operator notifications. It sends automatic notifications and reminders to improve the management and resolution of preventive actions.

2. Frontline workers apps

These apps are meant for the direct labour force, encouraging participation in improving safety using shared tablets or mobile devices.

2.1 Risk communication

This app allows workers to report non-urgent risks, send photos and comments to OSH managers and supervisors through Teams.

2.2 Have you had a safe day?

This app allows operators to report their impressions on daily safety. A weekly report is

automatically generated and sent to both management and OSH managers.

2.3 Requests for personal protective equipment and workwear

This app allows workers to request necessary personal protective equipment and workwear. The supervisor approves and records the handover, leaving a record of the status of the request in the system.

2.4 Ideas for improvement

This app allows workers to suggest improvements with sketches, photos and files, explaining the current situation and proposing solutions. Ideas are evaluated and approved by the area supervisor and, where appropriate, by the OSH officer.

3. Digital workshops

These workshops encourage worker participation in improving OSH.

3.1 LOTO (lockout-tagout) production workshop

This workshop involves the installation of line door locking systems with keys for production operators. Workshops were held to identify specific scenarios and define the best ways of lockout-tagout. Finally, safety information was placed next to each door.

3.2 LOTO (lockout-tagout) maintenance workshop

Involving a multidisciplinary team (maintenance, production, lean manufacturing and safety), this workshop focuses on identifying and defining action guidelines for maintenance operators on production lines. Following the workshop, information sheets accessible through QR codes were created in the production areas.

3.3 Chasing risks workshop

This workshop encourages employees to look critically from a safety point of view at their work environment on a daily basis, identify significant risks and launch a remedial action plan.



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What was achieved?

- All accident indicators across the four plants have seen significant reductions. The frequency index has dropped from 17.1 in 2021 to 5.4 in 2024 and the severity index from 0.43 in 2021 to 0.08 in 2024.
- Workers are more involved in OSH management and frequently report risks.
- The number of risky conditions reported has increased by 70%.
- The number of open health and safety actions has increased by more than 250%.
- OSH is rated as the best aspect in the 2023 workplace climate surveys at all sites.



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Success factors

- Workers are actively involved in the design and development of tools.
- Tools are continuously adapted to the real needs of the business.
- The versatile applications can be used in different contexts and situations.

- The apps can be accessed from a mobile, tablet or computer.
- The intuitive and easy-to-use tools do not require advanced technical knowledge.
- Travel and task execution times are significantly reduced.
- Non-value-added tasks are eliminated, optimising work processes.

Transferability

The fact that the digital applications and workshops presented in this example can be created in-house using common productivity software makes them an easily accessible option for many manufacturers or other industries with high-risk workplaces, regardless of company size.

Costs and benefits

The project was implemented using the company's own resources and productivity software licences already allocated.

Benefits include an improved safety culture, greater involvement of operators and supervisors in OSH management, and identification of cross-cutting risks in different areas of the plant.

Key features of good practice example

- The company has reinforced its preventive culture and actively promotes worker participation through the use of digital technologies.
- Management demonstrates strong leadership in its commitment to prevention.

Further information

Further information can be found at:

<https://www.gonvarri.com/en/>

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