

# Healthy Workplaces Good Practice Awards 2023–2025

## CASE STUDY



## Digital app for workers' safety and reporting of incidents in electronic manufacturing

### ORGANISATION/COMPANY

Intel Corporation

### COUNTRY

Ireland

### SECTOR

Electronic manufacturing

### TASKS

Production of computer chips

### Introduction to the case study

At Intel Ireland, safety is more than a priority – it is a culture. By launching the Safety App and the CatchWise system, Intel advanced workplace safety, streamlining risk reporting and using AI to identify risks before they escalate. With strong leadership support and active employee participation, safety engagement soared, injuries dropped and workplace safety evolved into a proactive, data-driven system – elevating both wellbeing and operational excellence.

## Background

Intel's Leixlip campus in Ireland is a hub of innovation, housing a cutting-edge semiconductor wafer fabrication facility and the Neural Processing Unit (NPU) Group who develop low-power AI technology and software for Intel's Client Computing Group. As the site expanded and technology evolved, so did the challenges of maintaining a seamless approach to OSH.

With a growing workforce of more than 4,500 people and an increasingly complex work environment, workers needed a faster, more efficient way to access essential environmental, health and safety (EHS) information. However, the absence of a centralised hub made it difficult to quickly locate safety contacts and up-to-date programme details.

Another critical challenge was the manual processing of occupational safety and health (OSH) related reports submission. The time-intensive nature of this system not only delayed response times but also reduced the ability to proactively address potential risks. Recognising these gaps, Intel sought an innovative solution to streamline access to safety resources and upgrade workplace protection.

## Aims

Intel's goal is to improve safety and communication methodologies in the manufacturing facilities, promoting an excellent and enduring site safety culture.

## What was done and how?

- Intel implemented the Safety App and CatchWise system to strengthen workplace safety, streamline communication and foster a proactive safety culture.
- The Safety App provides instant access to safety resources and contacts, simplifies reporting and encourages worker engagement in safety initiatives.
- CatchWise leverages an AI chat bot to analyse safety data, identify trends and refine safety measures to reduce risks and potential incidents.
- The implementation of these tools followed the hierarchy of prevention, applying the STOP principle: substitution of paper-based safety processes; technological measures using AI-driven analytics and real-time contact access; organisational measures with QR codes that

ensure access to safety tools for all workers; and personal protection measures with built-in features for personal safety checks and PPE reminders.

- Senior managers continuously support and promote the digital tools through company-wide meetings and communications. They also conduct environment, safety and health (ESH) audits using the Safety App to log observations, track corrective actions and prevent incidents. During the launch and pilot stage of these apps, they provided additional time for workers to adapt and introduced a recognition programme to reward engagement.

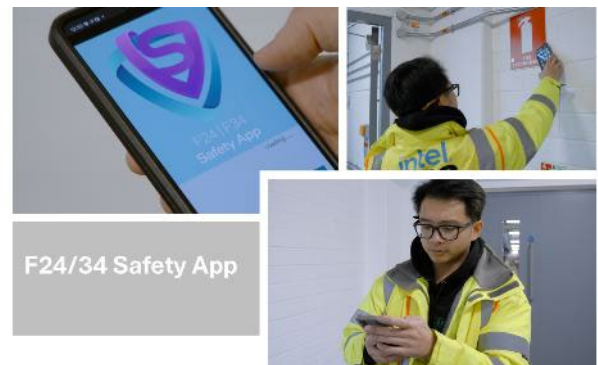
## What was achieved?

- The company improved safety communication and responsiveness, with faster reporting and resolution of safety concerns.
- Engagement in proactive safety measures improved, with workers actively identifying and addressing risks.
- Through the integration of the Safety App and the CatchWise system, there was an increase in risk reporting, demonstrating heightened safety awareness.
- The CatchWise system, powered by AI, enables rapid detection of patterns and risks, preventing incidents before they occur and analysing safety trends.
- Increased participation in risk reporting has reinforced a culture of continuous safety vigilance.
- Workers feel valued and actively involved in an inclusive and proactive safety programme.
- The site now operates with a more responsive, data-driven and employee-centred approach to safety.

## Success factors

- The intuitive, user-friendly interface of the app ensures workers of all skill levels can easily navigate and use the app.
- The QR code system increases accessibility, allowing instant access to safety resources with a simple scan.
- The strong support and commitment from leadership has driven widespread adoption and integration of the app into daily safety practices.
- Workers have been actively involved in providing data for CatchWise, creating a feedback loop that strengthens safety measures.
- The implementation of the STOP method – substitution of paper-based safety approaches, technological, organisational and personal

protection measures – was a winning factor for improving the OSH culture in the workplace.



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## Transferability

Intel Ireland's approach to safety through the Safety App and CatchWise AI system offers a scalable and adaptable model for other industries, particularly those with complex operational environments and large workforces. Companies looking to optimise their OSH strategies can adopt similar tools to simplify reporting, improve hazard detection and foster proactive safety engagement. The key success factors – user-centric digital tools, strong leadership support and active worker involvement – demonstrate that a technology-driven, worker-empowered safety culture can be replicated in various sectors.

## Costs and benefits

Implementing the Safety App and CatchWise AI system required an initial investment, including training time and overcoming resistance to new technologies. However, the adoption of digital safety tools has improved safety communication, reduced workplace injuries and increased job satisfaction. A proactive safety culture has emerged, reinforcing Intel's reputation as a leader in workplace safety.

The long-term gains are substantial, with reduction in accidents, legal costs, downtime and productivity losses. Key achievements include a 50% decrease in first aid injuries and a 30% drop in serious injuries compared to the previous year. With over 30,000 good catches logged and 11,000 safety walks completed in 2024, employee engagement in safety initiatives is stronger than ever. Recognition through the Fab Sort Manufacturing Excellence Award and two National Irish Safety Organisation awards further underscores Intel's commitment to integrating safety with technological innovation for a safer, more efficient workplace.

## Key features of good practice example

- The Safety App provides a centralised hub for safety information, includes interactive site maps marking PPE cabinets, chemical storage and waste disposal locations and facilitates safety walkabout tracking to encourage proactive safety inspections. It also embeds a reporting tool for a 'good catch', that is, a report of a potentially unsafe act or condition that could lead to an injury.
- The CatchWise tool automates the analysis of more than 35,000 good catch reports annually, eliminating slow manual processing. It uses AI-driven pattern recognition to identify safety trends and high-risk areas, continuously refining insights through machine learning.



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## Further information

Further information can be found at:

<https://www.intel.ie/content/www/ie/en/company-overview/intel-leixlip.html>

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