



**8**  
Facilities



**Multi-country**  
Rollout



**88**  
True - Als



## Background

Smurfit Kappa is a global provider of sustainable packaging solutions. The company operates in over 30 countries and has over 350 production facilities, making it one of the largest integrated manufacturers of paper-based packaging products in the world.

Smurfit Kappa's facilities are designed to optimize inventory management and ensure timely deliveries to customers. However, it's important to note that the density of forklift operations within these warehouse facilities may pose safety hazards for pedestrians.



## The Problem

The company faced a significant challenge in ensuring the safety of its pedestrian employees in the proximity of forklifts. Due to the paper rolls, forklift drivers could not see pedestrians behind them, making forklifts a potential risk for nearby pedestrians. The use of forklifts to move materials posed a risk to nearby pedestrians, as **the drivers had limited visibility**.

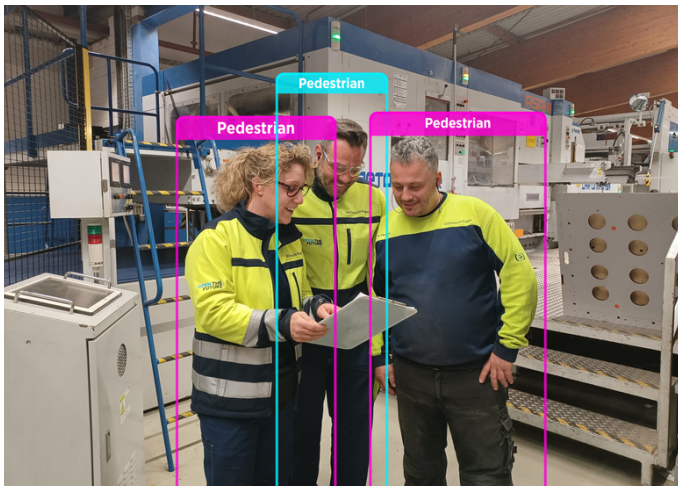
Smurfit Kappa faced a challenge in finding a suitable solution to alert forklift drivers of pedestrians in dangerous proximity without generating unnecessary alarms in safe areas. Forklift drivers at Smurfit Kappa's Lübbecke plant had no assistance to help them navigate the risks of moving materials around pedestrian employees. This lack of assistance was a significant pain point for the company, as it posed a **significant risk of accidents and collisions that could result in costly damage and injuries**.



Trio Mobil's expert team analyzed the situation and recommended the installation of a forklift-pedestrian accident prevention system equipped with TRUE-AI technology. After experiencing unsuccessful results with competitors' solutions, Trio Mobil's cutting-edge technology proved to be the perfect fit for Smurfit Kappa's requirements.

**TRUE-AI, the Real-time AI Video Analytics solution, uses tagless pedestrian detection** to monitor defined areas for pedestrian presence.

If pedestrians enter a dangerous area, the system issues visual and acoustic alarms to alert nearby forklifts. However, no alarms are generated on forklifts if pedestrians are in safe areas. **This unique solution combines IoT and AI technologies.**



The system was customized to the plant's unique layout and requirements with zone-specific modular extensions. **The positioning of TRUE-AI's was determined to cover the risky zones and eliminate blind spots.**

After successfully testing the forklift-pedestrian prevention system, the Trio Mobil team implemented the solution in more than 8 factories of Smurfit Kappa. The solution allowed forklift drivers to be alerted only when necessary, increasing safety and productivity in the plant.

## **Conclusion**

Trio Mobil's AI-powered forklift safety solution has been successfully implemented across multiple countries, including eight Smurfit Kappa plants. The solutions have effectively prevented forklift-pedestrian accidents and forklift-forklift collisions, demonstrating their efficacy.

**The successful multi-country rollout** serves as a testament to Trio Mobil's expertise in forklift safety solutions and its commitment to delivering customized solutions to meet its client's specific requirements.

The forklift safety system implemented by **Trio Mobil effectively addressed Smurfit Kappa's safety concerns by preventing forklift-pedestrian accidents and collisions.** Resulting in a highly effective system. The success of the implementation at the Lübbecke plant paved the way for future multi-rollouts in the Dach region and even global rollouts in the future.

## **Results**

- AI-powered technology enabled **forklifts and pedestrians to work together safely and effectively, with best-in-class results.**
- Safety was ensured through successful implementation and prior testing of the solution.
- **The system eliminated blind spots and false alarms,** ensuring a highly efficient and effective setup.
- Furthermore, the modular design allowed for zone-specific extensions, ensuring scalability in the future. The modular and customizable nature of the solution allowed for easy extension and alignment to the plant's unique needs.

