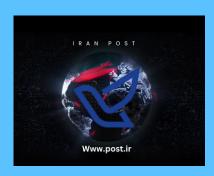# BEST PRACTICE

ENHANCING OPERATIONAL INTELLIGENCE: IRAN POST'S AI-POWERED ROBOTIC SORTING INITIATIVE

Iran Post had received the Innovation in the Postal Sector Award at the APPU Postal Business Forum 2024 for its pioneering use of AI-powered robotic sorting technology, setting a new benchmark for automation in the region's postal sector.

Highlights

- 100% accuracy achieved in sorting over 2 million items within 7 months.

- Zero downtime since launch – no technical failures or disruptions.

- Sorting speed reaches 30,000 items per day across 64 destinations.

- Staff requirement reduced from 30 to 7 per shift, with reallocation to other departments.

- Lower energy consumption than traditional mechanized systems.

- Inclusive workplace benefits: supports employees with lower physical ability.

- Supports diverse mail types, including envelopes and parcels up to 7kg.

- Decreased missorting and delivery delays, especially during peak traffic days.

Launched in March 2023, Iran Post's AI-powered robotic sorting system was developed to enhance sorting efficiency, speed, and precision in its major distribution hubs. At the Tehran Sorting and Exchange Center, 55 robots operate within a compact 200-square-meter space, intelligently sorting up to 3,000 postal items per hour. A second deployment with 25 robots is underway in Kermanshah province.

The robots offer a flexible and scalable alternative to traditional conveyor systems, adapting easily to irregular layouts or spatial obstacles such as support columns. Their compact footprint makes them ideal for maximizing output in limited operational areas.

The primary objectives of the project were to:

- Increase the speed and precision of mail sorting;
- Enhance operational productivity and reduce reliance on manual labor;
- Improve service quality and delivery performance;
- Introduce smarter infrastructure aligned with Industry 4.0 principles.

By investing in robotic solutions, Iran Post is transforming its operations while also enabling faster, more reliable services for customers. The system's success has not only elevated internal efficiency but also created capacity for sustainable, scalable growth – a model that reflects the future of postal logistics in the digital age.