

Japan's Approach on Automatic Threat Recognition

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Orchestrating a brighter world

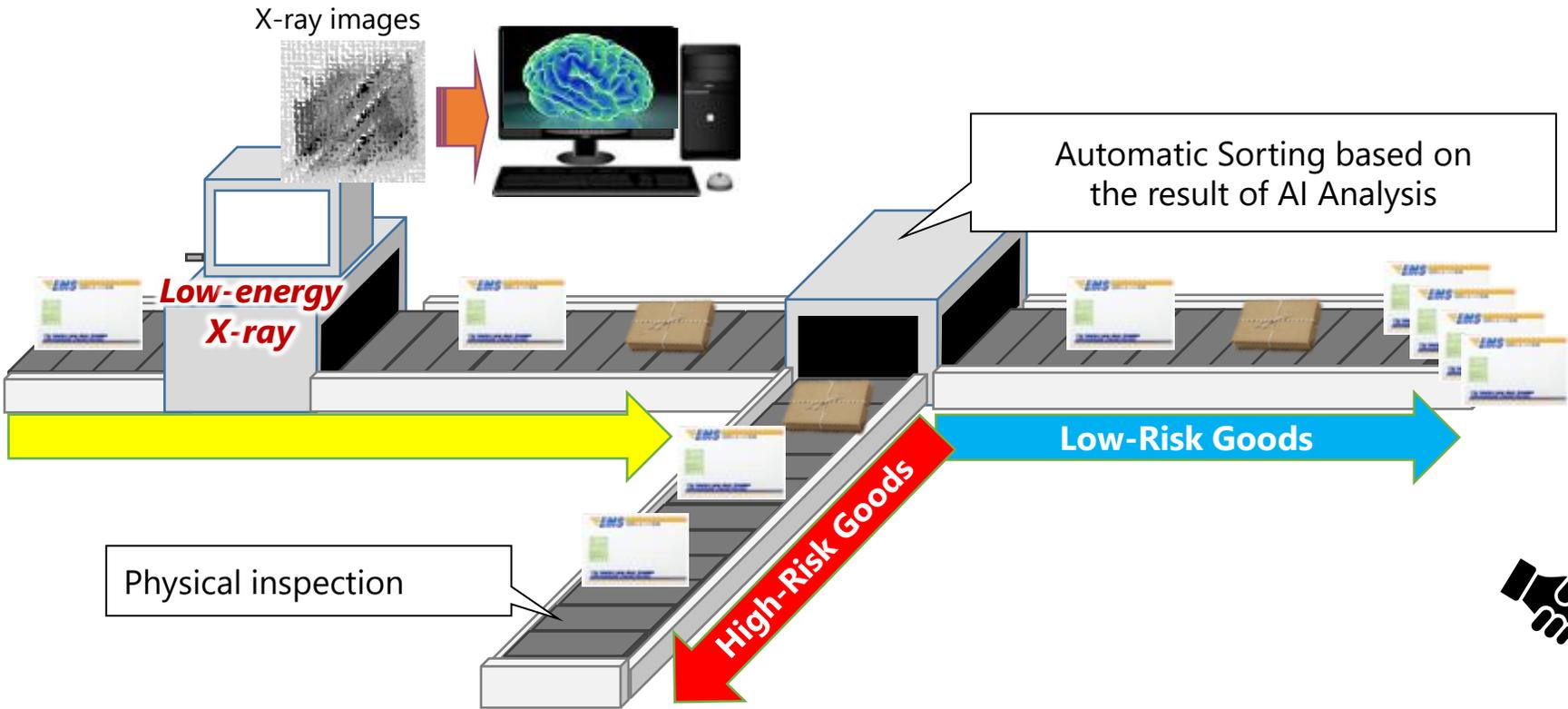
NEC

Background

Seeking Solutions with Technology

- Advancement of Deep Learning
- Increased number of Customs Declarations
- Illicit Trade through Postal Items

Efficient and Effective
Customs Operation and Risk Management
Required



Automatic Threat Recognition
as a Potential Solution

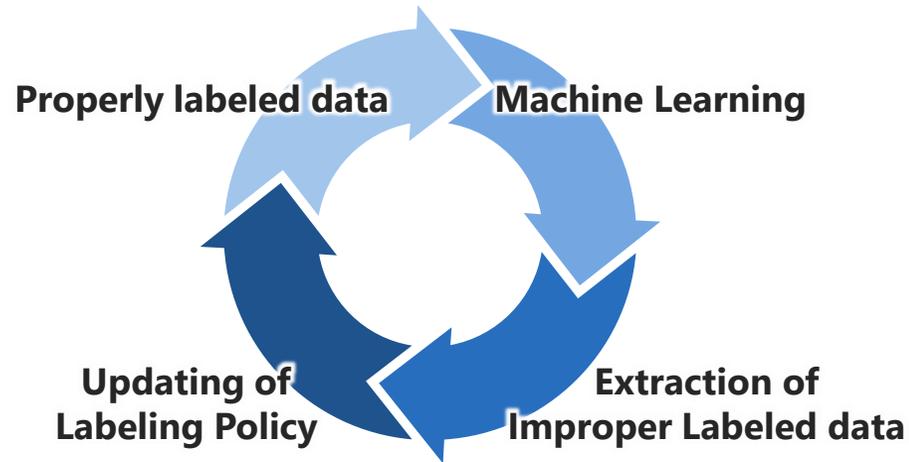
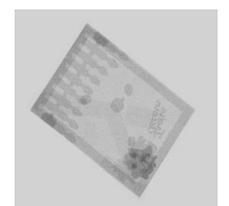
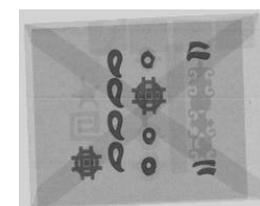
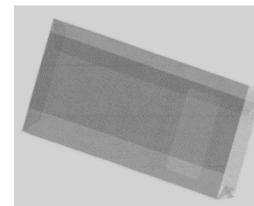
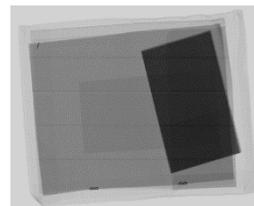
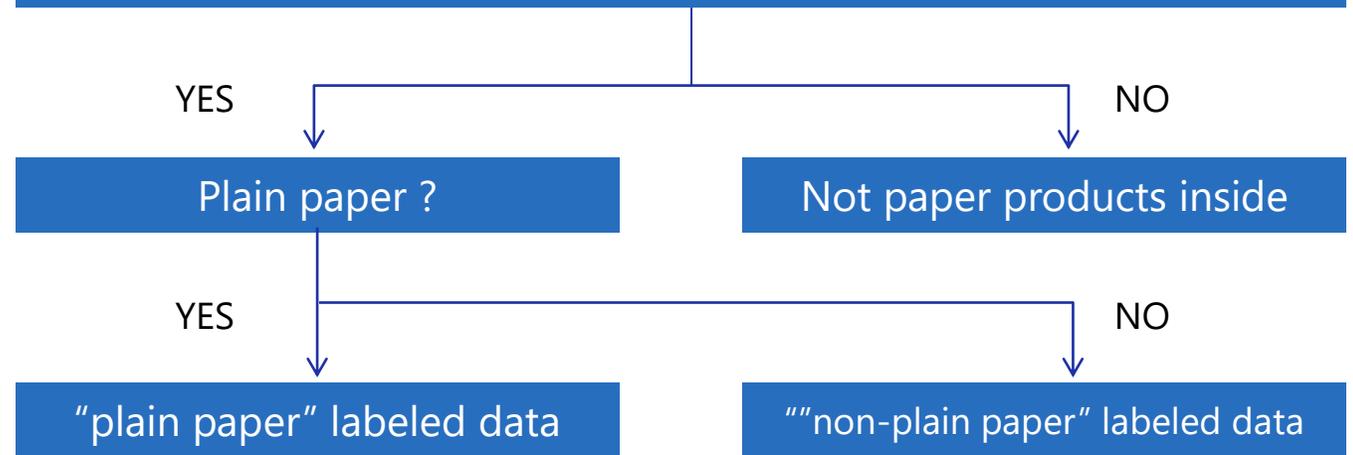
Joint Research and Development
with Private Sector

Data Collection & Machine Learning

AI requires properly labeled data, in sufficient quantities, to be effective

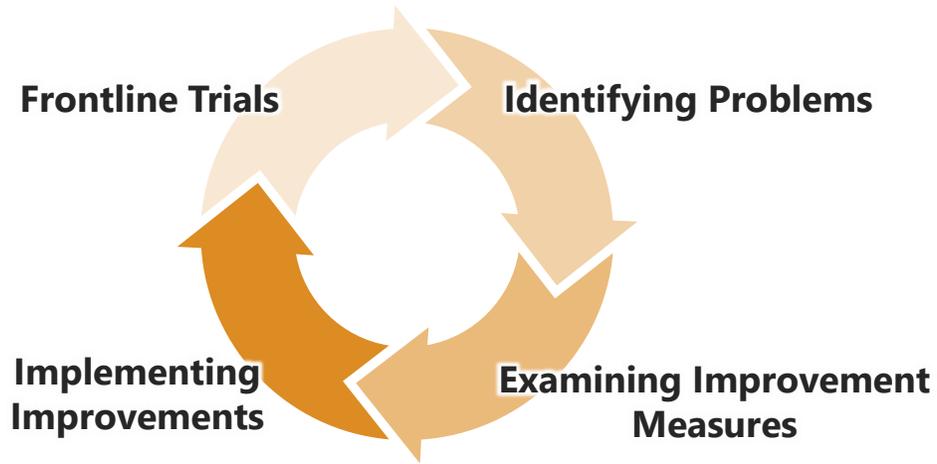
How to properly label

Judgment by the human eye to recognize only "paper products" (documents, letters, books, notes, etc.) to be visible ?

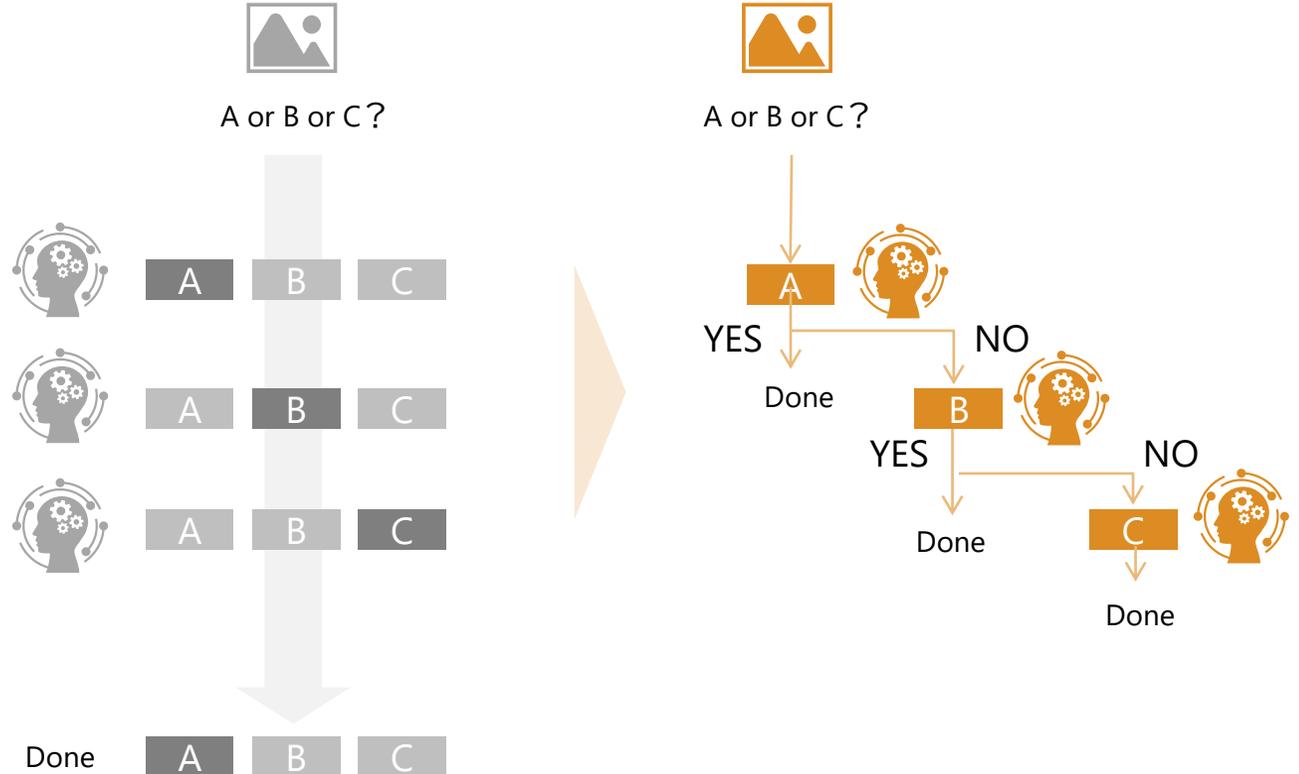


Frontline Implementation

The entire AI system must meet the criteria for being useful as a Frontline solution



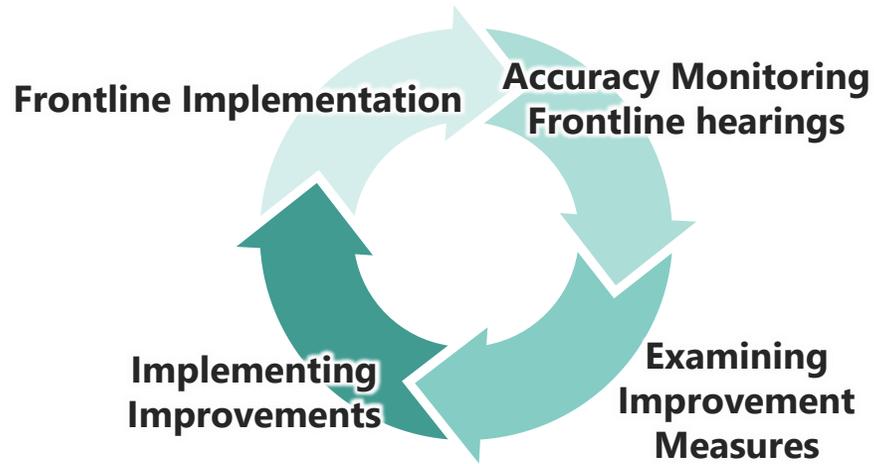
Multi-stage judgment

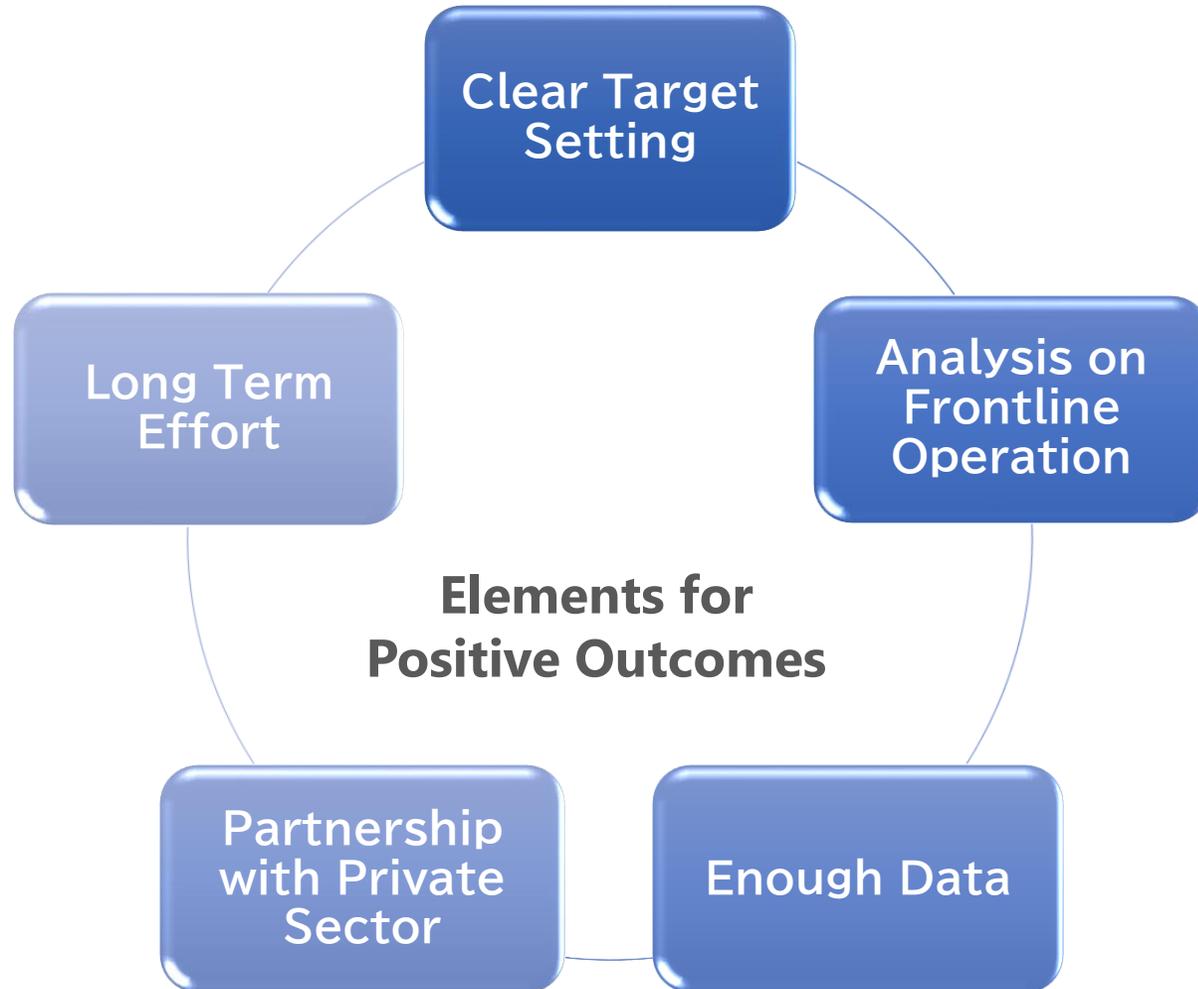


Post Implementation

AI system is continuously updated after introduction for longer usage

- Continuous and regular discussion to reach the ideal goal together





Continuous Journey

X-ray CT with AI Algorithm

