



Asia-Pacific Trade Facilitation Conference 2025: Integrating Technologies for Sustainable Trade Facilitation

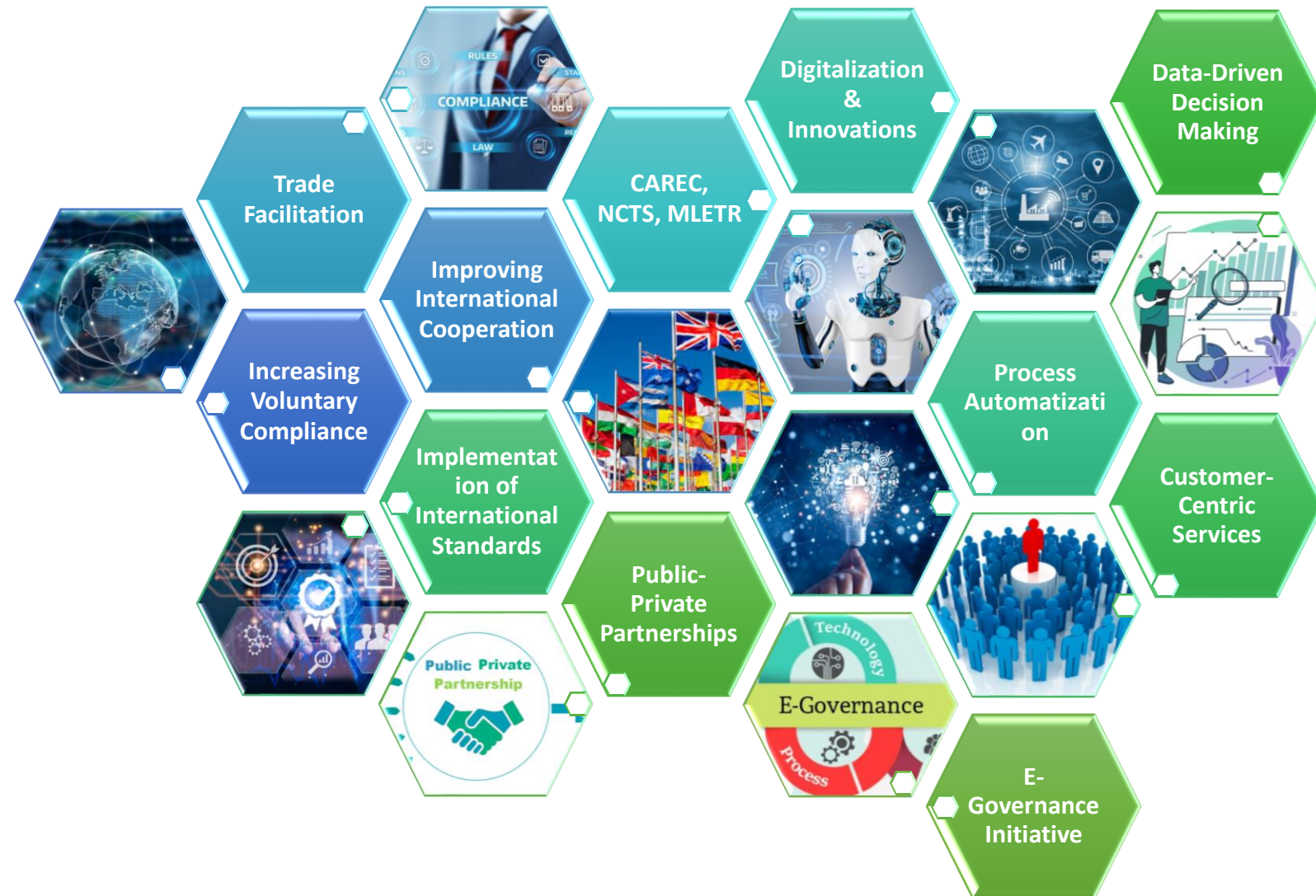
**Generative Artificial Intelligence for Trade Facilitation: Future
of Trade and Customs Services
Georgia Revenue Service**

NINO JINCHARADZE





Strategic Vision of GRS for Digitalization



Automating and Digitalizing Different Customs Processes Using Robotics and Artificial Intelligence (AI) Technology



**GEORGIA
REVENUE
SERVICE**



European Bank
for Reconstruction and Development



ASIAN DEVELOPMENT BANK



Technologies:

- ✓ RPA (Robotic Process Automation)
- ✓ OCR (Optical Character Recognition)


Areas Benefiting from the Process Automation and Digitalization:




Export Customs
Declaration
Processes



Assessment of Tax
Liabilities for
“Yellow Channel”
Goods



Closing Procedures
of Internal Transit
Document (T1)



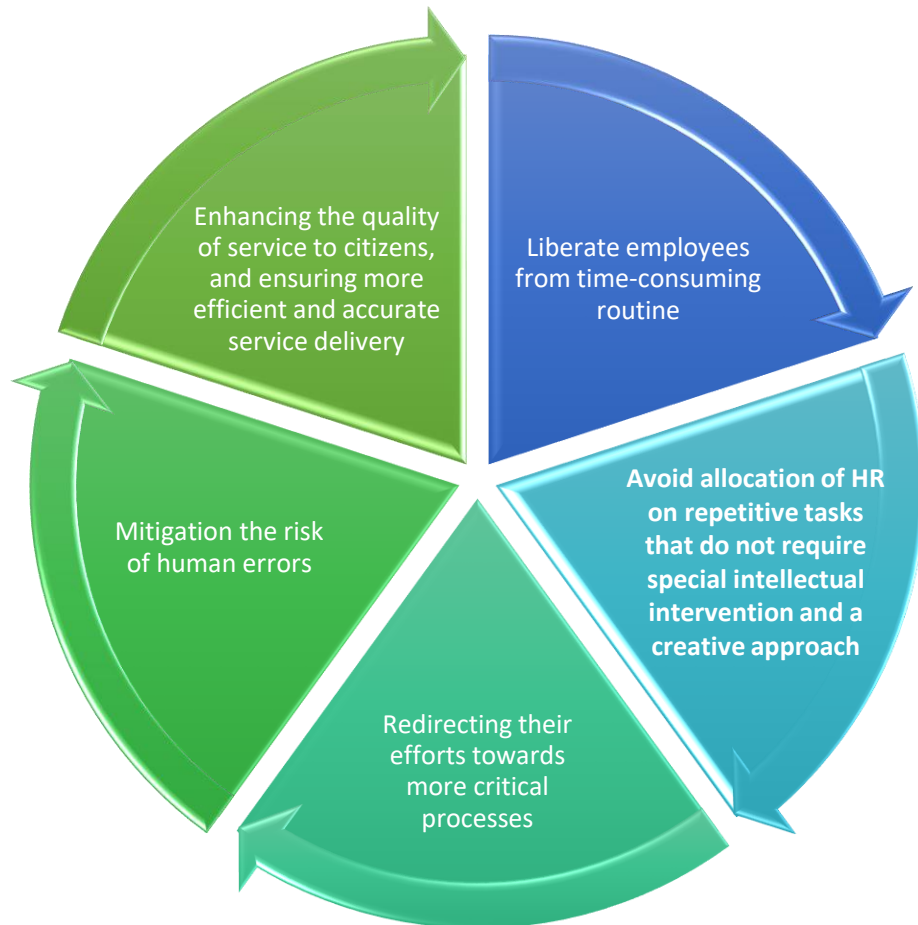
Automation of
Arriving/Releasing
Carriers at Customs
Clearance Zones



Issuance of
Certificates of
Origin



BENEFITS



Customs Declarations for Export Number > 53000; Growth rate 27%

BEFORE:

Time per decl. - 30 min
HR > 30 000 hours per year



AFTER:

Time per decl. - 3 min
Working hours saved per year
27 000

Assessment of Tax Liabilities for “Yellow Channel” Goods

BEFORE:

Only Time per Cert - 10 min
HR > 3 000 hr per year



AFTER:

Service - available 24/7
No human involvement
No additional costs for SMS

Certificates of Origin Number > 29 000; Growth rate 27%

BEFORE:

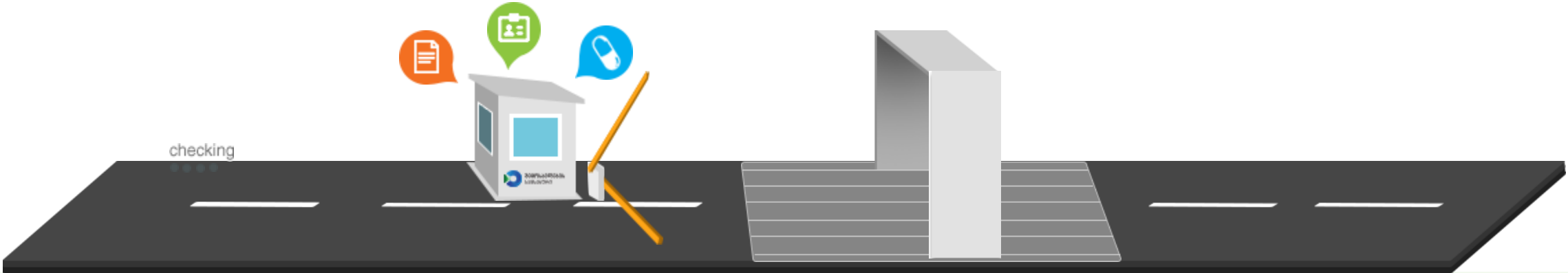
HR - 4 full time employee
Additional costs for SMS



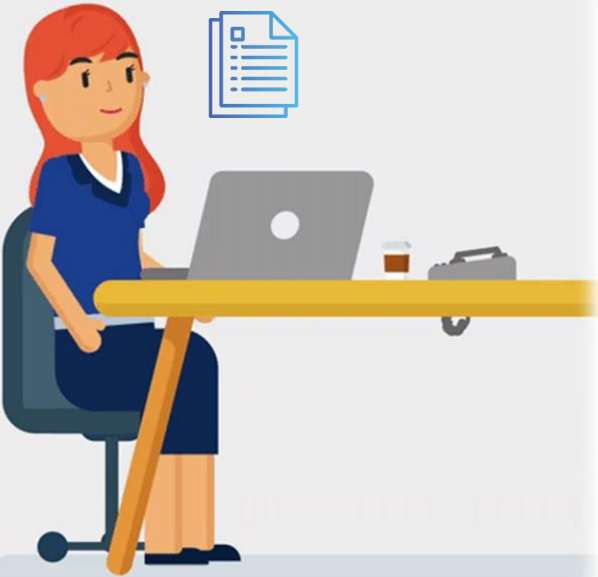
AFTER:

Time per Cert: 1.5 min
Working hours saved per year
2 500

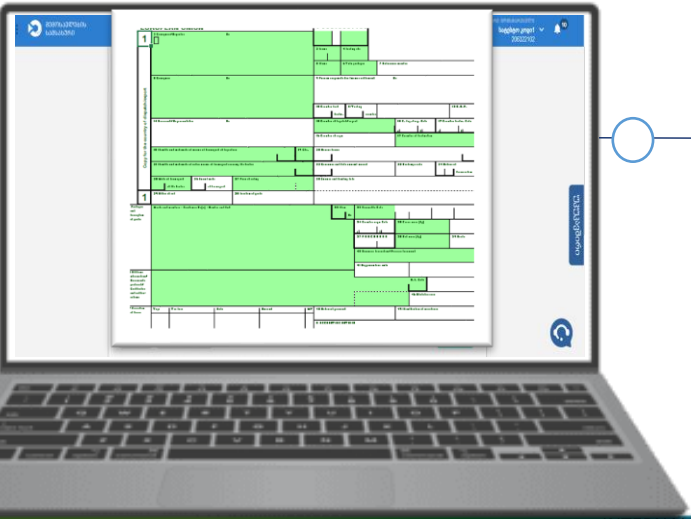
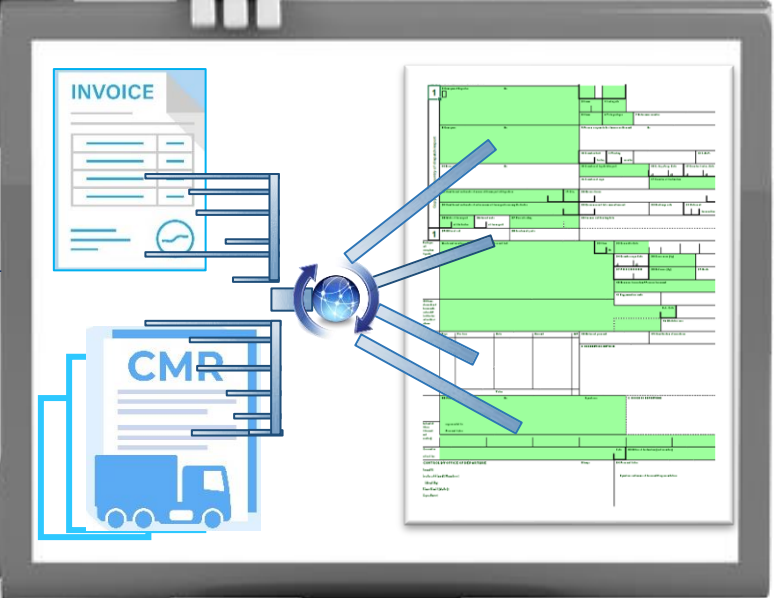
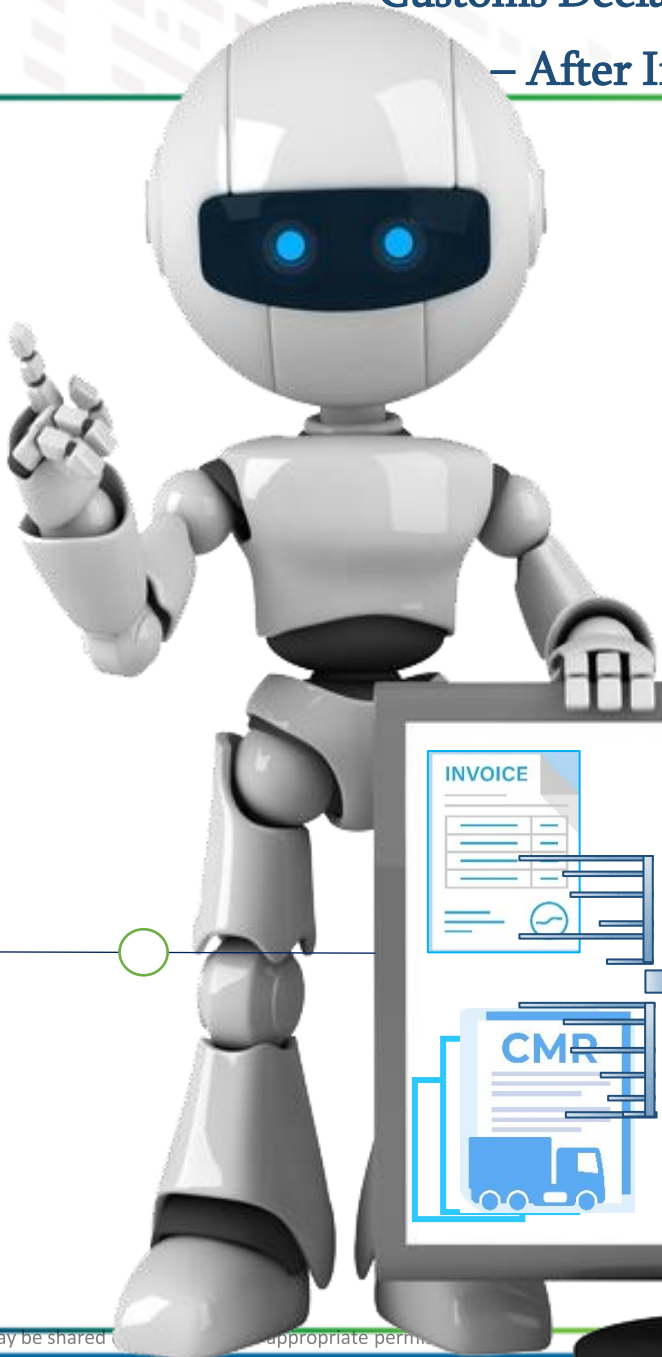
Assessment of Tax Liabilities for “Yellow Channel” Goods – After Implementation of AI/ML



Customs Declaration process for Export – After Implementation of AI/ML



WWW.RS.GE





Completed Tasks:

Document Identification

Data extraction from documents

Data input validation

– *Completion of Customs Declarations for export goods*

– *Issuance/ Validation of certificates of origin*

– *Assessment of tax liabilities for “yellow channel”*





Challenges and Solutions During the Implementation Stage

● Challenge: Resistance to Automation & AI

✔ Solution: Training, Transparency & Phased Implementation

- Customs officers and traders initially feared AI would replace their roles.
- Conducted training sessions and pilot programs to demonstrate how AI augments human expertise rather than replacing it.
- Engaged stakeholders early to build trust in gradual technology adoption.

● Challenge: Lack of Unified Documentation

✔ Solution: Standardization & Scalable Software Design

- Implemented standardized document formats to ensure smooth data processing.
- Designed modular and distributed software architectures for scalable and adaptable systems.

● Challenge: Technology Integration & Legal Frameworks

✔ Solution: Strategic Technology Selection & Process Reengineering

- Ensured new automation tools (RPA, OCR) integrate seamlessly with legacy systems.
- Updated legal frameworks and adapted software to support new digital trade mechanisms.

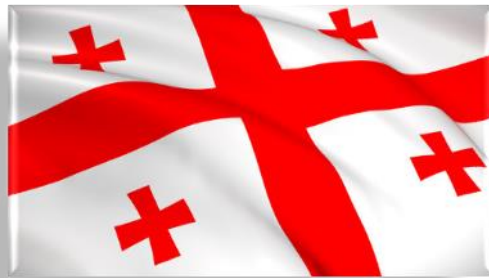
● Challenge: Validation, Human Oversight & Engagement

✔ Solution: Intuitive UI & Training Programs

- Developed user-friendly validation tools for customs officers to verify AI-generated decisions.
- Conducted awareness programs to bridge knowledge gaps and boost confidence in digital platforms.



მადლობა



THANKS FOR THE ATTENTION

Nino Jincharadze

Head of the Project Management and
Development Division, IT Center
Georgia Revenue Service

M: +995 599 04 03 02

E: n.jincharadze@rs.ge

Pers. E: ni.jincharadze@gmail.com

6, Gulua str. Tbilisi, GEORGIA

WWW.RS.GE